

Annex 4

Early Proposals

To ensure our Early Proposals are robust, relevant, and aligned with customer priorities, we conducted a multi-stage process grounded in stakeholder engagement and strategic analysis of the drivers of change for ED3. Using a combination of insights from customer research, roundtables, and other dialogues, we developed a package of Early Proposals to address the identified value gaps.

Each potential solution was assessed against Ofgem's eligibility criteria and our strategic priorities for ED3. This ensures that all our Early Proposals are clearly aligned with Ofgem's Consumer Interest Framework (CIF) and ED3 consumer outcomes.

We engaged with our Independent Stakeholder Group (ISG) during the development process. Their expertise was leveraged to challenge and refine our thinking, ensuring the final suite of Early Proposals reflects the priorities and positions expected at this stage.

This iterative and evidence-based approach has resulted in a portfolio of 12 Early Proposals that are ambitious and progressive. They drive consumer-centric planning, inclusivity and whole-system thinking, whilst being grounded in strong consumer value and address sector-challenges.

NGED's ISG Statement:

"NGED shared its early proposal with its ISG. The Group challenged the proposals robustly and encouraged the team to enhance many of them. Overall the Group was supportive of putting forward innovative, creative proposals that addressed identified customer benefit gaps. The Group more strongly supported those proposals where benefits were clearer and more likely to be realised earlier, including the DSO proposals, the Consumer Value Framework, Connections performance monitoring and the development of data standards and sharing of AI tools. The group noted that some proposals were more 'preparatory' in that they were aimed at gathering information or preparing for future action, including the development of segmented customer data and unlooping data and visibility. Other proposals were seen as 'business as usual', e.g. network resilience to climate change, although it was acknowledged that these could be encouraged with more incentives."

For ease of review, our Early Proposals are grouped into five theme areas as detailed below. Please note it is important to consider the four "Fit for purpose DSO for the future" Early Proposals as a package and, therefore, have included an introduction to this section to illustrate the overarching logic and benefits.

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Fit for purpose DSO for the future

Overview

The energy system is decentralising, driven by rapidly changing customer needs and behaviours. By 2035, we expect an 12x increase in storage needs, 4.5x increase in renewable energy, a 30x increase in Heat Pumps and 16X in EV chargers. To optimise whole system outcomes locally and nationally, these system requirements are becoming increasingly complex, which requires reliable access to energy networks, managing flexible assets and balancing local and whole system needs.

We recognise the DSO's evolving role from using flexibility to avoid network reinforcement to an enhanced DSO role that considers whole system outcomes and uses flexibility for a broader range of system operation and reinforcement contexts.

We are proposing four overarching roles for the DSO. Three of these roles enhance those proposed in the SSMC, and we have included one additional role around how the DSO interacts with NESO.

Role	Activity	Objective
 Transmission Boundary Management	1.1 Transmission Boundary Management	Collaborating with NESO to understand and define the operating envelopes for Grid Supply Points, to enable DSO to manage bidirectional flows of energy across the boundary
	1.2 Grid Supply Point Capacity Management	Collaborates with NESO to agree new Grid Supply Points identified via Integrated Local System Planning role, subsequently coordinating the commercial arrangements and assuring DNO and TO delivery
	1.3 Connections Acceleration	Develops and manages the products and services (including Technical Limits) that accelerate customer connections and increase clarity and predictability of timescales, including fault level constrained connections
 Integrated Local System Planning	2.1 Long-Term System Forecasting	Collect input from diverse stakeholders to forecast long-term customer needs and whole system interactions, interfacing bidirectionally with NESO's RESP, Local Authorities and customers
	2.2 Integrated System Planning	Lead the long-term integrated network development plan, proactively addressing customer needs, consumer costs, network resilience, and network operability (inc. voltage & losses) to be validated against the requirements set by NESO's RESP
	2.3 Headroom Direction & Assurance	Specify load related expenditure to DNO and instruct delivery, with subsequent assurance activities by the DSO to ensure that DNO delivery meets integrated plan requirements and timescales
 Local System Operation	3.1 Operational Forecasting	Use DNO and customer asset data to forecast network risks (asset conditions & reliability) and opportunities (asset availability for whole system services required by NESO).
	3.2 Operational Planning & Optimisation	Optimisation up to 24-hrs ahead of real time across: services to NESO, voltage, losses, customer reliability, customer impacts, asset health, faults, reactive power, constraints and outages.
	3.3 System Operation & Activation	Operation and activation of all assets below the Transmission-Distribution boundary, including where NESO requests whole system services from decentralised assets.
 Local Flexibility Market Development	4.1 Market Development & Design	Collaborating with Market Facilitator, DSOs and NESO to develop & scale of new market services, including: whole system needs, voltage, losses, reactive power, faults, resilience, network build delivery risks, connection queue management
	4.2 Procurement & Contracting	Dynamic procurement, contracting and remuneration of flexibility based on local and whole system outcomes (avoiding flexibility use for deferring long-term network investment), including management of risks, incentives and penalty regimes
	4.3 Market Architecture & Systems	Management of decentralised DSO market interface with NESO whole system needs, via digital architecture that complies with Market Facilitator & interoperability standards

Considering the expanded scope of responsibilities, the existing panel assessment and stakeholder survey alone are not sufficient to drive the right outcomes for consumers.

Additional quantitative outcome-based measures should be introduced to support new objectives.

DSO incentive framework proposal

The SSMC recognises the DSO's evolving role in enabling a smart, flexible, and decarbonised electricity system, however, has not yet detailed the mechanisms and incentives to support the safe and efficient operation of millions of distributed assets. Without clarity on this, the distribution network risks becoming a blocker to decarbonisation, limiting headroom, slowing connections and increasing costs for consumers.

To respond to this changing landscape, DSOs need the capabilities and responsibilities of a true system operator at the distribution level, working in clear coordination with NESO. We need roles and incentives that reflect whole system decision making: balancing voltage, losses, curtailment, creation of headroom across local and national needs.

We agree with the three existing DSO roles (integrated local system planning, local system operation, local flexibility market development) and the increased emphasis on voltage and losses management; to go further in delivering whole system benefits, these roles should be augmented with a fourth role (transmission boundary management). We believe the best application of these roles is through an outcome-based framework incorporating the needs of local systems. This allows for the evolution of these roles over time, as we expect more of our local networks. Our early proposals introduce targeted, outcome-based incentives across these roles, to ensure DSOs are rewarded for the benefits they deliver locally and across the whole system. These mechanisms will help ensure that the financial value created at the whole system level flows appropriately to the local level, such that individual customers are paying for benefits aligned to their local system needs.

The package targets critical gaps in today's regulatory framework, such as lack of incentives for headroom creation, accelerated connections with minimal curtailment, efficient system operation, and transmission-distribution coordination. Together these proposals create a strong package of DSO incentives to support delivery of a more anticipatory, integrated and consumer-focused DSO in ED3.

A summary of each proposal is provided below. More detail can be found in individual early proposals.

1. Transmission boundary management – unlocking shared value at the transmission-distribution interface

Effective DSO planning and operations require enhanced alignment with NESO. This proposal formalises and incentivises structured, measurable coordination with NESO across both planning and operational time horizons. Improved boundary visibility, joint optioneering and real-time coordination help unlock Grid Supply Point-level capacity, reduce balancing costs and strengthen whole-system voltage and reactive power management. This proposal ensures that capacity created at the distribution level is not limited by inefficiencies at the interface with the wider system. To fund these operations, we propose extending the scope of the Coordinated Adjustment Mechanism, to include NESO and operational solutions.

2. Integrated local system planning – creating anticipatory, targeted capacity

This proposal supports the core objective of the ED3 framework of more strategic and proactive investments by rewarding the networks to create headroom in the right place at the right time. Our approach builds on existing proposals, recognising that a regulatory

framework focused solely on capacity added fails to incentivise creating headroom where it is most needed, and evolving the existing load index reporting does not capture the long-term requirements of investment. This ensures constraints are addressed before they become a blocker, supports the 'touch network once' ethos and improves predictability of connections, especially for low carbon technologies.

3. Local system operation – ensuring efficient, whole-system use of the network

We support Ofgem's move towards integrated network planning and believe the same co-optimisation principles could be applied to system operation. Our proposal to create a single, Distribution System Operability Strategy will bring elements of losses, voltage, flexibility and network operability together into one coherent framework. This strategy will recognise the interdependencies and trade-offs between different factors ensuring that operational decisions are taken in the whole context of system optimisation. We propose that each DSO is incentivised on a balanced scorecard of qualitative and quantitative metrics that will evaluate the DSOS and the DSO's delivery against it.

4. Local flexibility market development – enabling faster flexible connections with minimal curtailment

As flexibility services mature, there is an opportunity to formally recognise the benefits they can bring not only in supporting system operation but also in bringing connections forward while keeping curtailment low. By rewarding effective use of flexibility services and ensuring they complement rather than substitute for network reinforcement, this incentive targets efficient use of the capacity created through strategic planning, T-D coordination and effective system optimisation to deliver rapid connections and contribute to the national net zero targets.

Benefits

Together these proposals deliver a comprehensive set of whole-system benefits that strengthen planning, operation, flexibility use and coordination ultimately accelerating the transition to a low-carbon, reliable and efficient electricity system.

- **Faster connections:** proactive headroom creation, enhanced T-D boundary coordination and efficient use of flexibility maximise network capacity and enable earlier connection of DER and CER.
- **Enhanced system reliability:** integrated management of reactive power, voltage control and boundary conditions reduces technical losses, improves power quality and enhances resilience.
- **Reduced carbon intensity:** earlier renewable generation and earlier curtailment reduce reliance on fossil fuel generation, lowering overall system carbon intensity.
- **Lower whole-system costs:** integrated network planning and improved DSO-NESO coordination help avoid reactive reinforcement costs, while efficient network operation and maximising existing capacity use reduce balancing and redispatch costs, leading to a lower bill impact for consumers and supporting affordability.

Overall, our enhanced DSO proposals will support a smooth, affordable transition to net-zero by encouraging more renewable generation onto the system and lower curtailment, reducing costs through smarter system operation. This will deliver a resilient network that makes connecting homes, businesses and communities simpler and faster.

1. Transmission Boundary Management

Licensee name	NGED
Proposal name	Transmission boundary management: Whole system resilience
Type of proposal (confirm all that apply)	<ul style="list-style-type: none"> • Delivery accountability mechanism • New or enhanced service
Proposal Summary (Max 200 words)	
<p>This proposal is one of four which together lay out a DSO structure and incentives package to deliver significant customer benefits in ED3 and beyond. They recognise the increasingly complex nature of planning and operating distribution networks with growing connected renewable generation and behind-the-meter flexible assets. We retain the three existing DSO roles with network operations having increased emphasis on voltage and losses management. We propose a 4th role, Transmission-Distribution (T-D) management, recognising the increasing importance of whole-system optimisation and resilience.</p> <p>Our proposal relates to this new role, and the benefits of delivering whole-system resilience and optimisation through stronger DSO–NESO coordination. We can provide NESO with improved visibility of distribution load operations in real-time or near real-time and offer operability options to maximise efficient network operations. Whole-system benefits include:</p> <ul style="list-style-type: none"> • Lower costs • Reduced curtailment and improved use of distributed flexibility • Improved voltage and losses management • Enhanced operational transparency, system coordination and governance <p>To fund operations associated with this, we propose extending the scope of the Coordinated Adjustment Mechanism, to include NESO and operational solutions. We propose a quantitative metric measuring the volume of options offered to NESO at the T-D boundary, rewarding DSOs based on mega-volt amperes/hour (MVAh) provided.</p>	
Which ED3 outcomes does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Investing for the energy transition • Responsible and sustainable business • Smarter networks • Resilient networks
Which Consumer Interest Pillars does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Low-cost transition • Fair prices • Resilience
Summary of key reason(s) / driver(s) for the proposal (Max 200 words)	
<p>The SSMC acknowledges that the DSO role must evolve in ED3, setting a clear expectation that DSOs move beyond capability building to delivering measurable operational outcomes that create consumer and system value. Specifically, it discusses the role of DSO in providing services at the boundary including reactive power management and flexibility services.</p> <p>Achieving this requires DSOs to manage networks dynamically, make greater use of data and automation to improve efficiency, and collaborate proactively with NESO and wider system actors to support whole-system optimisation. Although much of this value is realised</p>	

at the T-D boundary, the SSMC does not define a specific DSO role for boundary management, leaving a critical aspect of system coordination without a clear framework.

