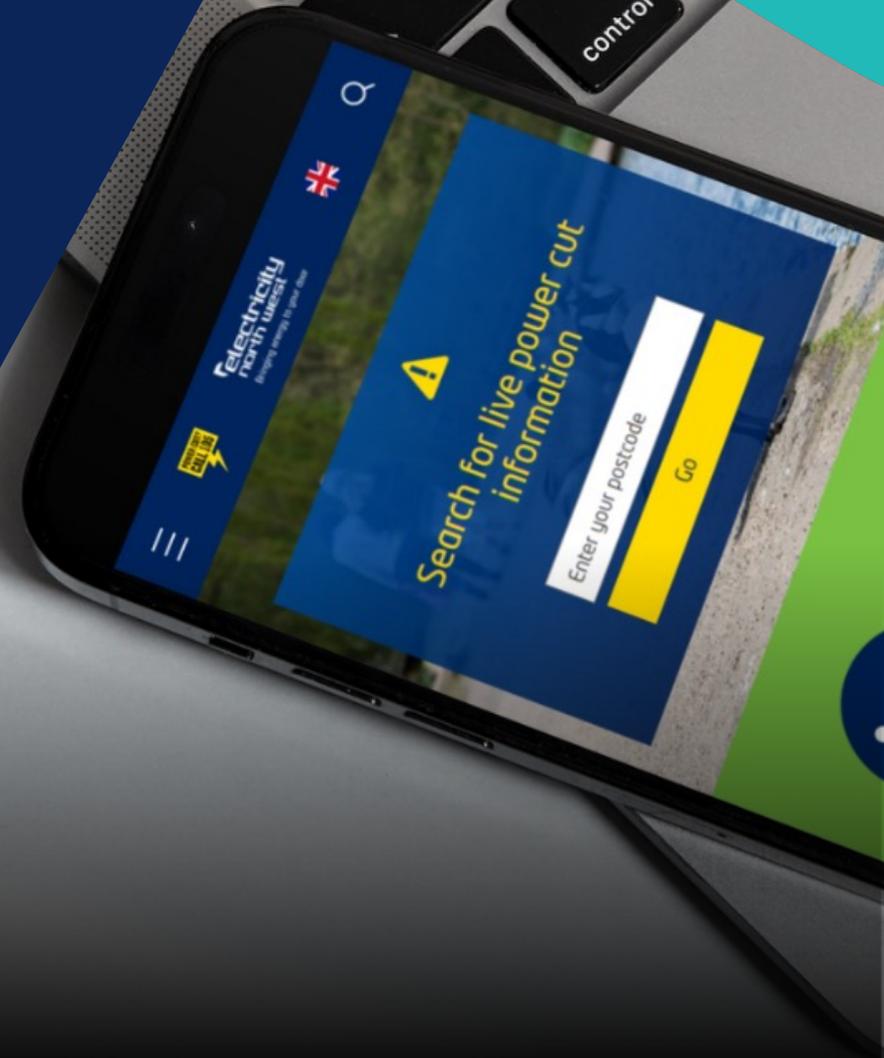


# Digitalisation Strategy Action Plan

Leveraging digitalisation  
technology and digitised data to  
generate value for customers and  
stakeholders

December 2023



# Welcome

## Digitalisation Strategy Action Plan December 2023

As the Director of Digital & Technology at Electricity North West, I am thrilled to lead our commitment to digitalisation. Recently joining in December 2023, I'm focused on catalysing our digital transformation, an integral aspect of our ED2 Business Plan's execution.

Our approach revolves around integrating digitalisation at the core of our operations. Internally, we're restructuring our organisation, adopting a 'Team of Teams' model for enhanced efficiency. This includes aligning Product teams with delivering tangible business value and fostering excellence in technology and data through our Platform teams.

