

▷ Distribution**System**Operator

DSO Strategic Action Plan

Putting your feedback into action

March 2024

DSO | national**grid**



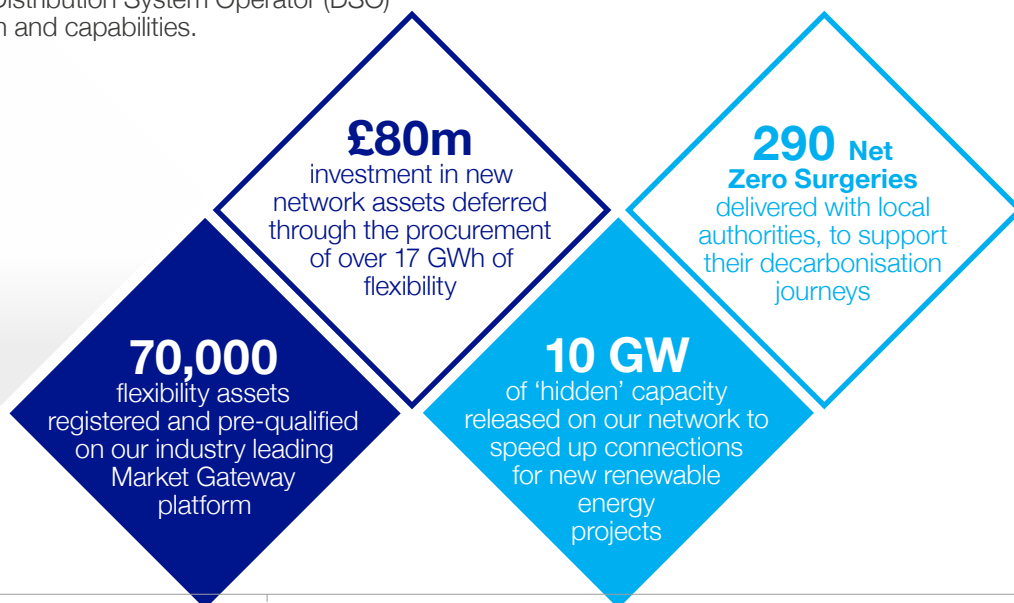
Executive summary

The UK electricity system is going through a period of transformation, with a target to decarbonise by 2035. This ambition to reach net zero is changing the way that electricity is generated and consumed at pace. Across National Grid Electricity Distribution (NGED) regions, we are seeing widespread investment in renewable generation and storage, alongside increasing deployment of low carbon technologies (LCT) such as heat pumps and electric vehicles.

Electricity distribution networks must adapt to the changing needs of their customers and stakeholders. We are committed to playing our part in enabling local and regional decarbonisation, and to address these evolving needs on our network we have prioritised development of our Distribution System Operator (DSO) function and capabilities.

In our first full year as a functionally separate DSO, we have made significant progress in delivering positive outcomes for our customers and stakeholders.

In addition to the below, we have published our seventh Distribution Network Options Assessment (DNOA) – our market leading method of communicating how we are managing network constraints – and eighth Distribution Future Energy Scenarios (DFES) annual forecasts which incorporate 7,200 strategic projects being developed by local authorities across our regions. Beyond these headlines, we share much more information on our progress so far and our plans to set us up for success in the future shared throughout this document.



Our forward plans are built around five key themes that our customers and stakeholders say are important:

Planning and Network Development		Enable local and regional decarbonisation by supporting ambitious initiatives from planning through to delivery on the ground
Network Operation		Enhance the visibility of our network by harnessing the latest data and digital solutions to drive smart, whole-system outcomes
Flexibility Market Development		Continue to lead the curve on flexibility, doing all that we can to create market opportunities and simplify access
Governance		Promote transparent, independent and efficient decision-making through effective DSO governance
Engagement		Proactively collaborate through partnerships to deliver whole-system outcomes, and be transparent with stakeholders how we measure DSO success

The first three themes were reflected in the strategic commitments we made in our DSO Charter in November 2023. This document expands on how we will deliver against those commitments and explains what action we are taking to address the other themes identified by our stakeholders.

Foreword

As we near the end of the first year of our new regulatory framework, I am extremely pleased to publish our DSO Strategic Action Plan. This two-year plan provides clarity on our DSO deliverables and outcomes, which we have co-created with our stakeholders.

Since April 2023, we have embarked on an extensive programme of engagement so we can make sure our stakeholders' voices directly shape development of our DSO plans and priorities. Through our Electricity Futures engagement series, we sought feedback on our initial view of the DSO vision, commitments and deliverables. We committed to ensuring that our DSO was set up to deliver the services that our stakeholders value. After a thorough review of the feedback, we published our co-created vision and commitments in our 'DSO Charter' in November.

Further engagement has now shaped the detailed deliverables and outcomes that our DSO will strive to achieve over the next two years. A key theme we heard from our stakeholders is the need for clarity on how we will measure success. We have developed measures for each of our strategic commitments, which will enable our stakeholders to hold us to account. We are committed to being transparent about how we are performing and will maintain effective engagement with our stakeholders.

While developing our Strategic Action Plan, we have not stood still, and have already delivered many tangible outcomes for our customers and stakeholders across our core DSO roles. I am truly excited by the future evolution of our DSO and the benefits we can create by enabling decarbonisation for our customers and communities. There is still much to do, but I am confident in the strong foundations that we have established. Through collaboration with our stakeholders and partners, we will continue to deliver the benefits that our DSO can unlock in the energy transition.



Ben Godfrey, DSO Director,
National Grid Electricity Distribution

Introduction

NGED is the regional distribution division of National Grid, which owns and operates the cables and substations in the East and West Midlands, South West and South Wales. We are the UK's largest electricity distribution network, serving over 8 million customers and delivering essential power to homes, businesses and over 18 million people across our regions.

While providing a safe, stable and reliable electricity supply, we are committed to playing a leading role in enabling local and regional decarbonisation as the UK transitions towards a net zero carbon energy system. We are already supporting LCTs to connect to our network. As the rollout of renewables, heat pumps and electric vehicles continues to ramp up, our forecasting shows that the demand to connect these LCTs will increase exponentially. Over the last regulatory year, we have been notified of 11,305 heat pumps and 52,142 electric vehicles, and have connected 374 MW of generation. [Looking ahead¹](#), we project that there could be 3.4 million domestic heat pumps, 7.7 million electric vehicles and over 25 GW of renewables capacity in the regions that we serve by 2035.