There is currently no mechanism that incentivises DSOs for the outcomes they deliver at the T-D boundary. Our proposal closes this gap by introducing a targeted incentive around the volume of options offered to NESO. This strengthens collaboration with NESO and ensures DSOs are appropriately rewarded for delivering the operational and whole-system benefits expected in ED3.

Summary of supporting evidence (Examples could include references to sector specific intelligence, innovation projects, ISG engagement, wider consumer research, endorsement from third parties) (Max 200 words)

- **International markets:** In Australia, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) has undertaken work on the future role and operating models for DSOs. The work highlights that a key responsibility for future DSOs will be the effective coordination and management of the T-D boundary¹
- **Reactive Power Injection Control Operability Trial (APRICOT):** NGED and NESO are working- together in the South-West region (APRICOT) to jointly address operability challenges at the TD boundary.
- **Ofgem direction:** Ofgem has previously made it clear that they want DSOs to manage flow at the boundaries; we agree with this and are prepared to commit to this as a standalone DSO role
- **ISG engagement:** We have engaged with our ISG during the development process for all our Early Proposals. Their statement related to this engagement can be found in the introduction to our Early Proposal Annex.

Summary of potential benefits (Max 200 words)

- **Reduced whole-system costs:** Closer coordination between DSOs and NESO reduces the need for balancing and redispatch actions. The incentive encourages operational decisions that minimise whole-system costs, rewarding DSOs for measurable reductions in the costs incurred to maintain secure system operation.
- **Reduced transmission curtailment and improved flexibility utilisation:** Aligning flexibility dispatch and ANM actions with NESO constraints and technical limits reduces unnecessary curtailment of distributed low-carbon generation and ensures flexibility is deployed efficiently across both transmission and distribution needs
- **Improved voltage and losses management:** Coordinated control of reactive power, tap positions and boundary voltage levels enhances network efficiency, reduces losses and improves power quality, strengthening overall system resilience during periods of high demand or variable renewable output
- **Enhanced operational transparency with stronger system coordination and governance:** Reliable real-time data on GSP flows, voltage conditions and flexibility availability supports faster, evidence-based operational decisions. Consistent joint processes between DSOs and NESO embed whole system thinking across planning and operations, ensuring clear accountability and delivery of measurable outcomes

Where the proposal relates to a new or enhanced service or to stretching commitments, explain why the proposal is not already business as usual or incentivised either through the existing RIIO-ED2 framework or under ED3 proposals that we are consulting on (Max 200 words)

The proposal goes beyond obligations for developing a coordinated and efficient network, and introduces a new role for the DSO to provide additional operability options for NESO.

¹ CSIRO, [Distribution System Operator \(DSO\) Models](#), 2025

Although the SSMC considers incentivising DNOs for providing flexibility through voltage management, this remains focused on internal, distribution-led actions. Our proposal goes further by rewarding DSOs for supporting NESO with more whole-system operability options through the development and provision of distribution-level solutions.

The proposed activities require new capabilities that are not funded or incentivised today, though we believe this could be funded under the Coordinated Adjustment Mechanism (CAM), if this was amended to include NESO. Activities may include developing operability envelopes and maintaining shared boundary processes and data flows. Delivering these activities will require collaboration between all DNOs and NESO to design the technical, operational and commercial parameters needed for consistent delivery.

Where the proposal relates to a new or enhanced service, explain why DNOs are best placed to undertake the activity described under the proposal (Max 200 words)

DSOs are best placed to deliver this because they have a detailed operational understanding of how their networks behave in real time. As more flexibility, DER and low carbon technologies connect, the distribution system will hold an increasing share of the total flexible capacity available to the whole system. Many national outcomes will depend on local conditions that DSOs already monitor and manage every day.

Working closely with NESO, DSOs can help turn national system needs into actions that are safe and practical at distribution level. This reduces operational complexity for NESO, who may not have (nor need to have) visibility of detailed characteristics and local constraints of the distribution system. Using existing or adjacent DSO capabilities provides an efficient and scalable way to support NESO's whole system objectives without duplicating infrastructure.

Combining NESO's national perspective with the local expertise of DSOs can provide a coordinated service that delivers the greatest value for customers and the wider energy system.

2. Integrated Local System Planning

Licensee name	NGED
Proposal name	Integrated local system planning: Accelerating demand
Type of proposal (confirm all that apply)	<ul style="list-style-type: none"> • Stretching commitment • Delivery accountability mechanism
Proposal Summary (Max 200 words)	
<p>This proposal is one of four which together lay out a DSO structure and incentives package to deliver significant customer benefits in ED3 and beyond. They recognise the increasingly complex nature of planning and operating distribution networks with growing connected renewable generation and behind-the-meter flexible assets. We retain the three existing DSO roles, with network operations having an increased emphasis on voltage and losses management, and we propose a fourth role, transmission–distribution boundary management, to recognise the increasing importance of whole-system optimisation and resilience.</p> <p>This proposal relates to integrated local system planning and builds on Ofgem’s proposal for the role in ED3. We believe that any regulatory framework to incentivise the creation of network headroom must contain a component which ensures that investment is directed to the right place (in line with a long-term decarbonisation pathway). We propose this could be measured through a quantitative metric of mega-volt amperes (MVA) of headroom added to the network alongside MVA of headroom required in load forecasts.</p> <p>Our proposal will enable more efficient network build-out by balancing necessary investment with consumer affordability, ensuring intergenerational fairness and supporting net zero through a planning approach that looks beyond a singular price control.</p>	
Which ED3 outcomes does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Investing for the energy transition • Responsible and sustainable business • Smarter networks • Resilient networks
Which Consumer Interest Pillars does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Low-cost transition • Fair prices • Resilience
Summary of key reason(s) / driver(s) for the proposal (Max 200 words)	
<p>A critical outcome for delivering a clean power future which supports additional system load is the creation of additional network headroom. Overall, the outcome needs to deliver network capacity in the right place, at the right time in alignment with system needs, and using a range of solutions available to networks.</p> <p>We believe proposals outlined in Ofgem’s SSMC do not fully deliver the desired outcome. A regulatory approach which solely measures capacity added does not encourage delivery of headroom where it is most needed. Similarly, an evolution of existing Load Index reporting does not capture the long-term requirements of investment. Our proposal incentivises the right behaviour, considering the enduring benefits of investment and could supplement either of the proposals for load related expenditure outlined in SSMC.</p> <p>This proposal also encourages the DSO to act as a local coordinator, across system needs, investment appraisal and ultimately guiding the DNO towards the highest-value solutions. Whilst headroom creation is currently funded through load related expenditure (and</p>	

performance via the TIM), there is no existing mechanism in the framework driving these coordination behaviours across the DSO.

Summary of supporting evidence (Examples could include references to sector specific intelligence, innovation projects, ISG engagement, wider consumer research, endorsement from third parties) (Max 200 words)

Headroom – Whole System Thinking: Our [NIA funded project](#) showed the whole system value created by adding headroom to the distribution network.

Long Term Integrated Network Development Plans (LTINDPs): The SSMC calls for the creation of strategic network investment plans which consider the enduring benefits for customers of projects (not just the short-term impacts). This proposal directly aligns to this requirement by rewarding the addition of headroom where it facilitates the long-term RESP ambitions.

Stakeholder Engagement: Stakeholders consistently highlight capacity as a top priority, particularly where it is required to meet and facilitate local decarbonisation plans.

DNOA Roadmap: National Grid DSO's DNOA Roadmap outlines our proposed approach to planning-timescale decision-making for ED3, including the Cost Benefit Analysis and optioneering processes underpinning this. The report demonstrates how customer benefits will be quantified (across multiple investment drivers) and forms a framework into which quantifying the benefit of network headroom would be incorporated. National Grid DSO's processes would be set up to facilitate this proposal and would continue to be transparent in our decision-making through the DNOA.

ISG engagement: We have engaged with our ISG during the development process for all our Early Proposals. Their statement related to this engagement can be found in the introduction to our Early Proposal Annex

Summary of potential benefits (Max 200 words)

Affordability and intergenerational fairness: Coordinating and incentivising both the DSO and DNO around the RESP's role in long-term strategic planning allows an optimised investment programme, focusing build when and where demand has a clear long-term need looking beyond a singular price control. This approach will ensure our networks are never a blocker but also that today's customers don't pay for demand that hasn't yet materialised.

Supporting the Net Zero transition: This proposal accommodates low carbon technologies by aligning capacity expansion with local energy and decarbonisation plans, helping to deliver whole system benefits.

Improved customer outcomes and faster connections: Smarter investment in network infrastructure enables the creation of timely headroom and more transparent timelines for connection, allowing customers to connect LCTs when they want, and where they want.

Transparency of investment plans: Utilising existing regulatory licence obligations such as the Network Development Plan improves transparency in networks' decision-making processes. We believe this aligns to Ofgem's 'proactive decision-making framework' outlined in the SSMC, which alternative proposals for load related expenditure do not provide.

Where the proposal relates to a new or enhanced service or to stretching commitments, explain why the proposal is not already business as usual or incentivised either through the existing RIIO-ED2 framework or under ED3 proposals that we are consulting on (Max 200 words)

While the SSMC acknowledges the evolution of the DSO's role in generating headroom and supporting network planning, there is currently no mechanism within the RIIO-ED2 framework or the emerging ED3 proposals that incentivises the volume and location of headroom that will be required in the future.

National Grid DSO's business as usual system planning process already considers the enduring benefits of any investment proposals (including the addition of network headroom). This proposal would allow this process to be formalised further in ED3. In addition, the establishment of the RESP will create an independent benchmark for ensuring DSOs target the delivery of headroom in the right place, where previously such a proposal could only be checked against DSOs' own forecasts. This presents an opportunity for Ofgem to introduce this proposal, and we believe a quantitative metric can be developed that utilises existing publications.

Our proposal provides a holistic solution that considers both the timeliness and location of required capacity. It encourages the DSO to act as a local coordinator, enabling more strategic, efficient and forward-looking investment decisions. This ensures that network capacity is deployed where it delivers the greatest value for customers and supports a fair, optimal and future-ready network.