Externally, our goal is to balance meeting the increasing digital expectations of customers while ensuring inclusivity for the digitally excluded. This involves leveraging digital channels to interact with customers on their terms while ensuring tailored experiences for all, particularly our most vulnerable customers.

Innovation is a key driver, and we're dedicated to creating a nurturing environment for experimentation. Rapid testing and learning from new ideas will pave the way for exciting outcomes for Electricity North West and our valued customers.

We're actively crafting a robust Digitalisation Strategy that aligns with our new leadership's vision, promising a more ambitious and engaging approach.

To validate our strategies, we're establishing a Digital Futures Panel starting in February. This panel will shape our initiatives, establish metrics, engage stakeholders, and garner support for our new strategies.

In the landscape shaped by Artificial Intelligence (AI) transformative power, 2023 marked a pivotal year. As we progress into 2024 and beyond, AI's influence will be central to our initiatives, reshaping processes, and enhancing our understanding of its potential, risks, and evolution. We aim to harness AI to elevate customer interactions, reinforce our network's performance, boost employee productivity, and accelerate our journey to Net Zero Carbon.

Electricity North West is dedicated to a strategy in 2024 that prioritises digitalisation and AI, fostering productivity, innovation, and business resilience.

Throughout, our customers and stakeholders remain at the forefront of our endeavours.

I hope you find this document informative and I welcome your feedback.

**Dave Roberts**  
**Digital & Technology Director**



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# 1. Executive Summary

Electricity North West is committed to delivering a modern, digital-enabled electricity system that meets the evolving needs of its customers. The Digitalisation Strategy Action Plan December 2023 outlines the company's plans to enhance customer engagement, ensure effective use of customer resources, and deliver tangible benefits to customers.

The Action Plan aligns with Electricity North West's broader Business Plan Vision, which aims to deliver a reliable, resilient, and decarbonised electricity network for the North West. The plan prioritises stakeholder benefits, ensuring that all initiatives and projects contribute to enhancing the overall customer experience and delivering value to the wider community.

The Action Plan emphasises the need to accelerate the delivery of benefits to customers. Electricity North West will take full advantage of opportunities to iterate improvements to products and services, ensuring that customers are at the heart of the digital transformation journey.

Electricity North West will establish clear success metrics and track progress against these targets. The company will also collaborate with the wider ecosystem of products and services to ensure a seamless and integrated digital experience for customers.

The Action Plan includes a comprehensive stakeholder engagement model to ensure that customers are informed and involved throughout the digital transformation process. Electricity North West has also developed a Data Strategy that outlines how the company will collect, manage, and use data to improve customer service and optimise network operations.

The Digitalisation Strategy Action Plan December 2023 demonstrates Electricity North West's commitment to delivering a customer-centric, digital-enabled electricity system for the North West.

The plan prioritises stakeholder benefits, emphasises speed to market, and ensures effective stakeholder engagement. By embracing data-driven insights and collaborating with the wider ecosystem, Electricity North West is paving the way for a more efficient, reliable, and sustainable energy future for the region.

- 1 Prioritising stakeholder benefits**  
Prioritise providing benefits to the stakeholders who pay for the products and services and also benefits to the broader Public Interest.
- 2 Delivering the vision**  
Ensure all products and services work towards a defined vision.
- 3 Time to market**  
Take full advantage of opportunities to deliver benefits early and to iterate improvements to products and services.
- 4 Communicating what we do**  
Make it easy to understand the products and services, the status of their delivery and how to access them.
- 5 Communicating delivery status**  
Ensure visibility about the nature and status of actions in the Digitalisation Action Plan.
- 6 Measuring success**  
There is a shared understanding of success and performance is measured.
- 7 Whole system collaboration**  
Coordinate with the wider ecosystem of products and services.

## 2. Our approach to stakeholder engagement

At Electricity North West we prioritise stakeholder and customer engagement as a cornerstone of its digitalisation strategy. By fostering meaningful connections with diverse stakeholders, the company ensures that its digital transformation journey aligns with the needs and aspirations of those it serves.