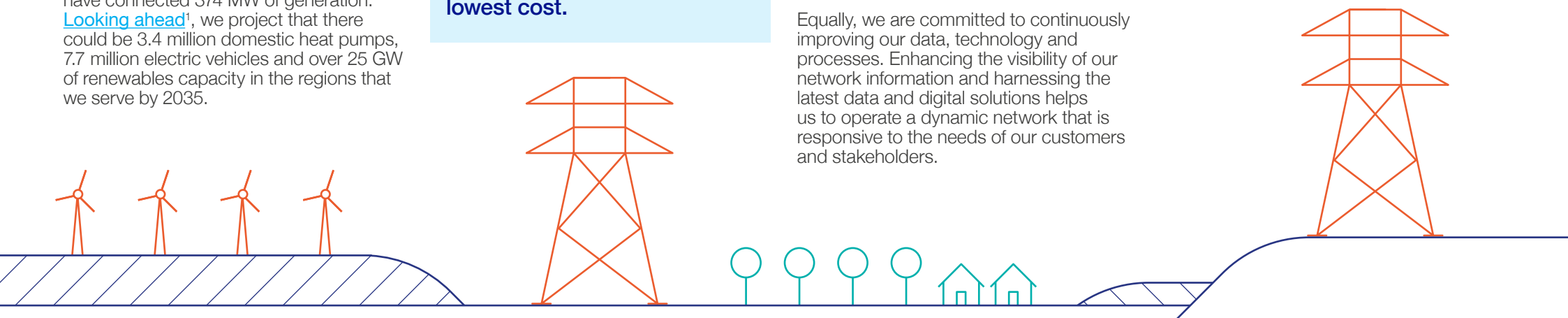
To respond to this challenge and accommodate the changing demands on our network, we established our DSO function in April 2023.

Our DSO vision is to enable and coordinate a smart, flexible energy system that facilitates local decarbonisation for all customers and communities at the right time and the lowest cost.

We will achieve our DSO vision by accelerating the development of flexibility markets and expanding access. This will maximise the capacity of the existing network and the benefits of demand side solutions in our regions. It also means taking a proactive and long-term approach to strategic planning. Working with our partners across the whole energy system, this will help us to make sure that investment in our physical network infrastructure is delivered where and when it is needed, in a way that minimises the cost to consumers.

Equally, we are committed to continuously improving our data, technology and processes. Enhancing the visibility of our network information and harnessing the latest data and digital solutions helps us to operate a dynamic network that is responsive to the needs of our customers and stakeholders.

All of this needs to be underpinned by effective governance. That is why we have started to introduce a range of measures focused on ensuring independent, transparent and efficient decision making by our functionally separate DSO. While we are committed to managing any conflicts of interests or trade-offs between our DSO and Distribution Network Operator (DNO) roles, we believe that a close working relationship between both functions is key to delivering optimal outcomes for consumers.



¹ Distribution Future Energy Scenarios (2024), Leading the Way

Key outcomes in 2023/24

In our first year, we have made significant progress in developing and refining our DSO capabilities. The aim of our approach is to achieve positive outcomes for the customers and communities that we serve, and we are proud to have already delivered these tangible benefits for our customers and stakeholders:

**Released
10 GW of additional
capacity**
for renewable
energy projects

**Deferred
over £80 million
investment**
in conventional
reinforcement through
flexibility, delivering
consumer saving

**Engaged 209
stakeholders**
from across the whole
energy system through our
Electricity Futures DSO
event series so far

**Procured
over 17 GWh of
flexibility availability,**
with 19,000
dispatch events

**Delivered 290
Net Zero Surgeries**
with our local authority
stakeholders, to support
their decarbonisation
journeys

**Launched our
independent DSO
Panel**

Engaging our customers and stakeholders

Effective customer and stakeholder engagement is paramount to being an effective DSO.

In our inaugural year as a functionally separate DSO, we have embarked on an extensive programme of engagement with our customers and stakeholders, making sure that their voices are heard at every step of the way.

Our engagement has included large-scale events through our leading Electricity Futures DSO event series and targeted workshops focused on key areas of our DSO roles and responsibilities. We have also engaged directly to support specific customer and stakeholder needs, such as our Net Zero and Flexibility Surgeries.

This proactive approach has helped us understand the needs and preferences of our customers and stakeholders, guiding

us in the development and delivery of tailored solutions. While we have been refining the foundations of our DSO, we have been able to incorporate meaningful feedback from our stakeholders, promoting transparency and collaboration. Through this extensive programme of engagement, we have been fostering a culture of collaboration, innovation, and responsiveness.

This is paving the way for a smart, flexible energy network that facilitates local decarbonisation for all customers and communities, at the right time and lowest cost.

2023/24 stakeholder engagement at a glance



Engaged 209 stakeholders across 155 stakeholder organisations from across the whole energy system through our Electricity Futures DSO event series so far

Delivered 290 Net Zero Surgeries across our regions, with local authorities and other stakeholders involved in decarbonisation planning

Held 8 flexibility webinars and workshops, reaching more than **250** flexibility market stakeholders

Delivered 30 Flexibility Surgeries with prospective Flexibility Service Providers

Engaged over 250 stakeholders via our regional stakeholder webinars and workshops co-delivered with Regen to publish the 2023 DFES

For more detail on our engagement, please see the Appendix

Our DSO Charter and vision

In September 2023, as part of the launch of our Electricity Futures DSO event series, we shared a draft DSO Charter with our stakeholders. During the event, we tested our DSO vision and strategic commitments with a broad and diverse range of 49 stakeholders including devolved and local government, flexibility market participants, energy generators and large energy users.

Building on the feedback we gathered, we published our revised DSO Charter in November 2023.



The purpose of our Strategic Action Plan

The purpose of this Strategic Action Plan is to outline the actions that we will take over the next two years to achieve our vision and ensure that we deliver our commitments outlined in the DSO Charter. We have documented the most important activities that we will deliver against each of our three DSO roles, and governance. We have focused on actions that are ambitious, practical and in line with the priorities we have heard from our stakeholders. A number of key reflections from our stakeholders have also shaped our priorities beyond our three core DSO roles. In particular, we heard that transparent decision-making between the DSO and DNO is important to our stakeholders, and as such, we have published our Guide to Governance with the Distribution Network Operator (DNO) outlining how we will balance the objectives of both functions. We also heard the importance of establishing specific and measurable DSO deliverables. This Strategic Action Plan builds on the DSO Charter by setting out how we will measure the actions we are taking, so stakeholders have visibility on how we are measuring success each year.

Understanding the needs of our customers and stakeholders

Flexibility Service Providers and aggregators:




Market participants, including aggregators, with an interest in the development and operation of flexibility markets, enabling them to participate easily.



I want to earn revenue from DSO services.

- To meet the needs of Flexibility Service Providers and aggregators, we are committed to improving our operational data and technology, improving transparency of decision making (e.g. curtailment information) and standardising and simplifying our flexibility market products and processes.

We're going to deliver this through these key commitments:

-  **2.1 & 2.2 Network Operation**
-  **3.1 & 3.2 Flexibility Market Development**
-  **Governance**

Key engagement routes and interactions: Flexibility webinar series, Flexibility Surgeries, Electricity Futures Series.