3. Local System Operator

Licensee name	NGED
Proposal name	Local System Operation: Affordable & reliable access
Type of proposal (confirm all that apply)	<ul style="list-style-type: none"> • Stretching commitment • Delivery accountability mechanism
Proposal Summary (Max 200 words)	
<p>This proposal is one of four which together lay out a DSO structure and incentives package to deliver customer benefits in ED3 and beyond. They recognise the increasingly complex nature of planning and operating distribution networks with growing connected renewable generation and behind-the-meter flexible assets. We retain the three existing DSO roles with network operations having increased emphasis on voltage and losses management. We propose a 4th role, Transmission-Distribution boundary management recognising the increasing importance of whole-system optimisation and resilience.</p> <p>This proposal focuses on local system operation, and the development and execution of a Distribution System Operability Strategy (DSOS).</p> <p>The DSOS prevents siloed thinking, driving an optimised network approach across voltage management, network visibility, flexibility and losses. This supports coordinated, transparent and evidence-based decision-making, signalling an ambitious step-change in proactive system operability. We propose Ofgem mandates a DSOS submission, setting out a DSO's ED3 operability strategy, alongside their business plan.</p> <p>During ED3, we propose incentivising DSOs on a 'balanced scorecard' of qualitative and quantitative metrics, evaluating their DSOS and delivery against it. This would reward optimised system operations aligned with the DSO's strategy. We suggest DSOs and Ofgem collaborate on scorecard metrics, with independent oversight and challenge to drive ambition.</p>	
Which ED3 outcomes does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Responsible and sustainable business • Smarter networks
Which Consumer Interest Pillars does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Fair prices • Quality and standards
Summary of key reason(s) / driver(s) for the proposal (Max 200 words)	
<p>SSMC's fragmented approach: The SSMC recognises DSOs must take a more active, evidence-based role in managing losses and voltage performance, with both as core DSO objectives. We support this direction but believe they must be considered holistically, not in silo.</p> <p>An integrated DSOS addresses this, bringing objectives together under one coherent framework. It recognises interdependencies between voltage management, losses, flexibility deployment, and network operability, ensuring transparent, evidence-based decisions that reduced costs and improve outcomes for consumers.</p> <p>DNOA roadmap: The DNOA process focuses on planning-timescale decision-making. The recently published DNOA Roadmap outlines how National Grid DSO plans to further develop the CBA and optioneering processes needed to consider the full customer benefits of investment. The DSOS will cover both planning and operational timescales, complementing and building on the DNOA Roadmap and providing direction to ensure the</p>	

DNOA outcomes are aligned across planning and operation to deliver full transparency in decision-making.

Need for coordinated direction: Without early top-down coordination, a DSO risks pulling different levers in isolation, creating inefficient or conflicting actions. This misalignment creates unnecessary costs, adding upward pressure to consumer bills. A DSOS provides the strategic direction needed to avoid these inefficiencies and support lower overall system costs.

Summary of supporting evidence (Examples could include references to sector specific intelligence, innovation projects, ISG engagement, wider consumer research, endorsement from third parties) (Max 200 words)

Stakeholder support: Through our stakeholder engagement we have identified that affordability and reliability remain the two most important priorities for customers. Improvements in system operation particularly around losses and voltage, will help lower overall costs and deliver better operational planning.

Through our engagement it is clear stakeholders value transparency and consistency in our decision making. The DSOS directly responds to this need with the expectation of creating a clear structured framework for managing voltage, losses and flexibility trade-offs giving stakeholders greater visibility of how operational choices are made and the value they deliver.

Government policy: The Electricity Networks Strategic Framework from government and Ofgem explicitly calls for efficient distribution system operation that delivers for consumers at the lowest possible cost. A DSOS directly supports this by enabling optimised, coordinated system operation across all levers to drive an affordable transition.

ISG engagement: We have engaged with our ISG during the development process for all our Early Proposals. Their statement related to this engagement can be found in the introduction to our Early Proposal Annex.

Summary of potential benefits (Max 200 words)

Lower costs: Taking a more holistic view on system levers enables more strategic decision making. By optimising voltage, losses and curtailment together, DSOs can identify lower-cost solutions and minimise inefficient actions, reducing overall system costs

Stronger alignment between DSO strategy and real-world decisions: The DSOS will strengthen the link between the DSO's strategic intent and the actual planning and operational decisions that deliver customer and whole-system outcomes, transitioning the DSO from a reactive to a proactive system operator

Enhanced network resilience: A holistic approach to planning and improved operational situational awareness will enable DSOs to make better trade off decisions, reducing operational risks and strengthening overall system resilience

Supports the energy transition: Enabling the network to respond efficiently to real time demand improves adaptability and supports greater integration of renewable energy sources and new technologies.

Enhanced transparency: The DSOS will provide clear visibility of our decision-making, giving stakeholders clearer insight into how operational decisions are made and the implications of those decisions.

Where the proposal relates to a new or enhanced service or to stretching commitments, explain why the proposal is not already business as usual or incentivised either through the existing RIIO-ED2 framework or under ED3 proposals that we are consulting on (Max 200 words)

In RIIO-ED2, voltage management and losses optimisation were not core DSO responsibilities. In the ED3 SSMC, Ofgem propose two new DSO objectives, Voltage Optimisation and Losses Optimisation, and is seeking views on the most appropriate incentive mechanisms to deliver these outcomes. However, we believe these objectives should not be considered in isolation.

Our proposal goes beyond Ofgem's current position by introducing a single integrated strategy framework, recognising the interdependencies and trade-offs between losses, voltage, flexibility and curtailment. Ensuring strategic framework outcomes are managed coherently rather than individually optimised at the expense of one another

Additionally, once the strategy is established, we propose Ofgem introduces a new incentive to reward DSOs for delivery across a balanced scorecard of metrics, evidencing their decision-making ability to manage trade-offs and deliver balanced outcomes.

4. Local Flexibility Market Development

Licensee name	NGED
Proposal name	Local flexibility market development: Accelerating distributed energy
Type of proposal (confirm all that apply)	<ul style="list-style-type: none"> • Stretching commitment • Delivery accountability mechanism
Proposal Summary (Max 200 words)	
<p>This proposal is one of four which together lay out a DSO structure and incentives package to deliver significant customer benefits in ED3 and beyond. They recognise the increasingly complex nature of planning and operating distribution networks with growing connected renewable generation and behind-the-meter flexible assets. We retain the three existing DSO roles with network operations having increased emphasis on voltage and losses management. We propose a 4th role, Transmission-Distribution boundary management recognising the increasing importance of whole-system optimisation and resilience.</p> <p>This proposal focuses on the role of local flexibility market development, delivering consumer benefits through accelerating local distributed energy. To achieve this, we will use our full Network Operations toolbox, but we have specifically linked this incentive to the flexibility role, as increasing use of Demand Turn Up flexible markets will be important for achieving the maximum benefit.</p> <p>The benefits arise from:</p> <ul style="list-style-type: none"> • Connecting renewable generation more rapidly whilst firm capacity is built out • Minimising the amount of curtailment for all renewable generation connected to the distribution network (firm and non-firm) <p>We propose quantitative metrics that measure the GWh of additional renewable energy connected faster (including 'firm' connections) because of these activities and reward DSOs based on the benefits delivered.</p>	
Which ED3 outcomes does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Investing for the energy transition • Smarter networks
Which Consumer Interest Pillars does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Low-cost transition • Fair prices • Quality and standards
Summary of key reason(s) / driver(s) for the proposal (Max 200 words)	
<p>At our recent industrial dialogues in South Wales and West Midlands, our stakeholders told us that they wanted quicker connections for behind-the-meter generation to deliver economic growth and skilled jobs. In addition, our innovation project with Baringa and EA Technology identified that there is a £100 benefit for every MWh of renewable energy that is accelerated onto the system.</p> <p>Our proposal will allow us to use the existing network as efficiently as possible whilst the enduring network is built. As a DSO we can proactively unlock and manage hidden capacity on our network delivering substantial benefits for consumers. We will use our full Network Operations toolbox to accelerate renewable energy, but we have specifically linked this incentive to the flexibility role as increasing use of Demand Turn Up flexible markets will be important for achieving the maximum benefit.</p>	

Summary of supporting evidence (Examples could include references to sector specific intelligence, innovation projects, ISG engagement, wider consumer research, endorsement from third parties) (Max 200 words)

British Government's Clean Flexibility Roadmap: The Government is pushing for the energy system to be more flexible, fully integrate variable generation, reward consumer participation and maintain security of supply in a net-zero future.

NGED DSO/DNO collaboration: National Grid DSO avoided 450 GWh of customer curtailment from April-September 2025, 50% above our annual KPI target of 300GWh. This was achieved through close collaboration with the DNO outage planning team, enhanced modelling, short-term forecasting and alternative running arrangements that kept power flowing for longer.

Technical Limits initiative: By formalising Technical Limits within our commercial agreements with NESO we have accelerated connections at scale, issuing 5.2GW of accelerated offers, 2.9GW of which has been accepted. This has brought forward connections timelines by an average 5.8 years showing our capability to accelerate connections effectively at scale.

Headroom – Whole System Thinking: Our [NIA funded project](#) sought to understand the benefit per unit of added headroom in terms of reduced energy cost and reduced grid carbon intensity, demonstrating a £100 benefit for every MWh of renewable energy accelerated onto the system.

ISG engagement: We have engaged with our ISG during the development process for all our Early Proposals. Their statement related to this engagement can be found in the introduction to our Early Proposal Annex.

Summary of potential benefits (Max 200 words)

Lower Costs: Accelerating connections through non-firm renewables and smarter technology brings lower marginal cost generation onto the system sooner. Earlier access increases the volume of renewable electricity available in the wholesale market, displacing more expensive fossil-fuelled generation and places downward pressure on wholesale prices.

Reduced grid carbon intensity: With more renewable energy capacity, the system will be less reliant on fossil fuel generation, reducing overall grid carbon intensity and aligning with policy targets

Maximises use of energy: Minimising curtailment ensures that once connected, generators can export as much energy as possible. This supports the most efficient use of network capacity and keeps the maximum renewable output on the system.

Increased investment case for generation: Maximising the use of energy generation improves the investment case of the sector, ensuring a higher share of generated energy reaches the market.

Where the proposal relates to a new or enhanced service or to stretching commitments, explain why the proposal is not already business as usual or incentivised either through the existing RIIO-ED2 framework or under ED3 proposals that we are consulting on (Max 200 words)

This proposal targets the objective of accelerating renewable generation energy, and incentivising DSOs for the benefits this delivers. These benefits are not incentivised under the existing ED2 or proposed ED3 frameworks. Creating an incentive directly linking accelerated energy to curtailment will deliver optimal system outcomes of maximising the actual value of the accelerated energy brought onto the system.

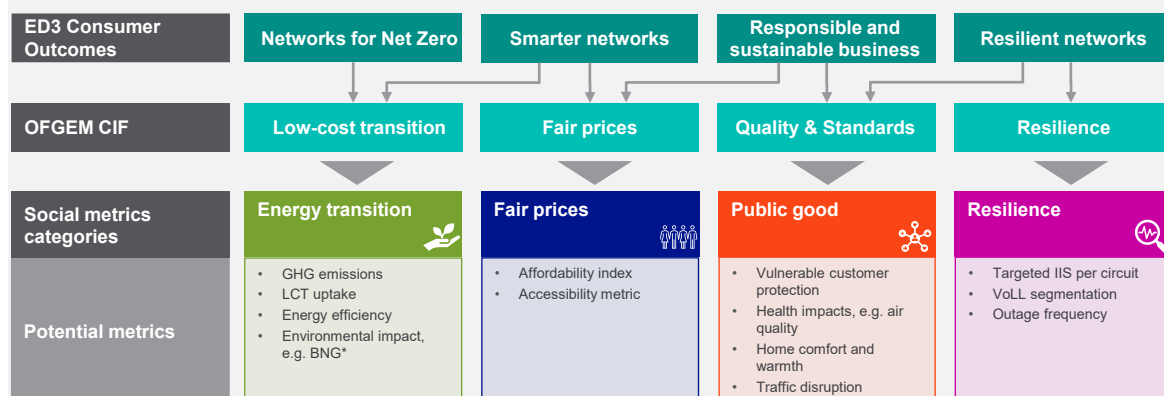
While ED2 proposed a curtailment efficiency outturn metric, this did not capture the overall system outcome. This metric was ultimately removed from the DSO incentive due to data quality concerns. Poor data quality is less likely to be a risk in this scenario as we are proposing outcome-based reporting, with improved network visibility tools that have arisen from data improvements throughout ED2.