At the heart of this approach lies comprehensive stakeholder identification and mapping. We meticulously identify and assess both existing and emerging stakeholders, categorising and mapping them based on their level of interest and influence in the company's activities. This exercise serves to pinpoint potential engagement gaps and develop tailored strategies to address them.

To gain a deeper understanding of customer priorities and engagement preferences, we actively engage in customer focus groups. This "outside-in" approach provides invaluable insights into customer perspectives, enabling the company to seamlessly integrate its business with the lives of its customers.

Further enriching our engagement strategy, we conduct a thorough review of published best practices, both within and beyond the electricity distribution sector. This knowledge-sharing exercise allows the company to continuously refine its engagement approach, incorporating proven strategies and adapting them to its unique context.

Recognising the value of learning from past experiences, we carefully reflect on feedback received during initial engagement efforts. This feedback serves as a catalyst for continuous improvement, enabling the company to refine its engagement approach.

To effectively engage a diverse range of stakeholders, Electricity North West has established a robust advisory panel governance structure. This structure ensures that the company recognises the specific needs of stakeholders and tailors its engagement activities accordingly.

The company has also enhanced its engagement activities to guarantee high-quality interactions with customers and stakeholders. These enhanced activities place customers at the forefront of our business planning, ensuring that their needs and perspectives are directly integrated into strategic decision-making.

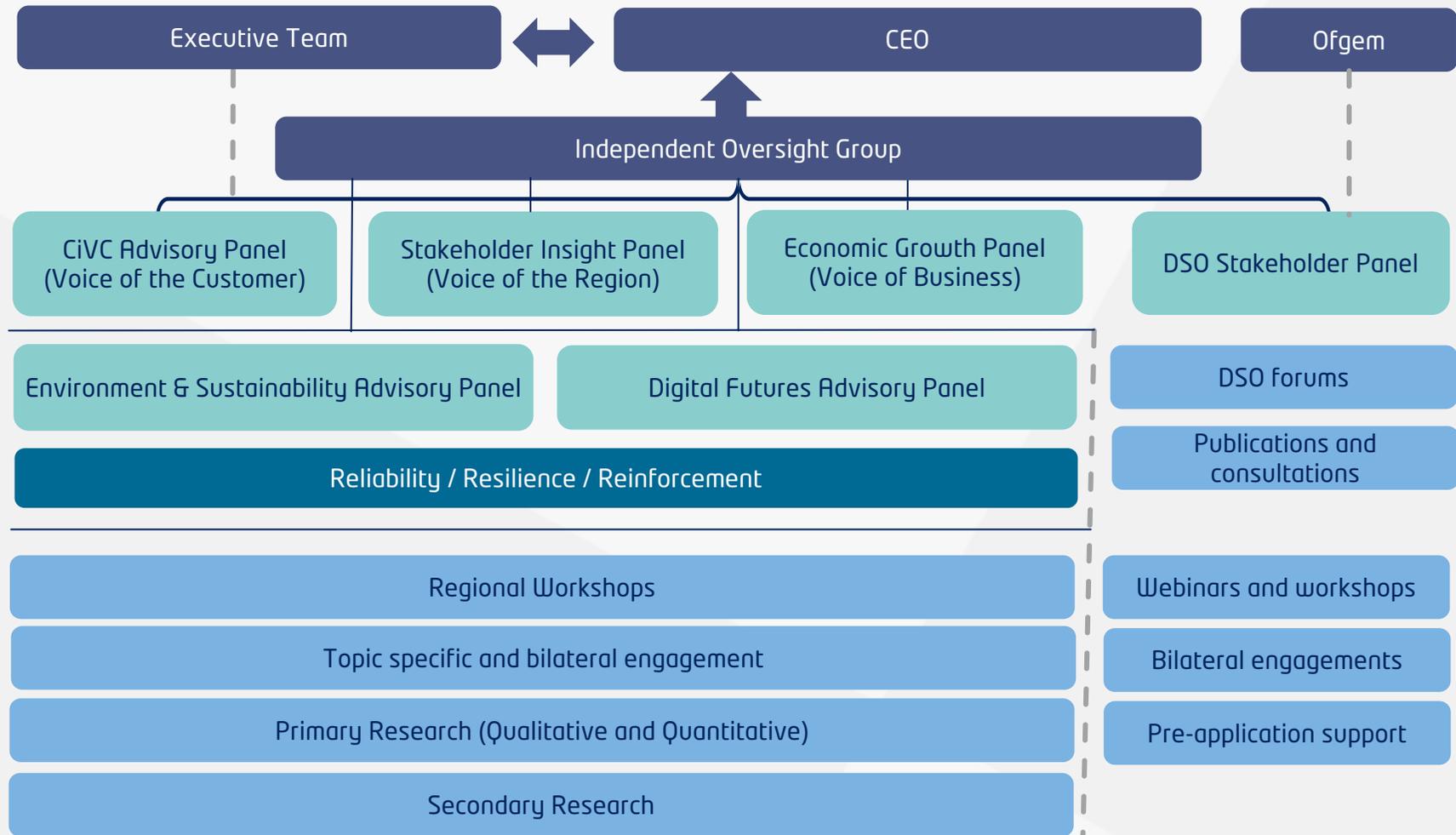
The Digital Futures Panel plays a pivotal role in validating our Digitalisation portfolio's activities and key performance indicators (KPIs) while ensuring robust stakeholder and customer involvement. They will build on previous stakeholder engagement, notably the comprehensive socialisation of our RIIO-ED2 Business Plan and its digitalisation strategy ([Annex 23](#)), which was extensively shared with our Customer Engagement Group which includes our cloud-first strategy. The panel will ensure our activities stay relevant and reflect evolving customer expectations. This includes scrutinising our strategy and overseeing the responsible sunset of outdated products and platforms.