We are also working with Flexibility Service Providers to develop flexibility products and services for domestic consumers that are accessible and inclusive.

Local authorities, consumers and communities:

Local authorities, as well as consumers and communities who want a cost effective and well-coordinated transition to net zero in their area.



I want future capacity to be ready when I need it at the lowest cost.

- We play an important role in enabling local decarbonisation at lowest cost. Through our forecasting capabilities, we ensure effective strategic network planning and provide easily accessible information to local authorities as they develop LAEPs.

We're going to deliver this through these key commitments:

-  **1.1. & 1.2 Planning and Network Development**

Key engagement routes and interactions: Net Zero Surgeries, DFES engagement webinars and Electricity Futures Series.

While consumers are unlikely to interact with the DSO directly, the interests of consumers and communities are represented through our engagement with stakeholders such as local authorities and consumer groups.

Understanding the needs of our customers and stakeholders

Generation, demand and large energy users:

Stakeholders including renewable generators, developers and operators, and large energy users that have an interest in how DSO activity will impact network capacity and access, as well as how flexibility markets develop and operate in practice.



I want a connection on time and to optimise use of my assets.

- To support our customers, we are committed to enhancing the quality of and access to operational data, enhancing the transparency of decision making (e.g. curtailment information), and standardising and simplifying our flexibility market products and processes.

We're going to deliver this through these key commitments:

- ◆ 2.1 & 2.2 Network Operation
- ◆ 3.1 & 3.2 Flexibility Market Development

Key engagement routes and interactions: Flexibility webinar series, Flexibility Surgeries, Electricity Futures Series as well as direct engagement such as with customers on the ENA three-point plan.

Electricity System Operator (ESO)²:

ESO is responsible for centralised strategic system planning as well as operating and balancing the system in real time. Upon transitioning to the National Energy System Operator (NESO) in summer 2024, it will soon also take on additional Regional Energy Strategic Planner (RESP) roles, coordinating strategic whole system plans at a sub-national level.



I want to coordinate to manage network constraints at a national and local level.

- To support NESO in the future, we are committed to facilitating whole-system coordination and improving overall efficiency.

We're going to deliver this through these key commitments:

- ◆ 1.2 Planning and Network Development
- ◆ 2.1 & 2.2 Network Operation
- ◆ 3.1 & 3.2 Flexibility Market Development

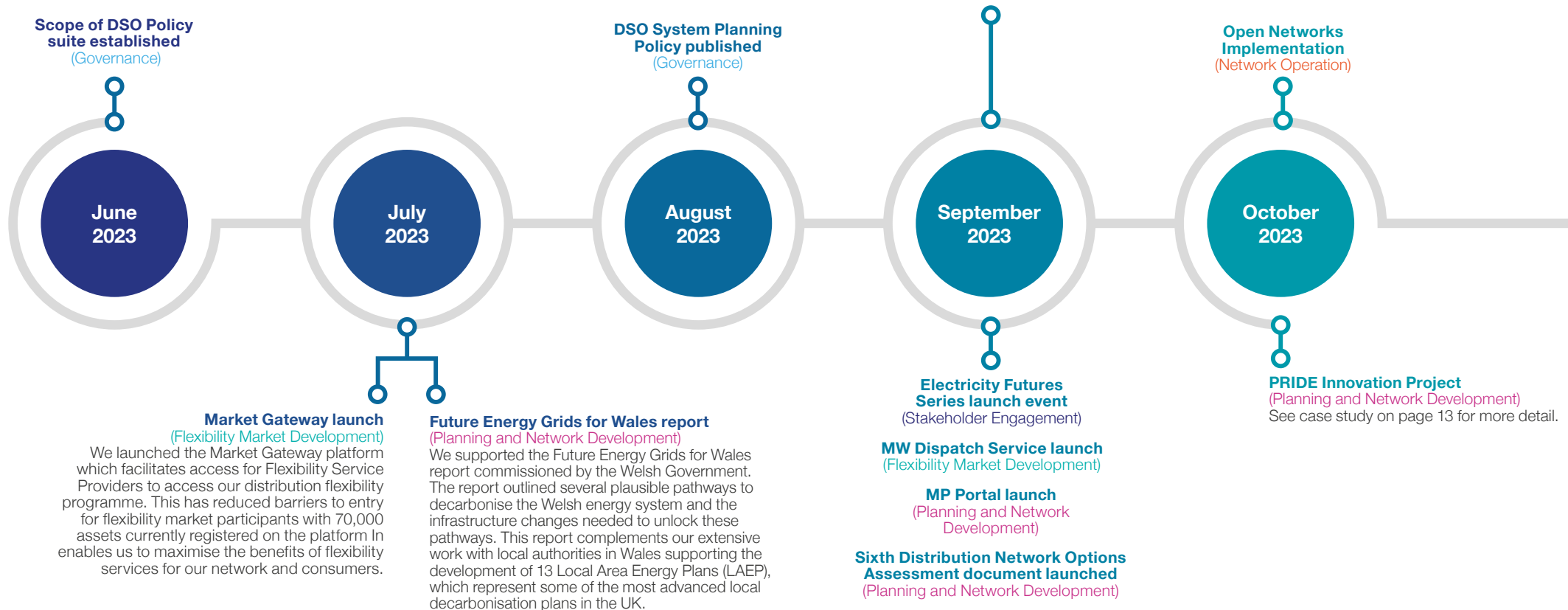
Key engagement routes and interactions: DFES webinars, flexibility webinars, Electricity Futures Series.

² The terms ESO and NESO are used through this document to refer to the same organisation. ESO is generally used when referring to the past or present and NESO is used when referring to the same organisation in a forward looking context.