Customer: Putting the customer first

5. Consumer Value Framework (CVF)

Licensee name	NGED
Proposal name	Consumer Value Framework
Type of proposal (confirm all that apply)	<ul style="list-style-type: none"> • Stretching commitment • Delivery accountability mechanism
Proposal Summary (Max 200 words)	
<p>Ofgem has asked the ENA to develop a Consumer Value Framework (CVF) tool, based on our original proposal which we outlined in our response to the ED3 Framework Consultation and presented to Ofgem in February 2025. The ENA tool is currently scoped only to “<i>explain the value created by proposals and commitments</i>” and excludes use for evaluating individual investment proposals on a comparable basis.</p> <p>We propose to extend the CVF tool to measure wider social impacts at the optioneering stage. Only a framework used at the point of decision making can reliably deliver better outcomes for consumers and give direct line of sight to investment choices. Done well, an extended tool also allows review of what has been delivered, improving accountability. It enables a standardised, evidence-based assessment of the societal and environmental impacts that matter most to consumers, ensuring that decisions are more transparent, accountable and aligned with consumer interests.</p> <p>The extended CVF will:</p> <ul style="list-style-type: none"> • provide a common method to assess wider social benefits at project and programme level, drawing on social NPV/SROI and qualitative techniques; • set a consistent way to present evidence and compare options; and • define how to choose between options and quantify value against a “do minimum” counterfactual. 	
Which ED3 outcomes does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Investing for the energy transition • Responsible and sustainable business • Smarter networks • Resilient networks
Which Consumer Interest Pillars does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Low-cost transition • Fair prices • Quality and standards • Resilience
Summary of key reason(s) / driver(s) for the proposal (Max 200 words)	
<p>Limiting the CVF to value articulation alone risks inefficient choices and undermines accountability. Ofgem’s new statutory duties for Net Zero and Economic Growth require a step change in regulatory approach. Our extended CVF enables DNOs to justify investments through comprehensive assessment of consumer value (social, environmental, economic) at the point decisions are made, not after the fact.</p> <p>In ED2, wider social benefits helped communicate Business Plan value but did not guide option choice; approaches also varied by DNO. Our proposal builds on existing tools (RIIO-ED2 social CBA template, ENA frameworks) to give ‘full sight’ of wider impacts at decision</p>	

points, aligned to Ofgem’s Consumer Interest Pillars, with standardised, high-quality evidence to support accountability and stakeholder trust in decisions.



Summary of supporting evidence (Examples could include references to sector specific intelligence, innovation projects, ISG engagement, wider consumer research, endorsement from third parties) (Max 200 words)

Priorities for ED3: Our original CVF proposal has been presented at Ofgem ED3 working groups and has received support from DNOs, ISGs, and wider stakeholders.

The proposal aligns with NIC’s ED recommendations;² and Ofgem’s ED3 framework decision.³

ISG engagement: We have engaged with our ISG during the development process for all our Early Proposals. Their statement related to this engagement can be found in the introduction to our Early Proposal Annex

Consumer engagement: Engagement with consumers and stakeholders highlighted the need for more consistent, transparent communication around achievements and challenges; and the tension between costs and affordability. Only a tool integrated at decision points can deliver the required assurance.

Need to go beyond existing tools: Experience from ED2,⁴ and existing ENA tools such as the CEM,⁵ show the practical value of CVF concepts for decision-making, but are narrow in scope. The Six Capitals framework currently used across the water sector is applied mainly as a conceptual and reporting tool, with very limited examples of application in decision making.⁶

Together, this evidence shows the need for an extended CVF tailored for the ED sector to prioritise consumer interests, and measure contribution to ED3 priorities.

² NIC suggested that Ofgem should “base future price controls around a rebalanced set of objectives focused on long-term requirements for the distribution network that deliver wider consumer value, alongside consumer costs.”

³ [Ofgem ED3 framework decision](#) “We want these consumer outcomes to be central to the development of ED3 and we want to ensure that DNOs are focussed and held to account on delivering them.”

⁴ For example, the DSO Whole System Headroom Innovation Project and Smart Energy Plans.

⁵ Common Evaluation Methodology, used for assessing active network management versus flexibility versus reinforcement.

⁶ [Yorkshire Water](#)

Summary of potential benefits (Max 200 words)

DNOs:

- Standardised framework for optioneering, reducing effort for evidence gathering
- 'Full sight' of the wider impacts that could result from proposed investments and programmes, leading to better decision making
- Improved evidence to justify investments that have wider benefits beyond the financial
- Improved performance against targets, by helping justify investments that deliver a more robust network

Ofgem:

- Consistent understanding and communication of wider value add from business plans
- Ability to assess DNO proposals through a consumer centric lens
- Greater accountability in regulatory decisions

Consumers:

- Greater transparency, delivering better understanding of the value of DNO expenditure and investments
- Clear articulation of value, giving consumers a greater level of trust in decisions
- Increased scope to deliver social benefits to consumers

Where the proposal relates to a new or enhanced service or to stretching commitments, explain why the proposal is not already business as usual or incentivised either through the existing RIIO-ED2 framework or under ED3 proposals that we are consulting on (Max 200 words)

This proposal goes beyond current BAU and ED2/ED3 incentives.

ED2 framework did not map to CIF

In ED2, the social CBA template captured a narrow set of non-financial benefits (e.g. carbon, health and safety). It did not cover all of Ofgem's Consumer Interest Pillars, for example omitting indicators for vulnerability and distributional impacts. The template lacks guidance on robust definition of a counterfactual to compare against, meaning it can be applied inconsistently, and does not enable tracking of the actual value delivered after the fact. Engineering Justification Papers prepared by DNOs currently rely on ad-hoc criteria, with limited and inconsistent treatment of wider social impacts. This prevents consistent assessment and comparison of consumer value.

ENA proposal does not deliver at decision stage

As described above, the ENA's current work is focused on value articulation and does not provide standardised, repeatable methods to compare options or justify investments with significant non-financial benefits.

There are opportunities for future development

Once developed and proven through ED3, the CVF could be extended further for assessment of delivery and use in benchmarking. We wrote to Ofgem in April outlining how this could be achieved.

Where the proposal relates to a new or enhanced service, explain why DNOs are best placed to undertake the activity described under the proposal (Max 200 words)

N/A – does not relate to new or enhanced service.

6. Enhanced customer service segmentation

Licensee name	NGED
Proposal name	Enhanced Customer Service Segmentation
Type of proposal (confirm all that apply)	<ul style="list-style-type: none"> • Stretching commitment • New or enhanced service
Proposal Summary (Max 200 words)	
<p>We propose a collaborative commitment to work with stakeholders across the energy system to develop a more granular customer segmentation framework that goes beyond Ofgem's proposed Priority Service Registration (PSR) and non-PSR definitions. This framework will provide DNOs deeper insights into customer circumstances and enable a more proportionate and consistent approach to meeting the needs of all residential consumers.</p> <p>By capturing a broader spectrum of consumer needs, the framework will allow Ofgem to refine incentive mechanisms during the ED3 period, ensuring DNOs are effectively addressing the full range of customer needs and are appropriately recognised and rewarded.</p> <p>A more detailed, impact-based segmentation framework will create a clearer system of prioritisation than is currently achievable under PSR and non-PSR segmentation, allowing investment and operational activity to be directed towards customers who need the most support.</p> <p>This approach will drive improved customer outcomes and more transparent, accountable systems for measuring DNO performance.</p>	
Which ED3 outcomes does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Responsible and sustainable business
Which Consumer Interest Pillars does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Quality and standards • Resilience
Summary of key reason(s) / driver(s) for the proposal (Max 200 words)	
<ul style="list-style-type: none"> • Growing vulnerability and inequality: More customers will require tailored support, both temporarily or over the long term. An ageing population, higher rates of disability and changing household structures mean that more customers will require additional support, either temporarily or over the long term • Current licence conditions limit prioritisation: Current licence obligations require DNOs to treat all customers fairly. In practice, this is often interpreted as treating all customers in the same way, which can restrict the ability to prioritise support based on differing levels of need. True fairness requires proportionality, recognising that some customers face greater risks or dependency • Insufficient segmentation: Ofgem's proposal to segment customers by PSR and non-PSR does not fully capture the range of needs across the customer base, 	

hindering DNOs' ability to allocate resources efficiently or focus effort where the impact is greatest

- **Strong public support for greater customer protection:** Consumer research shows strong public support for energy companies to provide enhanced support for vulnerable customers, reinforcing the case for a more targeted, transparent and needs-based approach

Summary of supporting evidence (Examples could include references to sector specific intelligence, innovation projects, ISG engagement, wider consumer research, endorsement from third parties) (Max 200 words)

Forecasts indicate that level of disability and dependency are increasing in line with an ageing population, with the ONS projecting a continued rise in old-age dependency, particularly in the Southwest.⁷⁸ Wider research also forecasts a significant growth in non-financial vulnerabilities between now and 2040.⁹

Government and regulatory guidance emphasise the need for prioritisation based on risk and dependency, reinforcing the case for a more impact-based segmentation framework.¹⁰

Recent collaboration through the DNO ED3 CVI group, chaired by NGED, has demonstrated shared commitment across networks to improving service quality. Participants agreed that enhanced segmentation will enable DNOs to better tailor services to meet customers' diverse requirements.

We have engaged with our ISG during the development process for all our Early Proposals. Their statement related to this engagement can be found in the introduction to our Early Proposal Annex.

Summary of potential benefits (Max 200 words)

- **Improved quality of service:** A more detailed understanding of customer needs will enable DNOs to tailor engagement, communication and support, resulting in higher customer satisfaction and more consistent service delivery
- **More efficient use of resources:** Better segmentation will allow DNOs to focus investment and operational effort where it delivers the greatest benefit, ensuring resources are deployed in line with need and impact
- **Greater accountability and transparency:** Linking segmentation outcomes to an ODI-F mechanism will strengthen performance monitoring and create clearer incentives for DNOs to demonstrate measurable improvements
- **Fairer and more proportionate support:** A clearer view of customer vulnerability and dependency will allow DNOs to prioritise those most in need, ensuring fairness in both process and outcome

⁷ House of Commons Library, *UK Disability Statistics: Prevalence and Life Experiences*, 2021

⁸ ONS, *How the Population of England is Projected to Age*, 2021

⁹ Sustainability First & Kelp, *Vulnerability Strategy: Demographics Analysis and Future Forecasts*, 2025

¹⁰ HM Government, *Identifying and Supporting Persons who are Vulnerable in an Emergency*, 2025

- **Enhanced collaboration and consistency:** Co-development of the segmentation framework across DNOs will promote consistency in approach and increase stakeholder confidence in how vulnerability is assessed and addressed

Where the proposal relates to a new or enhanced service or to stretching commitments, explain why the proposal is not already business as usual or incentivised either through the existing RIIO-ED2 framework or under ED3 proposals that we are consulting on (Max 200 words)

Ofgem's recognition of PSR/non-PSR distinctions through its proposal to split the BMCS is a positive step.

Our proposal goes further by introducing a framework for a more detailed customer segmentation framework that reflects a broader range of customer needs. This will enable DNOs to identify and prioritise customers based on levels of dependency and potential impact, not just PSR registration status.