Our prioritisation framework reflects this collaborative spirit. Actions are first judged based on critical technical and support needs, then by their potential to unlock business value and benefit customers. Finally, we consider technical dependencies and sequencing, ensuring a smooth and efficient digital transformation.

Electricity North West's comprehensive stakeholder and customer engagement approach underscores the importance of understanding and addressing the needs of those we serve. By continuously refining its engagement strategies and placing customers at the heart of its digital transformation journey, the company fosters a collaborative and inclusive environment that drives sustainable success.

# Stakeholder Engagement continued

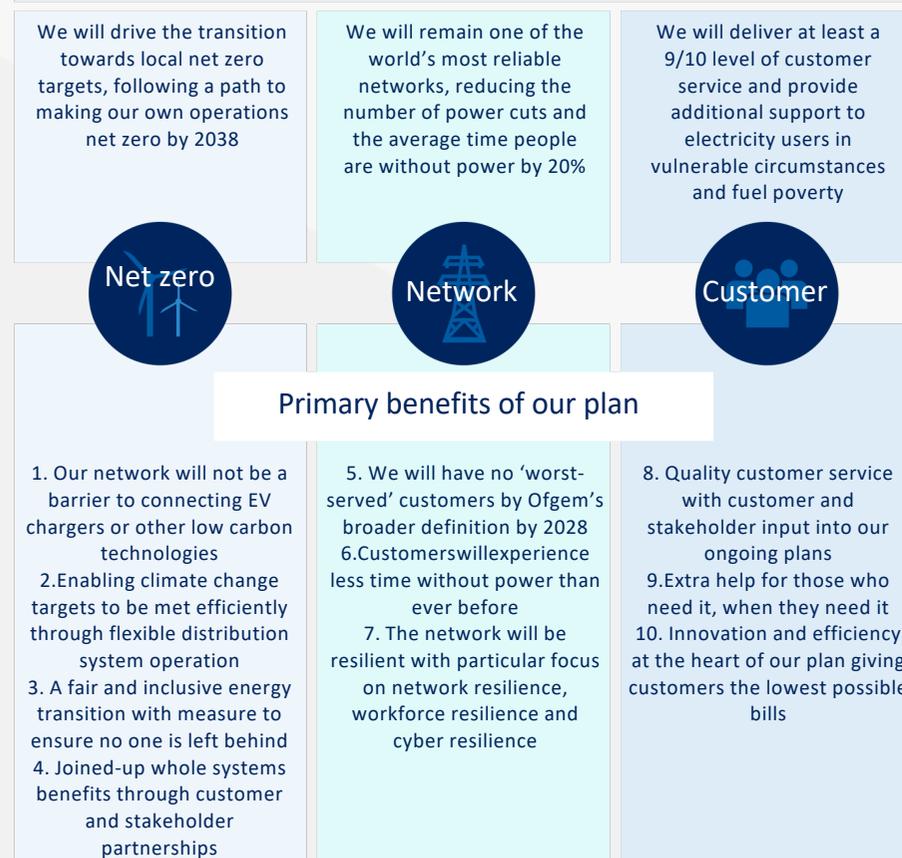
Our strategy for managing our stakeholders is based on our wider engagement model. This is outlined in the diagram below:



# 3. Contribution to our Business Plan Vision

This section summarises our RIIO-ED2 business plan and how our digitalisation strategy contributes to the business plan vision.

Vision: Leading the North West to net zero



We will continue to deliver network reliability and security, excellent service and efficient operations by building on our core services and exploiting new and maturing digital technologies. These are changing the way companies interact and work with their customers and stakeholders while recognising that some customer segments have difficulty accessing some technologies.

For our customers and stakeholders, this will mean increased availability of data and transparency through improved and cost-effective digital services. These enhancements will not only support market innovation, energy supply chain efficiency, and economic growth but also result in savings and reduced costs for our customers.

Our customers have a large part to play in shaping and delivering our digitalisation strategy. We will work together to provide improved digital services and open access to network and market information, taking care to avoid excluding hard-to-reach groups.

We have developed a continuous improvement process that will refine and confirm our digitalisation journey. While engaging with customers and stakeholders for our RIIO-ED2 submission we focused on the opportunities and projects that provide the best stakeholder outcomes. We are in a process of exploration and consideration, not least as the technology evolves.

We are asking ourselves how best to address the challenges we face. We will be open and transparent in this process, and we want and need our stakeholders to help us decide what we do, recognising that we need to remain agile in this fast-changing dynamic digital world.

The 14 initiatives outlined in our digitalisation strategy are what we plan to deliver in RIIO-ED2. We are continuing to refine this as we undertake more detailed planning based on the final determination outcome, cost benefit analysis and consultation. This will ensure that our investment plan for RIIO-ED2 is affordable, deliverable and optimally aligned to the ten business plan benefits and our stakeholders' priorities.

# 4. Digitalisation vision

This section details the three digitalisation capability themes which have shaped our investment plans for RIIO-ED2 across the 14 investment areas and underpin our digitalisation vision.