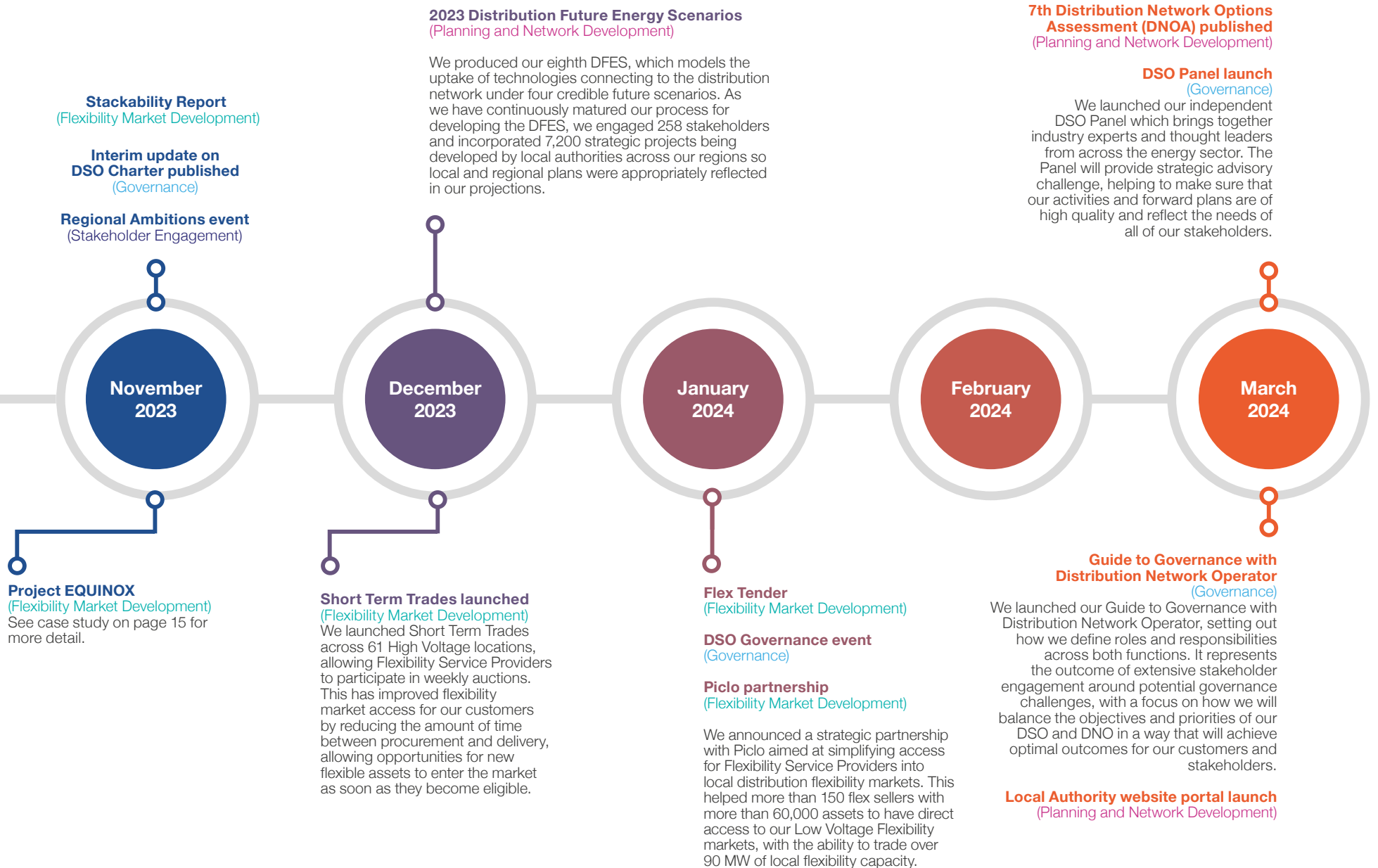
Our progress so far

As we have been shaping our DSO function over the last year, we have not stood still, and have been delivering significant results across our core DSO roles, as well as progressing our vision and strategic commitments to reflect our stakeholders' feedback.

Timeline of key DSO achievements



Timeline of key DSO achievements



Governance: Our DSO Panel

DSO Panel Chair:



Regina Finn
Director at Lucerna Partners
and Chair of the LCCC and the
Electricity Settlement Company

DSO Panel members:



Doug Cook
Director of Strategy at Ohme



Nina Skorupska
Chief Executive of the
Renewable Energy Association



Janine Michael
Deputy Chief Executive
at Centre for Sustainable Energy

What is it doing?

In March 2024, we launched our independent DSO Panel composed of energy industry experts and thought leaders that will support us to deliver effective governance of our DSO. The Panel will play a key role in providing rigorous, independent and strategic advisory challenge to our DSO plans and ensuring that our activities are reflective of the needs of all of our stakeholders. The Panel, combined with our external assurance programme, will also play a role in ensuring that our DSO governance structures are operating effectively, and will provide recommendations for continuous improvement.

Who is involved?

The Panel is composed of industry experts equipped to represent the perspectives of a broad range of our DSO stakeholders – flexibility market participants, local energy consumers and communities, and energy generators. The Panel is chaired by Regina Finn, Director at Lucerna Partners and Chair of the LCCC and the Electricity Settlement Company.

Outcomes and timescales

The Panel will meet on a quarterly basis and provide regular feedback and strategic challenge to our DSO activities. On an annual basis, the Panel will deliver a report to our DSO leadership focused on the transparency and efficiency of decision making within our DSO function and the extent to which our activities are forward plans reflect our stakeholders' needs.

Planning and Network Development: Project PRIDE

What is it doing?

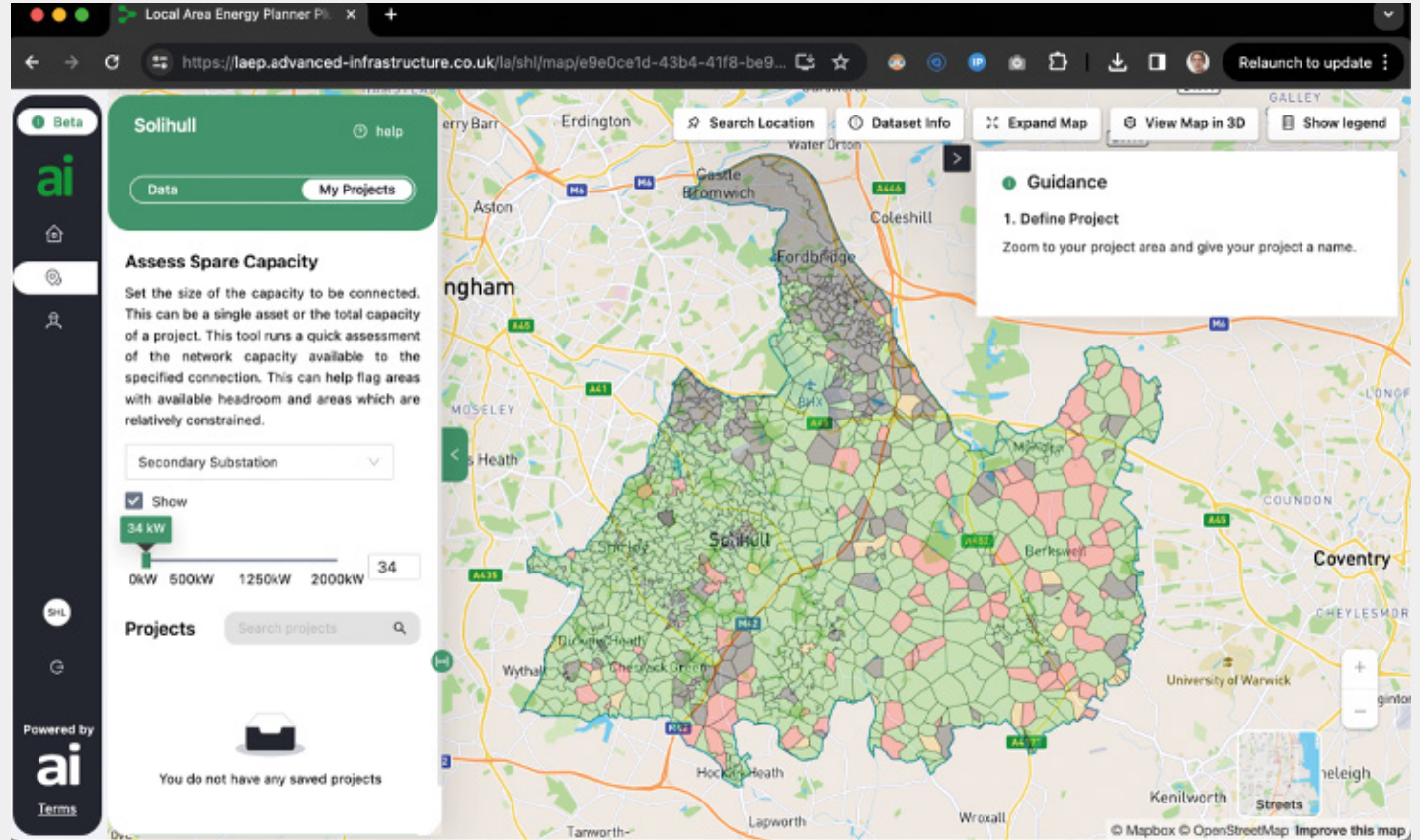
PRIDE aims to support local area energy planning and serve network investment decision needs, to fast-track low-carbon technology deployment at a regional level. The project includes developing a “whole systems digital planning tool”. The project will test how this tool works across different regional energy planning stakeholders, and how it could be used in broader governance structures, specifically in the upcoming Regional Energy Strategic Planning process.