This proposal therefore represents a material enhancement to existing arrangements. It would require collaborative development of new data, processes and governance, and will provide Ofgem with a stronger evidence base to refine the incentive mechanism during the ED3 period.

Where the proposal relates to a new or enhanced service, explain why DNOs are best placed to undertake the activity described under the proposal (Max 200 words)

DNOs are uniquely positioned to undertake the proposed activity of adopting a more granular customer segmentation approach. Their existing relationships, operational capabilities, and commitment to regulatory standards make them the ideal entities to ensure that the diverse needs of all residential consumers are met effectively.

DNOs already maintain ongoing relationships with residential consumers, which positions them well to engage with customers on a deeper level. This existing rapport allows DNOs to gather feedback and understand customer needs more intimately, facilitating the implementation of targeted initiatives that address specific segments.

DNOs have a responsibility to support vulnerable customers, and a granular segmentation approach will enable them to identify and prioritise these individuals more effectively. This focus aligns with regulatory expectations and societal needs, ensuring that DNOs can deliver equitable service to all customer segments.

As regulated entities, DNOs are accountable to Ofgem and must adhere to standards that prioritise customer satisfaction. By using a more defined segmentation to incentivise and penalise DNOs, Ofgem can ensure that DNOs remain focused on meeting the diverse needs of their customers, particularly the most vulnerable and worst served.

Connections: Driving low carbon technologies

7. Evolution of Connections performance monitoring

Licensee name	NGED
Proposal name	Evolution of Connections Performance Monitoring
Type of proposal (confirm all that apply)	New or Enhanced Service
Proposal Summary (Max 200 words)	
<p>Ofgem's Connections End-to-End (E2E) Review highlights the need for a framework that better supports LCT connections and delivers consistent, high-quality outcomes across the customer journey. We support removing connections from the BMCS and introducing a new LCT incentive but believe this should go further. Our proposal sets out a single, outcomes-driven incentives package tailored to the needs of different customer segments. Taken together, this package would deliver:</p> <ul style="list-style-type: none">• Accelerated and consistent LCT delivery. A domestic LCT incentive would improve outcomes by encouraging higher auto-approval rates and timely completion of enabling works• More consistent pre-application experience. A pre-application incentive would drive more effective early engagement, improving customer understanding and supporting higher-quality applications that enable faster connections• Improved customer service through aligned journeys. A new minor connections category covering all LV schemes would apply proportionate, standardised measures so customers with similar journeys receive a consistent service• Stronger representation and customer insight. A major connections incentive, informed by an annual survey and independent panel, would ensure broad stakeholder input directly shapes service improvements• Consistent and timely major connections delivery. Defined milestones linked to SLAs would enhance accountability and promote on-schedule progression through key stages <p>To ensure balanced and proportionate incentives across all measures, the package would be underpinned by a symmetrical financial incentive.</p>	

Figure 1 Evolution of Connections Performance Monitoring: Incentive Package

Evolution of Connections Performance Monitoring: Connections Incentive Package				
Component	Pre-application	Micro connections	Minor connections	Major connections
Description	Incentive linked to the provision of pre-application services, designed to encourage DNOs to deliver consistent and high-quality support to customers.	Incentive for domestic LCT connections with performance measured through: <ul style="list-style-type: none"> The percentage of customer outcomes obtained in less than 24 hours Time taken to deliver enabling works (with varying targets depending on the complexity of the enabling works) 	Adjustment of minor connections to include all LV related works	Removal of the MCCSS and introduction of an annual stakeholder survey and panel assessment Introduction of SLAs for key journey milestones, pre-agreed with customers as part of the connections offer, linked to a penalty only financial incentive
Benefit	Consistent pre-application services	Accelerated delivery of LCT connections	Improved customer service thought alignment of customer journeys	Consistent and timely delivery of connections
	Improved customer service through better stakeholder representation and customer insights			

Figure 2 Figure 2: Incentive Package Alignment to E2E Review

E2E theme	Pre-application	Micro connections	Minor connections	Major connections
1) Visibility and accuracy of connections data	✓	✓		
2) Improved standards of service across the customer journey	✓	✓	✓	✓
3) Requirements on networks to meet connections dates	✓		✓	✓
4) Quality of connection offers and associated documentation	✓	✓		✓
5) Ambition of connection offers	✓			✓
6) Minor connections		✓		
7) Provision and guidance for determinations				

Which ED3 outcomes does the proposal support? (confirm all that apply)

- Investing for the energy transition
- Responsible and sustainable business
- Smarter networks

Which Consumer Interest Pillars does the proposal support? (confirm all that apply)

- Low-cost transition
- Fair prices
- Quality and standards
- Resilience

Summary of key reason(s) / driver(s) for the proposal (Max 200 words)

This proposal is driven by three main factors:

- 1. Broader customer representation.** The current connections framework does not adequately reflect the experiences of all customers or wider stakeholders who engage with connections services but are not the direct delivery partner. As customer needs become more complex, the framework must evolve to capture the full range of experiences and expectations across all services and tools that DNOs provide. Our proposal introduces clear customer segments within a single incentives package to ensure broader engagement, consistent measurement and stronger accountability.

2. **Enabling LCT uptake and supporting net zero and CP2030.** Rapid growth in LCT connections will place increasing pressure on networks and lead to more complex customer journeys. Existing incentives do not sufficiently drive timely, efficient or consistent delivery. The proposed package introduces targeted measures that accelerate reliable connections and reduce barriers to the rollout of EVs, heat pumps and distributed generation, while supporting CP2030 and the UK's 2050 net zero target.
3. **Addressing the challenges of Ofgem's E2E Review.** Our package directly responds to the E2E Review's objective to strengthen the overall connections framework and improve service standards across the customer journey by introducing clearer expectations, enhanced insight and more effective performance drivers.

Summary of supporting evidence (Examples could include references to sector specific intelligence, innovation projects, ISG engagement, wider consumer research, endorsement from third parties) (Max 200 words)

E2E review: Ofgem's E2E Review highlights several issues across the connections process:

- **Visibility and accuracy of data:** Customers lack clear, consistent information to support early decision-making. The absence of standardised pre-application data leads to speculative and lower-quality applications
- **Standards of service:** Service quality varies significantly across connection stages, with limited accountability and inconsistent customer engagement
- **Meeting connection dates:** There are weak incentives for networks to deliver against agreed milestones, leading to delays and uncertainty for customers
- **Quality and ambition of offers:** Connection offers are often unclear or overly cautious, reducing transparency and slowing project progress
- **Minor connections:** Smaller customers experience longer lead times and inconsistent service, particularly when connecting LCTs
- **Determinations:** Stakeholders report limited clarity and confidence in the complaints and determinations process

ISG: We have engaged with our ISG during the development process for all our Early Proposals. Their statement related to this engagement can be found in the introduction to our Early Proposal Annex.

Summary of potential benefits (Max 200 words)

This proposal provides a targeted response to the issues identified through Ofgem's E2E Review, delivering measurable improvements in accountability, consistency and customer experience across the connections process.

- **Visibility and accuracy of data:** The pre-application component promotes earlier engagement and improved data sharing, enabling better-informed customer decisions and reducing speculative applications
- **Standards of service:** Replacing the BMCS with a single, outcomes-based package introduces clear expectations and consistent measurement across all connection types. The major connections annual survey and independent panel provide transparent benchmarking and broader stakeholder feedback, driving continuous improvement
- **Meeting connection dates:** The proposal introduces defined major connections milestones linked to SLAs. This ensures timely progression through key stages of the journey, strengthens accountability for delivery and improves customer confidence in achieving agreed connection dates

- **Quality and ambition of offers:** Independent assessment and financial incentives encourage clearer, higher-quality and more ambitious offers aligned with customer needs and system requirements
- **Minor connections:** Standardised measures for micro and minor connections improve consistency, accelerate delivery and support LCT rollout.

Together, these measures accelerate connections and support CP2030 and the UK's target to reach net zero by 2050.

Where the proposal relates to a new or enhanced service or to stretching commitments, explain why the proposal is not already business as usual or incentivised either through the existing RIIO-ED2 framework or under ED3 proposals that we are consulting on (Max 200 words)

We welcome Ofgem's decision in the SSMC to remove connections from the BMCS and introduce new incentives for LCTs. Our proposal goes further by creating a holistic package that captures the full customer journey, broadens the range of stakeholders who provide feedback, and strengthens accountability across all connection types. It establishes clear, outcome-focused measures that incentivise continuous improvement, standardise performance across networks and ensure the delivery of timely, high-quality services that enable efficient LCT uptake and progress towards net zero.

Our connections incentive package will provide enhanced coverage by inclusion of elements for micro, minor and connection as well as pre-application activities. Together, these elements provide a coherent package that promotes consistency, transparency and improved customer outcomes. The proposed Major Connections Annual Survey and independent panel would replace the MCCSS, expanding engagement to a wider range of customers and introducing independent scrutiny and benchmarking. This will drive continuous improvement and clearer accountability for performance.

A new pre-application component addresses an opportunity area not currently incentivised or standardised. It would encourage a more consistent experience of pre-engagement, ensuring customers are better informed about the connection process. This will support more informed customer decision-making and result in faster, more cost-effective delivery.

Where the proposal relates to a new or enhanced service, explain why DNOs are best placed to undertake the activity described under the proposal (Max 200 words)

DNOs are best placed to deliver the proposed package as they have direct responsibility for managing and operating the local networks through which most new connections and LCTs are made. They already work directly with customers at every stage of the journey, from pre-application through to post-connection, giving them the insight, data and operational control needed to improve service quality and efficiency. Their role in ensuring interoperability with NESO, and their responsibilities for operating the network and facilitating timely, efficient connections, also aligns with the expectations set out in the separate DSO early proposal. This reinforces the need for a coherent and coordinated approach across these related reforms.

DNOs have established systems for managing connections data, customer engagement and delivery performance, which can be built upon to implement the proposed incentives quickly and effectively. They are also well positioned to coordinate across different customer types and connection sizes, ensuring that new measures are applied consistently and fairly.

By integrating the proposed ODI-Fs and performance metrics within existing governance and reporting structures, DNOs can improve transparency, strengthen accountability and deliver better outcomes for customers without adding unnecessary complexity.

DNOs also play a central role in enabling the rollout of LCTs and supporting the transition to net zero. Their operational experience, regional presence and direct relationships with customers make them the most effective organisations to deliver a consistent, standardised and customer-focused connections package.

8. Unlooping data and visibility programme

Licensee name	NGED
Proposal name	LCT-readiness information platform
Type of proposal (confirm all that apply)	<ul style="list-style-type: none"> • New or enhanced service • Delivery accountability mechanism
Proposal Summary (Max 200 words)	
<p>This proposal would incentivise DNOs to make reliable information about their unlooping programme accessible to end consumers. The way in which consumers can access this information is for the DNOs to develop and trial over ED3. DNOs should be incentivised to compete on the quality of this service (albeit some may collaborate to develop a solution and thereby share in any reward / incentive payment). The best approach developed may then be adopted as an industry standard for ED4.</p> <p>The platform developed by DNOs would include a user-friendly interface so consumers can confirm when their network connection is likely to be ready for an LCT. This would be similar to services offered by broadband providers to check the status / speed of internet connection. Other information could include; when their DNO has planned to deliver unlooping programmes, when customers may expect disruption across unlooping programmes of work, whether they can connect LCTs, how can they avoid incurring network costs from LCT installation, and who can they speak to next. Since Ofgem will require DNOs to develop a strategic unlooping programme for ED3, this incentive would encourage DNOs to improve data and develop a consumer-friendly way of accessing it.</p>	
Which ED3 outcomes does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Investing for the energy transition • Responsible and sustainable business • Smarter networks
Which Consumer Interest Pillars does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Low-cost transition • Quality and standards
Summary of key reason(s) / driver(s) for the proposal (Max 200 words)	
<p>The adoption of LCTs might be slowed by a combination of financial, technical and behavioural barriers. Many consumers are risk-averse and the uncertainty around installation as well as the perceived risk of disruption might prevent/slow consumers from adopting LCTs. Our proposal aims to address one of these barriers by conveying to consumers when their connections are ready for LCTs (amongst other data insights). As noted in our response to SSMC Q6, DNOs do not currently have the breadth nor consistency of data for looped services on the LV network as interventions under historic price controls have focused on HV primary network. This proposal would help DNOs to fill that information gap, increase consumer confidence in the installation process and alleviate any concerns over potential costs, delays or inconvenience resulting from network connection problems.</p> <p>In addition, the proposal could complement the proactive unlooping programmes that will be undertaken by DNOs in ED3. The proposed platform could help optimise these programmes by providing consumers the option of indicating their demand for LCTs, allowing DNOs to</p>	

focus their initial efforts on the areas where the unlooping connections is likely to lead to the greatest increase in uptake of LCTs.