## Enablement

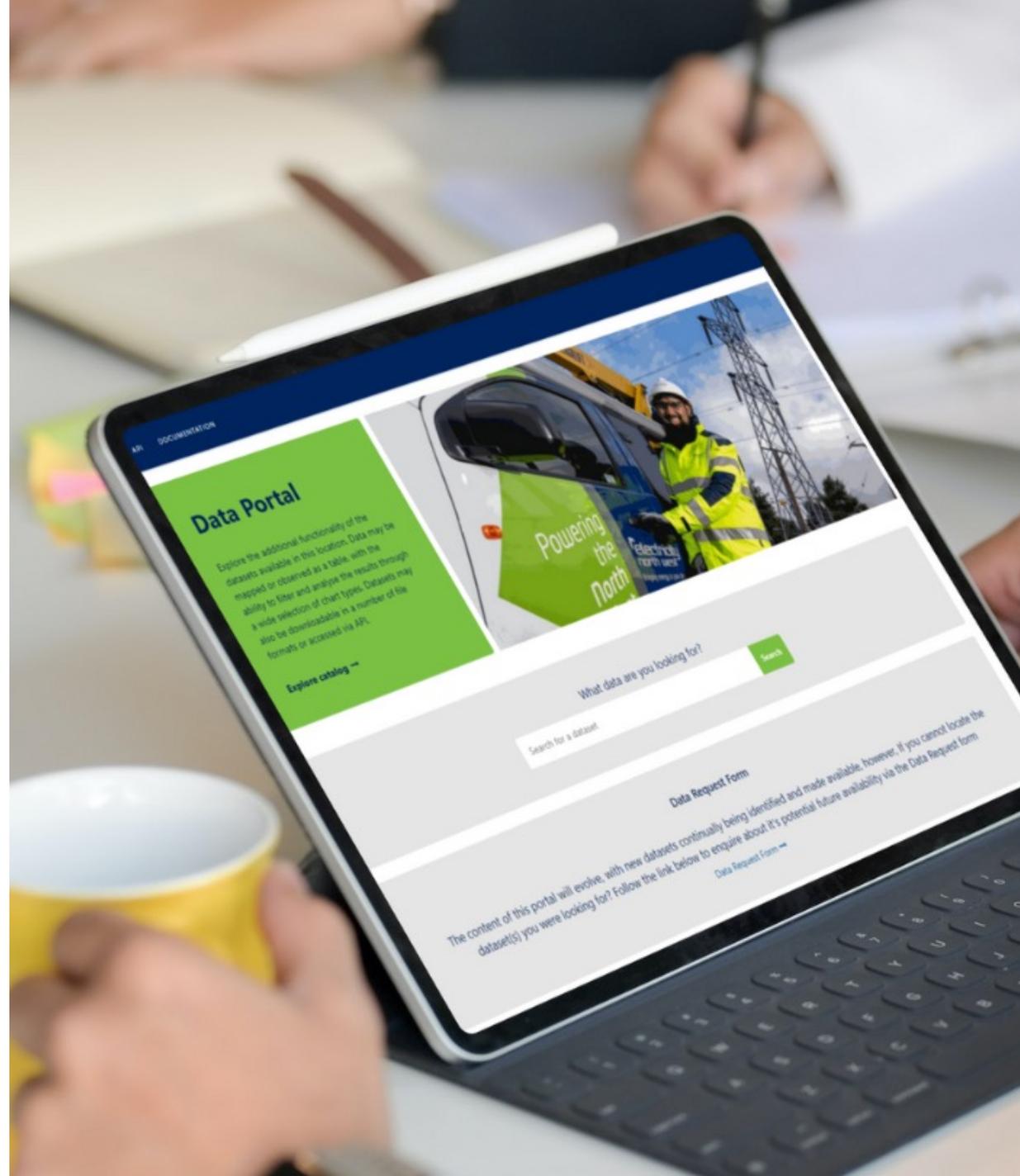
We will provide cyber protection and business resilience around access to data and appropriate technology. This will enable our people to work more safely and efficiently, to improve public safety and better serve our customers and stakeholders. Our initial focus in RIIO-ED2 will be to improve systems for our field teams, replace inefficient devices and enhance our work and asset management systems.

## Innovation

We will ensure the company and our supply chain can adapt quickly to changes in the operating environment and can innovate by continuing to invest in flexible technology platforms, data quality and data sharing.

## Insight

We will make information and analytics accessible in an affordable, secure and reliable manner, to enable us, as well as third parties, to identify opportunities to innovate and continually improve the whole energy system.