Who is involved?

NGED is the lead network with a consortium including Regen, the West Midlands Combined Authority, Advanced Infrastructure Technology Ltd and National Grid ESO.

Outcomes and timescales

The goal is to support local authorities in the production of Local Area Energy Plans, while ensuring these plans serve energy network planning needs, and ultimately accelerate progress towards net zero. PRIDE’s alpha phase runs to March 2024, with the aim of introducing a prototype for a digital tool to support local authorities with putting plans together, and a beta phase, which, if successful, will finalise the tool and the governance structure behind local area energy planning and will establish the suitability of a digital solution to support RESP function.



<https://www.advanced-infrastructure.co.uk/laep>

Network Operation: 10 GW Capacity Release

What is it doing?

In September 2023, we announced plans to unlock 10 GW of unused grid capacity to accelerate the connection of scores of low carbon technology projects including solar farms, onshore wind and batteries. Through a new agreement with the ESO, projects that require additional transmission network reinforcement will be offered the chance to connect under an interim, non-firm connection arrangement.

Who is involved?

The identification and release of this additional capacity follows months of work and engagement with stakeholders, including National Grid ESO, Ofgem and the UK Government, to find innovative solutions to speed up the connection of low carbon technologies.



Outcomes and timescales

This will enable us to bring forward some 'shovel ready' schemes by up to five years and support the UK's ambition to decarbonise the electricity system by 2035. In March 2024, Horsey Levels solar farm made history as the first project nationally to have been energised significantly ahead of its original planned connection date since we introduced changes to speed up connections.



Flexibility Market Development: Project Equinox

What is it doing?

EQUINOX aims to discover how we can best engage domestic consumers using heat pumps to provide flexibility services to the DSO. The project tests three commercial incentives, as well as the associated technical arrangements across a diverse range of domestic consumer groups, to explore which are most effective in obtaining flexibility. The project tests use of this flexibility to manage distribution network constraints, without impacting comfort levels in the home.

Who is involved?






Led by NGED, the project involves collaboration with a range of partners including Octopus Energy, SP Energy Networks, Welsh Government, West Midlands Combined Authority, Sero and Guidehouse as well as being endorsed by Ofgem. It comprises over 1,350 households with heat pumps.

Outcomes and timescales

The project will span trials over 3 winters, concluding in spring 2025. It aims to deliver a model for business-as-usual implementation of domestic heat flexibility by that point. The trials have already shown positive results in delivering flexibility. Given all DNOs are likely to see deployment of heat pumps within their regions, the models developed could have application across the country.



Action plans to deliver DSO Charter commitments

	FY 2024/25				FY 2025/26			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Planning and Network Development 	Support all Local Authorities to create detailed and aligned plans for local energy and decarbonisation							
	Create system constraints and network solutions register		Enhance modelling capabilities to assess complex network constraints					
	Present Network Development Plans back to stakeholders				Convene a total of four major decarbonisation initiatives across vectors			
	Convene two flagship decarbonisation initiatives							
	Data support sessions for local authorities				Review and diversify the use cases for flexibility to maximise capacity			
	Coordinate with Ofgem, ESO and others to shape Regional Energy Strategic Planner (RESP) role							
	Review scope of PRIDE LAEP-Plus digital tool		Develop smart-meter and LV substation data for forecasting		Improve DFES forecasting accuracy and process efficiency			
Network Operation 	Publish a roadmap for improved operational decision-making		Trial processes to manage potentially conflicting decisions (primacy)		Semi-automated dispatch decision-making			
	Begin publishing weekly dispatch data		Review and update data visible on the Connected Data Portal		Enhanced integration of flexibility services into our network management system			
	Continue to lead the Open Networks primacy working group and implement decision-making priorities							
	Short term load forecasting for dispatch and curtailment modelling		Publish inputs to our decision making					
	Identify consumer value of curtailment through our 'Whole System Headroom' innovation project to better target interventions							
Flexibility Market Development 	Implement standardisations with other DSOs through the Open Networks				Deploy day ahead competitions to maximise competition and get as close to real-time procurement as possible			
	Digitalise trading function		Programme of further improvement to Market Gateway		Deploy the joint utilisation competition to allow competition between long and short-term procurement			
	Review accessibility of our flexibility services		Deliver demand-turn up service					
	Lead implementation of high priority action from revenue stacking report (with other DSOs and NESO)							
	Implement revenue stacking across all of our zones							
Governance 	Integrate DSO Panel with existing governance		Quarterly DSO Panel meetings					
	Guide to our governance with the DNO		Report on DSO KPIs		Report on DSO KPIs		Report on DSO KPIs	
	Develop DSO KPI tracker with stakeholders		Further develop DSO controls framework to complete external audit					Assess options for external accreditation of DSO processes
Stakeholder 	Energy Futures Series events twice per year		Energy Futures Series events twice per year		Energy Futures Series events twice per year		Energy Futures Series events twice per year	
	Targeted engagement with FSPs through flexibility forums							
	Ongoing engagement with Local Authorities via net zero surgeries, and regional engagement events							
	Ongoing engagement with identified decarbonisation programmes							



Key Commitments: Governance



Good governance is fundamental for DSOs to be trusted to deliver for stakeholders. It underpins all three core DSO roles, impacting all DSO stakeholder groups. We have made substantial progress over the course of the last year to establish the foundations of strong and transparent DSO governance. We started by establishing our executive-level DSO accountability with clear and functionally separate decision making. We stood up our independent DSO Panel and held an engagement event with stakeholders to understand their views on DSO governance. We have since set out the division of responsibilities between the DSO and DNO in our 'Guide to Governance with the DNO' and outlined our compliance approach for DSO processes as we work towards external audit.