Summary of supporting evidence (Examples could include references to sector specific intelligence, innovation projects, ISG engagement, wider consumer research, endorsement from third parties) (Max 200 words)

Our proposal is supported by the following:

- **Consumer research** indicates that disruptions are a key barrier to LCT uptake¹¹. Research conducted by +impact¹² for SSEN showed that 47% of people said the potential for delays would discourage them from having a LCT installed. For these individuals, *“the disruption caused by the upgrades, particularly if it involved prolonged power outages or extensive digging, was a greater deterrent than the time required to complete the work.”* Similarly, Energy Systems Catapult’s consumer survey¹³ indicated 47% of participants who were initially planning on installing heat pumps, decided not to proceed due to disruption concerns. Other studies by DESNZ¹⁴ and Citizen’s Advice¹⁵ also point to disruption as a key barrier to LCT uptake.
- We have engaged with our ISG during the development process for all our Early Proposals. Their statement related to this engagement can be found in the introduction to our Early Proposal Annex

Summary of potential benefits (Max 200 words)

Key benefits could include:

Increased take-up of LCTs: The main benefit will be felt by consumers who want to take-up LCTs but have not done so due to concerns over the potential disruption. The transparent provision of information on connections LCT-readiness could improve consumer confidence in the process of LCT installation and enable forward planning on future adoption. Moreover, where consumers have foresight over planned unlooping, they can adapt and plan around any disruptions, making it less of a barrier to LCT uptake. This means that consumers who were deterred by potential disruption may not choose to take up an LCT.

In addition, if the platform allowed customers to indicate potential demand, DNOs could optimise their unlooping programmes to efficiently target areas where demand is highest. This would further accelerate speed of the energy transition and ensure that consumers who want LCTs have their connections unlooped more quickly. To incentivise consumers to provide their data, the platform could provide data in return on the amount and type of LCTs which are currently installed in their area (subject to data privacy requirements).

¹¹ Most studies refer to general disruptions without specifying the specific disruptions in question. Citizens Advice (2025) report titled [‘Consumer attitudes to retrofit’](#) simply refer to the ‘disruptiveness of the installation’ whilst UK Collaborative Centre for Housing Evidence (2023) report titled [‘Motivations and Barriers Associated with Adopting Domestic Heat Pumps in the UK’](#) refer to ‘Disruption of household routines from HPs installation’. In practice, consumers when surveyed and asked about disruption are unlikely to distinguish between in-home disruptions and the out-of-home disruptions.

¹² +impact & SSEN (March 2025), [Low Carbon Technology: Connections Readiness Indicator](#), page 15

¹³ Catapult Energy Systems (December 2022), [“Pump it up: innovation in low carbon heating is just getting started”](#)

¹⁴ Department for Energy Security and Net Zero (March 2024), [Decarbonising home heating](#), page 33

¹⁵ Citizens Advice (June 2025), [Consumer attitudes to retrofit](#), page 2

Reduced inconvenience for consumers: There will also be further for consumers who would have taken up LCTs anyway, but who now face less disruption) e.g. through better foresight and planning.

Where the proposal relates to a new provide or enhanced service or to stretching commitments, explain why the proposal is not already business as usual or incentivised either through the existing RIIO-ED2 framework or under ED3 proposals that we are consulting on (Max 200 words)

Whilst DNOs are set to adopt a programmatic approach to unlooping connections in ED3 so that LV networks are able to accommodate increasing demand from LCTs, there is currently no incentive or framework in place to communicate connection-readiness to consumers. DNOs also do not currently have the breadth nor consistency of data for looped services on the LV network

The ENA Direct portal enables installers to apply to confirm with DNOs if connections are LCT-ready but does not directly provide consumers with information that might alleviate their concerns in potentially purchasing LCTs. Where disruption or the expectation of significant disruption is preventing uptake of LCTs, there is currently no mechanism to communicate connection LCT-readiness to consumers and allow them to make informed decisions.

Where the proposal relates to a new or enhanced service, explain why DNOs are best placed to undertake the activity described under the proposal (Max 200 words)

DNOs are already planning the roll-out of unlooping programmes across ED3 and future price controls. While plans will inevitably evolve, DNOs will have a degree of foresight on the timing of when connections will be unlooped and therefore in a place where LCTs can be connected, or where connections have already been unlooped.

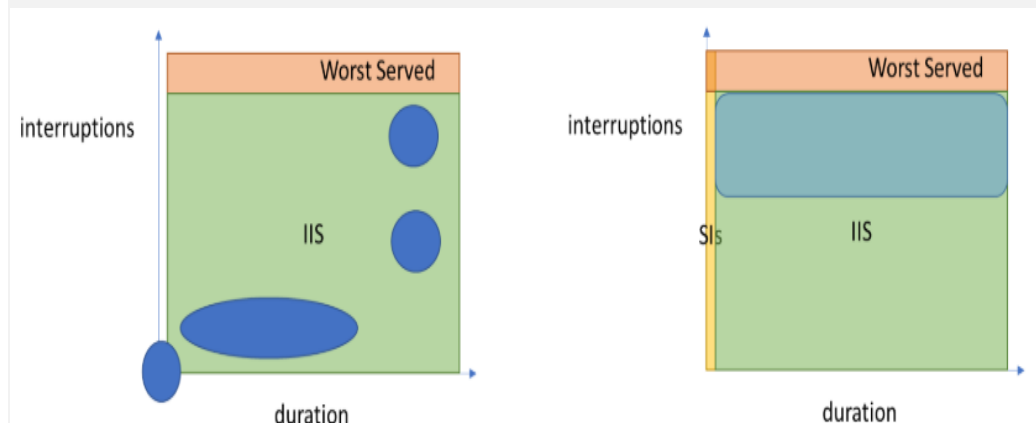
Reliability and resilience: Building a network you can rely on, for everyone

9. Ensuring no one's left behind

Licensee name	NGED
Proposal name	Ensuring no one's left behind
Type of proposal (confirm all that apply)	<ul style="list-style-type: none"> • New or enhanced service • Stretching commitment
Proposal Summary (Max 200 words)	
<p>We are proposing an evolution of the reliability framework to incentivise DNOs to improve performance for customers with relatively lower reliability standards which would not currently be rewarded under existing arrangements. This includes two new incentives to: (1.) narrow the performance disparity between urban and rural areas, and (2.) reduce the incidence of short interruptions across the network.</p> <p>Under (1.), DNOs are rewarded for shifting customers at the bottom half of the distribution of service reliability closer to median performance by the end of the period (i.e., narrowing the long tail of poor performance). These customers are often rural or on dispersed LV feeders where the marginal return under IIS is lower.</p> <p>Under (2.), DNOs are rewarded for reducing the number of customers experiencing short interruptions through a new incentive. DNOs report a baseline number of annual average short interruptions per customer and incentivised through rewards and penalties to reduce the numbers of customers in higher interruption intervals over time. Recent ENA work on dynamic VoLL can inform how short interruptions are valued and the associated incentive rates. Improvements to smart meter over time will improve accuracy of short interruptions data at LV level and inform better targets.</p>	
Which ED3 outcomes does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Responsible and sustainable business • Resilient networks
Which Consumer Interest Pillars does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Fair prices • Quality and standards • Resilience
Summary of key reason(s) / driver(s) for the proposal (Max 200 words)	
<p>Under current framework, DNOs are incentivised to improve service reliability where investments have the biggest impact on average IIS scores. This tends to focus investment in densely populated urban areas where number of customer minutes can be reduced at least cost. In most cases, these customers are now relatively well served. However, there are two groups of customers left behind.</p> <p>Firstly, customers on rural or on dispersed LV feeders with below average IIS performance have been left behind by the current IIS framework.</p> <p>Secondly, customers facing a proportionately higher incidence of multiple short interruptions experience costs which are not fully captured by IIS approach and so DNOs are not adequately incentivised to address these customers. Insight from our customer and</p>	

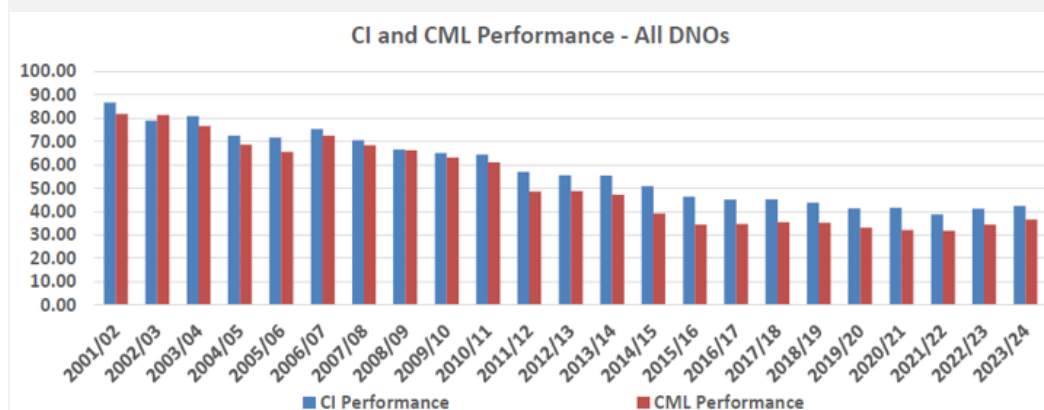
social obligations panels also shows that sequences of short interruptions can cause confusion for the elderly.

The diagram below shows the customer types which this Early Proposal would target which the current IIS does not provide a sufficient incentive for. The blue box represents the below-median performers (often rural) and yellow box the short-interruptions.



Summary of supporting evidence (Examples could include references to sector specific intelligence, innovation projects, ISG engagement, wider consumer research, endorsement from third parties) (Max 200 words)

Average CML and CI has improved over the last decade (see below) but DNOs have since reached a level of maturity in performance. Consumer feedback shows that reliability is no longer considered as important a problem to many which can be explained by the fact these consumers experience close to perfect reliability. The incentive framework should now adapt from incentivising improvements in *average* performance to *equitable* performance.



Evidence also shows that improvements in reliability have been concentrated amongst those who already experience good reliability. The performance described by this chart (average) masks a trailing lower distribution of customers which are targeted under proposal elements (1.) and (2.). Indeed, Ofgem has noted in the SSMC that a more targeted focus on customers on the extreme ends of performance measures may be required. In addition, Ofgem outline a commitment to explore 'additional measures to minimise interruptions and speed up restoration for customers who have historically faced poor service, including those in remote areas'. Our proposal is aligned with Ofgem's stated ambitions.