What we've heard from our stakeholders:



- Develop clear decision-making frameworks when optimising between DSO and DNO objectives – finding a balance between innovation and risk.
- Provide transparency on how stakeholders can input and respond to DSO processes – communication is key.
- Develop an accountability framework with DSO KPIs.
- Continue to evolve independent oversight activities to challenge DSO decision-making and outcomes.

How we are taking action:



- ➔ Fully operationalise our DSO Panel and establish integration with existing governance processes.
- ➔ Work with stakeholders to establish a DSO KPI scorecard and agree frequency of reporting.
- ➔ Evolve our 'Guide to our governance with the DNO' document with stakeholder input to include our decision-making frameworks.
- ➔ Further develop our DSO controls framework to progress towards an external audit.
- ➔ Assess options for external accreditation of DSO processes.

These actions will deliver the following impacts for stakeholders:



Access to information on how the DSO makes decisions, and how we optimise both DSO and DNO objectives.

The opportunity to provide feedback and input into our DSO processes.

Transparency on DSO measures of success, and performance.





Key Commitments: Planning and Network Development

1.1 We will maximise the use of 'hidden' capacity on the network, whilst ensuring network investment is delivered when it's needed, at the lowest cost to consumers.



As a DSO we commit to taking a 'flexibility first' approach to maximise use of the capacity on our network before recommending future network build. This enables faster decarbonisation and keeps bills lower for end consumers. Having produced our eighth DFES this year, which is the starting point for our network investment process, we have a detailed understanding of forecast modelling. We rely on accurate data and insight for effective modelling. As a DSO, it is therefore essential for us to understand our stakeholders' future needs, to ensure we can deliver network investment when it is needed, at the lowest cost.

What we have heard from stakeholders:



- Find ways to maximise the capacity in the network today, while building the right size network for the future, and keeping costs low for consumers.
- Stakeholders want the network to be ready for them when they want to use it; they don't want to wait to be connected. This applies to local authorities, who are looking to deliver on their net zero ambitions, right through to the end consumer who wants to connect their heat pump to the grid.

How we are taking action:



- Review and diversify the use cases for flexibility to maximise capacity in the network.
- Present Network Development Plans back to local stakeholders, demonstrating where we have incorporated their plans so that network capacity is ready when they need it.
- Create a register of system constraints and network solutions in the Network Development Planning process that can be ranked to increase network utilisation in the right places on the network.
- Enhance our modelling capability to assess more complex network constraints and solutions.
- Provide more accurate load data by evolving access to smart meter data, and advancing the coverage and capability of substation monitoring on our low-voltage network.
- Categorise and deliver targeted improvement to DFES forecasting accuracy as well as the time and resource required to deliver DFES.

These actions will deliver the following impacts for stakeholders:



Impact

Quicker connections to our network and cost savings for the end consumer.

The right amount of reinforcement and flexibility is recommended so the network is ready when stakeholders want to use it, enabled by accurate forecasts.

Measure

Percentage of flexibility outcomes in our annual investment report (Distribution Network Options Assessment).

Forecasting accuracy. The percentage error of load forecast across our substations for the year ahead.





Key Commitments: Planning and Network Development

1.2 We will collaborate and coordinate across the whole-system, to help stakeholders achieve their decarbonisation plans.



The DSO is a key enabler of decarbonisation at local and regional level – our data and network planning expertise can help local authorities to develop their LAEPs. Having established our dedicated strategic engagement team, we are already proactively helping local authorities and other partners, to develop their decarbonisation plans. This year we have positively contributed to the development of 13 LAEPs in South Wales and held 290 Net Zero surgeries across our licence areas.

By working collaboratively, the insight we obtain from local authorities across heat, buildings and transport helps us to develop more accurate forecasting for our future network investment. By enabling this two-way sharing of data, we can invest in the right areas of the network so future capacity is ready when local authorities and their communities need it.

What we have heard from our stakeholders:



- Provide more help in interpreting and understanding DSO data, and guide how it can be used for energy planning.
- Engage even more with local authorities and encourage learning and sharing of best practice.
- Offer digital tools that streamline data and provide a consistent approach to planning.
- Bring stakeholders together across vectors to add value to decarbonisation projects.
- Help shape the future role of the Regional Energy Strategic Planner (RESP) working with local authorities and other regional stakeholders to ensure new governance arrangements are coordinated across the whole-system.

How we are taking action:



- Enhance engagement with local authorities to deliver network data education sessions to strengthen understanding of DSO data and to share best practice and guidance for LAEP planning.
- Continue to enhance our data offer to make it easy to access and interpret for local authorities.
- Apply to extend the scope of our PRIDE LAEP-Plus tool project so more local authorities can benefit from its use.
- Extend our engagement support for flagship decarbonisation programmes in our regions, by building on the proactive support provided to two leading initiatives in year one (Bristol Mission Net Zero and UK Central Hub) and reach at least four decarbonisation programmes in year two.
- Actively coordinate with Ofgem, NESO and other local and regional stakeholders to shape and influence the development of the RESP.

These actions will deliver the following impacts for stakeholders:



Impact

Improved support and coordination for LEAPs and decarbonisation initiatives.

Measure

Percentage of local authorities in our licence area that we are supporting to create LAEPs and decarbonisation initiatives.





Key Commitments: Network Operation



2.1 We will facilitate whole-system coordination that improves efficiency and transparency of decision making.



To support the pathway to a decarbonised energy system, stakeholders expect network operators to collaborate, and make decisions that are in the best interest of the whole-system. This requires increasing coordination to ensure industry frameworks fit together, rather than becoming fragmented, or creating barriers to entry. How we work together needs to be transparent, and the decisions we make clear, so that trust and confidence can be established to ensure evolving markets are a success.

What we have heard from our stakeholders:



- Improved forecasting to support Distributed Energy Resources (DER) make decisions on how to deliver services and optimise assets.
- Greater clarity and transparency on decision making criteria for dispatching flexibility and curtailment.
- Ensure clear and coordinated operational decision-making across the whole-system, that is aligned at the national and local level.
- Enhanced access to market information around flexibility dispatch decisions, particularly in relation to location, price, and carbon intensity.

How we are taking action:



- ➔ Consult on and publish a roadmap explaining how we will improve our decision-making systems and capabilities over the next two years.
- ➔ Identify the consumer value of curtailment to help inform our curtailment decision-making (via our whole-system headroom innovation project).
- ➔ Continue to lead Open Networks primacy group, collaborating with NESO and other DSOs to trial, and implement new processes that set out operational decision-making priorities between the national and local level.
- ➔ Publish weekly flexibility dispatch data including data on location, price and carbon intensity.

These actions will deliver the following impacts for stakeholders:



Impact

Clearer operational decision making, that is aligned at national and local level and is in the interest of the whole-system.

Greater transparency on how we make operational decisions across flexibility dispatch and curtailment.

Measure

Percentage of potentially conflicting decisions between NESO and DSOs which have an agreed process to manage them.

Feedback received on our publications and regular engagement with stakeholders.





Key Commitments: Network Operation



2.2 We will work to continuously to improve our data, technology and processes to operate a responsive and dynamic network.



As the pace of renewable technologies which are integrated at the distribution level increases, DSOs need to operate in a more dynamic way, moving towards more real-time operation of the network. To make the right operational decisions, such as where to dispatch flexibility or when to use curtailment, there needs to be clear visibility of what is happening on the network. This requires reliable and timely data, supported by appropriate technology and processes. DSOs can then draw the right data insights to facilitate effective decision-making.

What we have heard from our stakeholders:



- Data should be high-quality and accurate if it's used as an input into decision-making and planning processes.
- Data needs to be closer to real-time to move towards dynamic operation.
- Standardise operation of the network across DSOs, through use of digital technologies and automation.
- Make data sources open, transparent, and accessible for stakeholders.

How we are taking action:



- Introduce short-term load forecasting with use of weather data to feed into flexibility dispatch decisions and curtailment modelling.
- Deploy technology to semi-automate our dispatch decision-making for flexibility services to enable more dynamic operation.
- Develop enhanced outage planning modelling processes to target use of curtailment.
- Continue to review data visible on the [Connected Data Portal](#)³ and update this based on stakeholder feedback.
- Integrate flexibility data into our network management system to improve our ability to dispatch flexibility services closer to real time.

These actions will deliver the following impacts for stakeholders:



Impact

Improved accuracy of data, which drives DSO decision-making across flexibility dispatch and curtailment.

Increased use of technology and automation in operational decision-making, in coordination with other DSOs.

Measure

Short-term (week-ahead) load forecasting accuracy.



Amount of curtailment avoided through enhanced outage planning processes.



Percentage of flexibility dispatch decisions which are automated.





Key Commitments: Flexibility Market Development

3.1 We will collaborate with industry stakeholders to simplify and standardise how we procure our flexibility services.



We have led the curve on Flexibility Market Development, with our unique Market Gateway platform making it simpler and quicker for Flexibility Service Providers (FSPs) to register and participate in flexibility procurement. This has supported us to embed our 'flexibility first' principle to deliver efficient network reinforcement and to manage network risks, while keeping costs down for the end consumer.

What we have heard from our stakeholders:



- Make it easy for FSPs to register and participate in flexibility markets to increase participation.
- Use digital applications to simplify flexibility procurement registration, commercial contracts and trades.
- DSOs should collaborate to standardise procurement processes across licence areas, making it easier for FSPs to participate in multiple markets.

How we are taking action:



- Digitalise the trading function in Market Gateway and begin a programme of further platform evolution, considering other platform partnerships to facilitate wider and easier market participation.
- Proactively collaborate with other DSOs through the Open Networks Forum to implement the standardisation actions agreed with other DSOs as soon as possible. This includes standard contracts, pre-qualification criteria, products and settlement processes.
- Deploy day-ahead competitions to maximise participation further.
- Deploy the joint utilisation competition to allow competition between long- and short-term procurement.

These actions will deliver the following impacts for stakeholders:



Impact

Simplified and standardised procurement experience for FSPs, ultimately attracting them to register and pre-qualify on our Market Gateway platform, which develops our supply of flexibility ahead of need.

Increased flexibility market participation, that enables us to procure flexibility when its needed, thereby reducing costs for consumers.

Measure

Number of assets registered and pre-qualified on Market Gateway.

Stakeholder feedback on our improved processes.

Percentage of flexibility available to us for dispatch compared to the amount we need.

Amount of reinforcement deferred through targeted use of flexibility.



We recognise that DSOs need to do more to evolve flexibility markets further. As FSPs operate across multiple network licence areas, it is important to standardise procurement processes across different DSOs. This will minimise barriers to market entry and encourage wider investment and participation in the market. Without this, DSOs will find it increasingly challenging to deliver efficient network reinforcement solutions through flexibility.





Key Commitments: Flexibility Market Development

3.2 We will coordinate across the whole-system to deliver new market opportunities and reduce barriers to entry for all customers.



For FSPs to maximise the value of their assets and operate across multiple markets at the national and local level, there needs to be strong coordination across the DSOs and the ESO. Flexibility products must work together and encourage wider market participation.

We recognised there was an issue with current market alignment, as our stakeholders were unclear how to maximise their portfolio. This is why we led on commissioning an independent review on how flexibility revenue streams work together (revenue stacking).

It is also important for us to continually assess new and innovative approaches to developing market opportunities for FSPs. At the same time, we must consider the reach of flexibility products so that domestic customers are able to access and provide flexibility services with ease.

What we have heard from our stakeholders:



- Clarify how to stack services and revenues across national and local markets. Current lack of clarity presents challenges for further investment as financial benefits are difficult to quantify.
- Develop new products and markets that widen participation across broader stakeholder groups, ensuring there is standardisation and coordination to drive whole-system outcomes.
- Simplify interactions with domestic customers to make the flexibility market more accessible to them.

How we are taking action:



- Take a leading role to coordinate with DSOs and NESO to implement high-priority actions from the Cornwall Insight stackability report.
- Implement revenue stacking across our flexibility zones.
- Widen the scope of flexibility use cases (e.g. demand turn-up for generation led-constraints), resulting in an increase in market opportunities.
- Continue to support third party integrations to our market gateway to support new routes to market.
- Collaborate with FSPs and other stakeholders to review access to flexibility products.

These actions will deliver the following impacts for stakeholders:






Impact	Measure	
Increased understanding and ability to stack flexibility assets across national and local markets to optimise asset utilisation.	Number of flexibility use cases where revenue stacking is not possible.	
Greater market opportunities to participate in flexibility services from more use cases being implemented.	Volume of flexibility procured in our regions.	
Improved understanding of opportunities for domestic customers to engage in flexibility. This will result in increased procurement of our domestic flexibility products.	Volume of domestic flexibility available to us through market gateway.	