We have engaged with our ISG during the development process for all our Early Proposals. Their statement related to this engagement can be found in the introduction to our Early Proposal Annex

Summary of potential benefits (Max 200 words)

This proposal will drive reliability performance for customers for whom it has been seen as less commercially valuable to improve reliability. Previous improvements in IIS metrics have been concentrated amongst a group of customers for whom performance has now reached a level of maturity such that further improvements have correspondingly fallen in value. However, this has not led to a narrowing of the performance gap across customers.

Incentivising more equitable levels of performance would ensure investments are having the greatest impact on consumer welfare. The incentive rates under this proposal would be designed to drive sufficient investment to realise measurable improvements.

Moreover, introducing a more equitable way of viewing network resilience would more closely align to Ofgem's stated ambition of enabling a fair transition, for all customers. Our enhanced customer segmentation early proposal would further enable DNOs to understand if these 'left behind' customers have specific vulnerabilities (e.g., fuel poor).

Finally, whilst the costs of addressing 'left behind' customers may continue to be relatively high in ED3, this incentive will foster learning-by-doing and bring these costs down in ED4 and beyond. This could lead to lower incentive rates in future periods for the same outcomes.

Where the proposal relates to a new or enhanced service or to stretching commitments, explain why the proposal is not already business as usual or incentivised either through the existing RIIO-ED2 framework or under ED3 proposals that we are consulting on (Max 200 words)

The current IIS incentive framework applies a flat-rate improvement factor across each licence area. As a result, DNOs can meet their targets by prioritising investment in densely populated regions where improvements benefit a larger number of customers. While a UIOLI allowance exists to support investments aimed at the worst-served customers, there is limited incentive to improve network reliability for other customer groups (outlined above) where the return on investment under the current IIS is lower.

This is, in part, a consequence of the current framework assuming that costs of disruption (i.e., VoLL) are identical for all consumers and that it is driven by CML. Whilst this has previously been a necessary simplification which we generally agree with (see SSMC Q108 response), it means that DNO investment decisions do not currently account for customer groups for whom the VoLL is highest or where the costs of disruption are driven by multiple short interruptions.

For example, a 2019 NIA study by ENWL found significant differences between rural and urban customers. Beyond VoLL, there are also externality benefits to the energy transition from improving regional parity in service reliability and in delivering a fair transition for all customers (not just the median).

Where the proposal relates to a new or enhanced service, explain why DNOs are best placed to undertake the activity described under the proposal (Max 200 words)

DNOs are responsible for network improvements and have been carrying out investment projects to improve reliability. The improvements in IIS performance over the past decade is a testament to the fact that DNOs can, and do, successfully invest in projects that improve performance on IIS metrics.

The current IIS framework incentivises investments to be directed towards the areas where for a given financial amount, the most customers will see improvements in reliability (urban densely populated areas). The new proposed framework would enable DNOs to move forward proposals that have previously been deemed less cost-efficient, and therefore improve network resilience for less well served customers who are often in rural areas.

10. Network Resilience to Climate Change

Licensee name	NGED
Proposal name	Network Resilience to Climate Change
Type of proposal (confirm all that apply)	<ul style="list-style-type: none"> • New or Enhanced Service • Delivery Accountability Mechanism
Proposal Summary (Max 200 words)	
<ul style="list-style-type: none"> • This early proposal recommends a standardised qualitative framework for DNOs to justify climate resilience investments in business plans, alongside a mechanism to ensure accountability for delivery. The aim is to facilitate the justification of climate resilience investment decisions to advance business planning, while quantitative methods are developed. • The current quantitative methods proposed by Ofgem (stress testing and climate resilience metrics and indicators) do not consider local variation, risking over or underinvestment, and ultimately impacting on consumer bills and experience. The approach lacks the maturity to enable DNOs to apply the insights to robust investment planning decisions for climate resilience in time for ED3 business plans. This could hinder DNO's ability to make appropriate resilience investment decisions by overlooking the full scope of factors, limiting progress on climate resilience and risking maladaptation. • A qualitative framework, developed collaboratively, would provide DNOs a structured and systematic approach for translating climate resilience objectives into operational actions through alignment of strategies and plans, ensuring measurable outcomes while quantitative methods are still being refined. It would include broadening the scope of hazards considered, incorporating local and regional factors, and supporting transparent, evidence-based decisions. • We propose introducing an ODI-R to drive accountability to develop this framework and build consistent standards in collaboration with DNOs. Through aligning with Ofgem's climate resilience ambitions, it provides a structured no regret, first step in enabling the broader and long term framework. 	
Which ED3 outcomes does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Responsible and sustainable business • Resilient networks
Which Consumer Interest Pillars does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Quality and standards • Resilience
Summary of key reason(s) / driver(s) for the proposal (Max 200 words)	
<ul style="list-style-type: none"> • Network resilience to climate hazards is important and will become even more so with climate change. Although we support Ofgem's ambition to integrate climate resilience into investment decisions, the proposed quantitative methods lack the maturity to enable the necessary decision making and bring consumer value. Similarly, the alternative qualitative approach remains underdeveloped. We propose addressing this gap by developing a standardised framework in collaboration with other DNOs. • Ofgem's stress testing provides useful indicators, but the maturity and granularity of the current approach do not provide sufficient confidence required for decision 	

making. It could obscure critical vulnerabilities, or point to vulnerabilities that have already been addressed, driving inappropriate funding allocations. This incomplete approach only considers a narrow set of hazards and will later need to accommodate a more fit-for-purpose methodology, ultimately hindering progress on climate resilience.

- Without a stronger methodology, there's a risk of underinvestment and poor consumer value, whilst a 'do nothing' approach while the methodology matures is not a credible option from economic, operational and consumer value perspectives. Our proposed standardised qualitative framework would be a no regrets solution to address these gaps, enabling DNOs to consider a broader set of climate hazards, local factors, and interdependencies not captured by stress testing, ensuring tailored and effective interventions.
- This would inform ED3 planning, maintain in-period accountability, and support development of the quantitative methodology for ED4.
- A reputational incentive would support development of this framework ensuring climate resilience is given sufficient focus across all DNOs, hence improving understanding of the matter for the sector and ensuring accountability, while working to develop quantitative methods for ED4. The proposed approach would draw on the learnings from CVI, developed collaboratively by DNOs to deliver a framework with standardised metrics and a clear methodology.

Summary of supporting evidence (Examples could include references to sector specific intelligence, innovation projects, ISG engagement, wider consumer research, endorsement from third parties) (Max 200 words)

- The Climate Change Committee 2025 report recommended to: 'Ensure key regulated funding agreements provide incentives for adaptation deployment'. This agreement should ensure adaptation measures are deployed at-scale for a broad range of climate hazards'. Recent named storms have demonstrated the risk severe weather events present to the network and consumers, highlighting the need for future resilience across the sector.
- The Climate Change Resilience Working Group (CCRWG) has recognised that Ofgem's current approach remains at an early stage and that developing it further is essential to drive progress.
- University of Birmingham research on network resilience recommended developing more predictive analytics, and enhanced linkages between weather and impact data.
- In ED2, Ofgem did not provide allowances specifically for Quality Of Supply (QOS), instead DNOs are to consider the cost benefit from the Interruption Incentive Scheme (IIS) to drive investment. However, IIS is event-based and averages performance, which may not incentivise resilience in all areas, particularly for more sparsely populated areas.
- We have engaged with our ISG during the development process for all our Early Proposals. Their statement related to this engagement can be found in the introduction to our Early Proposal Annex.

Summary of potential benefits (Max 200 words)

- **Supports timely climate action in line with long term climate strategy:** Enables DNOs to continue integrating climate resilience into business planning while quantitative methods are developed. It also encourages DNOs to identify the enablers, capabilities, and specific initiatives needed to strengthen climate resilience. This builds a strong foundation to support longer term quantitative ambitions. It would also encourage actions in ED3 to be based on the best available evidence, supporting no regrets decisions.

- **Provides in period accountability:** a reputational incentive mechanism based on a standardised approach across DNOs holds DNOs to account.
- **Minimises impact on bills:** Targeting resilience funding where it delivers the greatest value mitigates the risk of over or under investment, avoiding unnecessary spend and therefore minimising the impact on customer bills.
- **Increased network resilience:** Enhancing proactive, climate focused interventions will strengthen the network's ability to withstand extreme weather and other climate related hazards. This will lead to improved reliability, including lower fault rates, fewer service interruptions and a more robust network over the long term.

Where the proposal relates to a new or enhanced service or to stretching commitments, explain why the proposal is not already business as usual or incentivised either through the existing RIIO-ED2 framework or under ED3 proposals that we are consulting on (Max 200 words)

- This proposal is not business as usual; it addresses gaps in the current RIIO-ED2 framework and Ofgem's developing approach for ED3. While we agree with Ofgem's ambition for ED3, the proposed approach to climate resilience in the SSMC is still developing and lacks a consistent framework for assessing and incentivising DNO performance, and has limited practical application to drive action.
- Our proposal addresses these gaps by introducing structure and standardisation into the proposed qualitative approach. This ensures better outcomes for consumers and network reliability during ED3, while building the foundation for a fully quantified approach in ED4.
- The introduction of a mechanism will link DNO actions directly to their broader climate resilience strategies.

Where the proposal relates to a new or enhanced service, explain why DNOs are best placed to undertake the activity described under the proposal (Max 200 words)

Decision making for climate resilience can be complex. DNOs are best placed to lead on this work because they possess detailed understanding of local considerations and interdependencies that are necessary for effective resilience decision making. For example, stress testing based on the historic data may indicate a vulnerability, but additional DNO knowledge may reveal that this has been mitigated in other ways. The local knowledge and operational insight of each DNO makes them best placed to identify and deliver local interventions that can have wide system benefits. Resilience strategies would be enhanced by provided a more comprehensive assessment of each DNOs needs.

IT & Digital: Leveraging data and digital innovation

11. Data Standards Framework

Licensee name	NGED
Proposal name	Data Standards Framework
Type of proposal (confirm all that apply)	<ul style="list-style-type: none"> • New or enhanced service
Proposal Summary (Max 200 words)	
<p>The Data Standards Framework establishes a unified cross-DNO approach to data verification, lineage and interoperability creating a trusted digital foundation for real-time coordination between DNOs, NESO and market participants. It fills in a gap where inconsistent definitions, varied taxonomies and differing levels of assurance across DNOs limit operational coordination, hinder flexibility markets and reduce information quality provided to NESO and other stakeholders.</p> <p>In ED3, we propose DNOs implement common standards and metadata for priority operational datasets, such as network topology, asset registers, outage and restoration events and flexibility market data, with a clear path for other datasets later. The framework introduces four core capabilities: a distributed trust layer for verified data exchange; automated lineage and observability to improve traceability and auditability; event-driven integration to replace batch processes with real time data flows; and a shared taxonomy aligned to Data Best Practice.</p> <p>This framework will move the sector from basic data availability to accountable, high-quality data that underpins digital twins, operational visibility, flexibility markets and whole system planning. It delivers a shared, robust and future-proof data backbone across DNOs, NESO, and wider market participants, with the intention for these standards to become mandatory once fully implemented to ensure sector-wide compliance.</p>	
Which ED3 outcomes does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Investing for the energy transition • Smarter networks
Which Consumer Interest Pillars does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Quality and standards
Summary of key reason(s) / driver(s) for the proposal (Max 200 words)	
<p>The transition to a decentralised, digital energy system increases the need for high-trust, consistent and interoperable data across organisational boundaries. Today's reliance on bilateral integrations, varied taxonomies and manual assurance limits DSO-NESO coordination, slows flexibility market development and increases operational cost.</p>	

Change is needed to deliver verifiable provenance, automated lineage, real-time availability, and consistent definitions across core datasets. As data volumes and regulatory expectations grow, the lack of a unified cross-DNO standards adds complexity, reduces transparency and erodes confidence in shared information.

The proposal complements Data Sharing Infrastructure (DSI) by ensuring that DNO data is standardised, validated and interoperable before it is consumed by wider system services. While DSI sets high level metadata requirements and provides a consistent environment for data discovery and reuse, it does not define or govern the detailed taxonomy, validation rules or lineage standards required for DNO operational datasets.

This framework addresses this by providing common definitions, shared taxonomy and automated assurance needed. It enables DSI to operate with consistent high-quality inputs and focus on delivering national-scale analytics. It establishes a single, cross-sector framework for data assurance, interoperability and automated governance, delivering benefits for DNOs, NESO, flexibility providers, aggregators, innovators, local authorities and consumers.

Summary of supporting evidence (Examples could include references to sector specific intelligence, innovation projects, ISG engagement, wider consumer research, endorsement from third parties) (Max 200 words)

The proposal responds to the Energy Digitalisation Taskforce's call for secure and auditable data sharing. It aligns with Ofgem's Data Best Practice, which requires standard definitions, metadata interoperability and clear provenance. The framework mitigates the risk of isolated interpretation of this guidance by introducing shared taxonomies, common verification rules and automated lineage.

There are proven precedents for this approach. For example, blockchain-based flexibility registries and national metadata standardisation initiatives, demonstrate that distributed verification and shared taxonomies are practical and valuable. While ongoing Energy Networks Association collaboration provides an established forum for developing and governing consistent data standards across all DNOs.

The framework builds on the investments made in ED2, including open data platforms, time-series stores and data mastering capabilities. It enhances them by embedding trust, automation and interoperability at scale enabling faster and more reliable data exchange. It is designed to align with NESO's DSI by ensuring that DNO inputs are standardised, validated and interoperable before they are integrated into national systems, avoiding duplication and ensuring complementary development.

We have engaged with our ISG during the development process for all our Early Proposals. Their statement related to this engagement can be found in the introduction to our Early Proposal Annex

Summary of potential benefits (Max 200 words)

The framework creates a common data backbone that enables real-time, verified and traceable data flows across all DNOs and with approved external partners. It delivers key technical benefits, including automated lineage, consistent taxonomy, reduced duplication and seamless integration with future Data Sharing Infrastructure. These improvements

create a more reliable and efficient data environment that supports more efficient planning, forecasting, system operation and market settlement.

At a strategic level, the framework strengthens regulatory assurance, supports whole-system coordination and enables advanced analytics, digital twins and flexibility optimisation. It provides a durable foundation for ED3 digitalisation ambition and wider transition to a smarter, more integrated energy system.

As we expect these standards to be adopted by all DNOs, it will further promote interoperability, expedite participation in DSI and more broadly, equality across networks.

Where the proposal relates to a new or enhanced service or to stretching commitments, explain why the proposal is not already business as usual or incentivised either through the existing RIIO-ED2 framework or under ED3 proposals that we are consulting on (Max 200 words)

While ED2 delivered valuable foundation, such as machine learning operations (MLOps) and cloud data platforms, it did not establish a unified, cross-sector approach to data verification, taxonomy governance or automated lineage. There is currently no existing mechanism that combines distributed trust, observability, real-time streaming and shared metadata standards within one regulated model. Existing BAU activities focus on local platform development rather than coordinated, multi-party data assurance.

The SSMC proposal to create an independent expert panel provides an important mechanism for oversight, challenge and coordination, but it does not deliver the common technical standards, shared taxonomies or automated assurance needed across core DNO datasets. This framework complements that panel by providing the practical and operational foundations required for consistent interoperability.

The transition to DSO operation requires reliable and consistent data exchange across organisational boundaries, which current frameworks cannot deliver. Current existing or proposed arrangements cannot provide the level of standardisation or assurance required to support these functions. As a result, this proposal introduces a step-change in scope, standardisation and assurance that goes beyond existing incentives or what has been proposed in ED3.

Where the proposal relates to a new or enhanced service, explain why DNOs are best placed to undertake the activity described under the proposal (Max 200 words)

DNOs hold and manage the operational, planning and market data that underpin flexibility services and system coordination driving efficient consumer outcomes. Their regulatory obligations around neutrality, reliability and transparency make them the natural custodians of sector-wide data standards.

A cross-DNO governance model is also essential to ensure that the agreed standards are applied consistently and that compliance becomes embedded in everyday practice across all licensees. The ENA provides a well-established structure for cross-DNO collaboration, enabling common governance of taxonomy, verification rules and assurance processes. This collective approach prevents fragmentation, supports common interpretation of standards and embeds a consistent level of quality across all networks

With direct responsibility for network operation, DNOs are uniquely placed to integrate the framework into control systems, planning tools, data platforms and market interfaces, ensuring consistent implementation and long-term stewardship. This proximity to operational functions ensures that the standards evolve in line with system requirements.

Taken together, these factors position DNOs, working collaboratively through the ENA, as the most appropriate parties that can deliver this level of coordination and provide sector with the trusted, interoperable data infrastructure needed for the future.

12. AI Collaboration Hub

Licensee name	NGED
Proposal name	AI Collaboration Hub
Type of proposal (confirm all that apply)	<ul style="list-style-type: none"> • New or enhanced service • Delivery accountability mechanism
Proposal Summary (Max 200 words)	
<p>The AI Collaboration Hub for DNOs will create a shared, secure digital platform enabling responsible and transparent use of Artificial Intelligence across electricity distribution operations. It is intended as a collaborative platform for sharing and governing AI models, rather than a commercial marketplace.</p> <p>The hub will allow DNOs and approved third parties to access, validate and deploy AI models that support forecasting, flexibility, asset management and system planning. It provides a consistent framework for data standards, assurance and ethical AI governance, reducing duplication of innovation and promoting interoperability across the sector.</p> <p>By embedding transparency, cybersecurity and consumer safeguards, the Hub ensures AI is used safely and efficiently to optimise networks and reduce costs. During ED2 we have established a dedicated data and AI scrum team, delivered initial AI and machine learning pilots and invested in our open data platform. This proposal brings that work together into a structured cross-DNO service.</p> <p>We propose to introduce this tool first to DSOs, who could gain the highest benefits for system planning and operation, and flexibility markets, before rolling it out across the wider DNO operations.</p> <p>We propose rewarding networks for sharing and deploying models through an ODI-F, reinforcing cross-sector collaboration and mitigating the risk of low deployment from standalone innovation projects.</p>	
Which ED3 outcomes does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Investing for the energy transition • Responsible and sustainable business • Smarter networks • Resilient networks
Which Consumer Interest Pillars does the proposal support? (confirm all that apply)	<ul style="list-style-type: none"> • Low-cost transition • Fair prices • Quality and standards • Resilience
Summary of key reason(s) / driver(s) for the proposal (Max 200 words)	
<p>As electricity networks decarbonise and electrification accelerates, DNOs must manage greater system complexity, variable demand and distributed generation.</p>	

AI can significantly enhance operational performance through predictive analytics, optimisation and automation, but current adoption across DNOs is fragmented, inconsistent and often duplicated.

The AI Collaboration Hub provides a coordinated approach, aligning innovation with ED3 priorities for digitalisation, data sharing and consumer benefit. It establishes a collaborative environment where validated AI models can be developed once and deployed across all networks under consistent governance. During ED2 we have begun to develop and trial individual AI models and governance approaches. We will continue to progress design and pilot activities through ED2 digital re-opener to enable us to use ED3 funding to scale up the proven concept.

This proposal directly responds to Ofgem's call for smarter, more interoperable and transparent digital solutions under ED3, ensuring DNOs can harness AI efficiently, safely and equitably to support the energy transition. The platform design assumes DNO leadership while working with the leading AI experts and academic partners to keep up to date with the best practice and expedite delivery of consumer benefits.

Summary of supporting evidence (Examples could include references to sector specific intelligence, innovation projects, ISG engagement, wider consumer research, endorsement from third parties) (Max 200 words)

The proposal draws on sector experience and regulatory signals:

- Ofgem's ED3 Framework Consultation (2024) identifies AI and data as key enablers for smarter and more resilient networks.
- ED2 Digitalisation Strategies highlight the need for improved data interoperability and governance.
- DNO innovation projects, such as predictive asset analytics and flexibility forecasting pilots, demonstrate technical potential but lack scalability.
- Stakeholder engagement via the Independent Stakeholder Group and Ofgem's AI Guidance Consultation (2024) confirms support for structured, cross-sector AI collaboration.
- Academic and industry partners have expressed readiness to contribute models and expertise under a transparent assurance framework.
- We have engaged with our ISG during the development process for all our Early Proposals. Their statement related to this engagement can be found in the introduction to our Early Proposal Annex
- Together, these provide a strong evidence base that a regulated, shared AI Collaboration Hub would accelerate innovation, reduce duplication and improve accountability for AI use across the sector.

Summary of potential benefits (Max 200 words)

For consumers:

- Lower overall system and innovation costs through shared development and deployment.
- Improved service reliability, safety and quality of supply.
- Greater transparency and trust in AI-driven decisions affecting network management.

For DNOs:

- Enhanced forecasting, planning and asset management through access to proven models.
- Efficiency gains of up to 30% from avoided duplication and common assurance as demonstrated by our use cases
- Stronger cyber and ethical governance for AI adoption.
- Support AI skill development across other DNOs and reduce discrepancies across regions

For the wider energy system:

- Accelerated progress toward net zero through smarter network operation.
- More effective integration of low carbon technologies and flexibility services.
- A scalable digital model that supports the future Data Sharing Infrastructure (DSI) and flexibility market facilitator functions and provides a common AI layer that can be reused by future whole system digital services.
- A unique access to these models will improve flexibility providers' understanding of the market and facilitate more informed decision-making
- A secure and DNO-governed central place for the approved third parties, such as academics and innovators, to share and deploy emerging AI models

Where the proposal relates to a new or enhanced service or to stretching commitments, explain why the proposal is not already business as usual or incentivised either through the existing RIIO-ED2 framework or under ED3 proposals that we are consulting on (Max 200 words)

As electricity networks decarbonise and electrification accelerates, DNOs must manage greater system complexity, variable demand and distributed generation. AI can significantly enhance operational performance through predictive analytics, optimisation and automation, but current adoption across DNOs is fragmented, inconsistent and often duplicated.

Existing ED2 mechanisms promote data openness and innovation but do not provide a coordinated platform for AI development or assurance. Current innovation projects are temporary, localised and not designed for enduring sector-wide use.

There is no cross-DNO infrastructure that enables AI models to be validated, shared and governed collectively. This proposal addresses this gap by creating a shared enduring service owned and governed by the DNOs.

This proposal directly responds to Ofgem's call for smarter, more interoperable and transparent digital solutions under ED3, ensuring DNOs can harness AI efficiently, safely and equitably to support the energy transition.

In ED3, we propose a new accountability mechanism that will monitor AI model availability and use.

Where the proposal relates to a new or enhanced service, explain why DNOs are best placed to undertake the activity described under the proposal (Max 200 words)

DNOs have a unique access to the operational data and also have regulatory obligations needed to steward such a platform. We recognise the AI industry is constantly developing and we propose to partner with leading academic and commercial experts in the field, where it delivers clear benefits and to ensure this doesn't hinder delivery of our other Data and Digital commitments.

We propose to implement a cross-DNO governance model, as networks themselves are best place to assure that only relevant and good quality models are shared in the hub.