Appendix

DSO indicative measures

Role	Commitment in Charter	Impact to Stakeholders	Key Performance Indicator (KPI)
 Planning and Network Development	We will maximise the use of 'hidden' capacity on the network, whilst ensuring network investment is delivered when it's needed, at the lowest cost to consumers	Quicker connections to our network and cost savings for the end consumer	Percentage of outcomes in our annual investment report (DNOA) which recommend flexibility
		The right amount of reinforcement and flexibility is recommended so the network is ready when stakeholders want to use it, enabled by accurate forecasts	Forecasting accuracy. The percentage error of load forecast across our substations for the year ahead
	We will collaborate and coordinate across the whole system, to help stakeholders achieve their decarbonisation plans	Improved support and coordination for LEAPs and decarbonisation initiatives	Percentage of local authorities in our licence area that we are supporting to create LAEPs and decarbonisation initiatives
 Network Operation	We will facilitate whole electricity system coordination that improves efficiency and transparency of decision making	Clearer operational decision making, that is aligned at national and local level and is in the interest of the whole system	Percentage of potentially conflicting decisions between NESO and DSOs which have an agreed process to manage them
		Greater transparency on how we make operational decisions across flexibility dispatch and curtailment	Feedback received on our publications and regular engagement with stakeholders
	We will continuously improve our data, technology and processes to operate a responsive and dynamic network	Improved accuracy of data, which drives DSO decision-making across flexibility dispatch and curtailment	Short-term (week ahead) load forecasting accuracy
		Increased use of technology and automation in operational decision-making, in coordination with other DSOs	Amount of curtailment avoided through enhanced outage planning processes Percentage of flexibility dispatch decisions which are automated
 Flexibility Market Development	We will collaborate with industry stakeholders to simplify and standardise how we procure our flexibility services	Simplified and standardised procurement experience for FSPs, ultimately attracting them to register and pre-qualify on our Market Gateway platform, which develops our supply of flexibility ahead of need	Assets registered and pre-qualified on Market Gateway
		Increased flexibility market participation, that enables us to procure flexibility when it's needed, thereby reducing costs for consumers	Stakeholder feedback on our improved processes % of flexibility available vs. requested (our ability to dispatch the flexibility we need and tender for)
		Reinforcement investment deferred through targeted use of flexibility	Reinforcement investment deferred through targeted use of flexibility
	We will coordinate across the whole-system to deliver new market opportunities and reduce barriers to entry for all customers	Increased understanding and ability to stack flexibility assets across national and local markets to optimise asset utilisation	Number of flexibility use cases where revenue stacking is not possible
		Greater market opportunities to participate in flexibility services from more use cases being implemented	Volume of flexibility procured in our regions
		Improved understanding of opportunities for domestic customers to engage in flexibility. This will result in increased procurement of our domestic flexibility products	Volume of domestic flexibility available to us through market gateway

Stakeholder engagement activity

Stakeholder engagement activity		Impact
<p>Electricity Futures Series</p>	<p>Our flagship Electricity Futures Series has been our primary platform for engagement and ongoing dialogue with a diverse range of customers and stakeholders over the course of the year. We have consistently involved our local, regional, and national DSO stakeholders. This has enabled us to test and refine our approach to developing our DSO capabilities with a focus on the big topics (our DSO Charter, vision and approach to governance), in a way that reflects the needs and priorities of our stakeholders.</p> <p>We captured extensive feedback through facilitated discussions both in person and online for stakeholders across our regions. We also used digital tools to capture more quantitative insights. These approaches have enabled us to publish stakeholder feedback reports following every event, which in turn have directly shaped the actions that we are now pursuing through this plan.</p>	<p>Engaged 209 stakeholders from across the whole energy system through three major events in the series so far.</p> <p>Gathered feedback from 11 Flexibility Service Providers and aggregators; 42 national, devolved and local authorities; three community energy and consumer advocates; as well as generation and large energy users and wider industry stakeholders.</p>
<p>Net Zero Surgeries</p>	<p>Through our Net Zero Surgeries this year, we have supported local authorities by providing network information and guidance on the processes, timescales and technical considerations required to realise their local decarbonisation ambitions in practice.</p>	<p>Delivered 290 Net Zero Surgeries across our region, 230 of these were with local authorities, and 60 were with other stakeholders developing decarbonisation plans.</p> <p>Contributed to the development of some of the most advanced local and regional energy planning activity in the UK, including 13 LAEPs in South Wales.</p> <p>Shaped our longer-term engagement support for local authority decarbonisation initiatives of all sizes looking to move from planning to delivery, including leading city-scale projects such as Mission Net Zero in Bristol.</p>

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Stakeholder engagement activity

Stakeholder engagement activity		Impact
Flexibility engagement programme	We conducted regular engagement with providers and wider stakeholders through our flexibility webinars and workshops, as well as Flexibility Surgeries. This engagement makes sure our products and processes are fit for purpose and reduces the barriers to participation in accessible flexibility markets. Our webinars and workshops covered a range of topics including revenue stacking and the launch of our leading Market Gateway platform.	Conducted eight webinars, engaging more than 250 stakeholders. Delivered 30 Flexibility Surgeries with prospective Flexibility Service Providers.
Customer engagement on connections reform	We worked collaboratively with the ESO to amend the technical limits of our assets where they connect with the transmission network. This meant we were able to free up 10 GW of hidden capacity and work with customers waiting to connect to the network to bring their projects forward.	Engaged 241 stakeholders across two technical limits webinars. Conducted a webinar with 11 battery storage operators on the ENA's three-point plan for connections reform.
Distribution Future Energy Scenarios (DFES) webinars and workshops	A key part of developing our DFES is engagement and consultation with local and regional stakeholders. Feedback from our stakeholders directly influences our models and assumptions to help us forecast future demand on our network.	Engaged more than 250 stakeholders as part of our regional stakeholder webinars co-delivered with Regen for our most recent DFES. Captured views from over 125 local authorities alongside regional decision makers, project developers, asset owners, energy consumers, community energy groups and trade bodies to develop bottom-up and stakeholder-led regional future scenarios. These views helped inform NGED's network planning and investment.

Our engagement in 2024/25

We are committed to ongoing engagement, to ensure we are dynamic and responsive to the evolving needs of our customers and stakeholders.

As part of this, we will continue our Electricity Futures Series events twice per year. We will also facilitate engagement on specific activities across the DSO roles, such as our flexibility engagement programme as we expand our market leading flexibility procurement.

Throughout our engagement, we will continue to seek and capture feedback, which will serve as an important basis for informing and shaping our future DSO plans and activities.

Stakeholder satisfaction is paramount to us and is a critical measure for understanding whether we are addressing our stakeholders' needs and engaging with them in a way that supports their individual requirements. We will track stakeholder satisfaction over time, and this will directly shape our future priorities and stakeholder engagement going forwards.

Thank you

We'd really like to hear from you – our communities, consumers, customers, employees, investors and stakeholders.

We want to make sure we're focusing on the right areas and delivering the right results.

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