## Our digitalisation strategy on page

Leading the North West to net zero					
Drivers	<ul style="list-style-type: none"> <li>• Cost efficiency</li> <li>• Heat pumps and electric vehicles</li> <li>• Cost of living</li> </ul>	<ul style="list-style-type: none"> <li>• Priority customers</li> <li>• Open data</li> <li>• Global warming</li> <li>• Cyber threats</li> </ul>	<ul style="list-style-type: none"> <li>• Smart grid</li> <li>• Modernising energy data recommendations</li> <li>• Data best practice</li> </ul>	<ul style="list-style-type: none"> <li>• Ecosystems</li> <li>• Environmental sustainability</li> <li>• Innovation</li> </ul>	<ul style="list-style-type: none"> <li>• Distribution system operation</li> <li>• Ofgem digitalisation principles</li> </ul>
Business plan themes	<p>Net zero</p> <p>We will drive the transition towards local net zero targets, following a path to making our own operations net zero by 2038.</p>		<p>Network</p> <p>We will remain one of the world's most reliable networks, reducing the number of power cuts and the average time people are without power by 20%</p>		<p>Customer</p> <p>We will deliver at least a 9/10 level of customer service and provide additional support to electricity users in vulnerable circumstances and fuel poverty.</p>
Our digitalisation themes	<p>Enablement</p> <ul style="list-style-type: none"> <li>• Business resilience</li> <li>• Prioritise field force</li> <li>• Cyber protection</li> </ul>		<p>Innovation</p> <ul style="list-style-type: none"> <li>• Open data</li> <li>• Modular architecture</li> <li>• Cloud first</li> </ul>		<p>Insight</p> <ul style="list-style-type: none"> <li>• Integration platform</li> <li>• Data platform</li> <li>• Analytics</li> </ul>

RIIO-ED2 roadmap 2023 -2028						
Investment proposals		Primary outputs and deliverables				
Corporate IT	<ul style="list-style-type: none"> <li>• Work and asset management</li> <li>• Geographical information systems</li> <li>• Connections</li> <li>• Customer</li> <li>• Market operations</li> <li>• Market operations</li> <li>• Complementary and specialised systems</li> </ul>	<ul style="list-style-type: none"> <li>• Work and asset management –field-friendly solutions</li> <li>• Data capture –accuracy improvement</li> <li>• New GIS system and open GIS data</li> <li>• Improved connections -customer journey</li> <li>• New priority services for vulnerable customers</li> <li>• Enhanced digital channels</li> <li>• Reduced manual processes</li> </ul>	Metrics	<ul style="list-style-type: none"> <li>• Number of 'open data' sets</li> <li>• Number of cloud services</li> </ul>	<ul style="list-style-type: none"> <li>• Number of external APIs</li> <li>• Cyber security compliance</li> <li>• Data best practice progress</li> </ul>	
			Key risks	<p>Business impact</p> <p>Overburden the company, parts of the company, with IT-driven change.</p>	<p>Deliverability</p> <p>Capacity to deliver our plans</p>	<p>Resourcing</p> <p>Resourcing and workforce resilience for key skills</p>
			Benefits	<ul style="list-style-type: none"> <li>• Our network will not be a barrier to connecting EV chargers or other low carbon technologies</li> <li>• Enabling climate change targets to be met efficiently through flexible distribution system operation</li> <li>• A fair and inclusive energy transition with measures to ensure no one is left behind</li> <li>• Joined-up whole systems benefits through customer and stakeholder partnerships</li> <li>• We will have no 'worst-served' customers by Ofgem's broader definition, by 2028</li> </ul>	<ul style="list-style-type: none"> <li>• Customers will experience less time without power than ever before</li> <li>• The network will be resilient with particular focus on network resilience, workforce resilience and cyber resilience</li> <li>• Quality customer service with customer and stakeholder input into our ongoing plans</li> <li>• Extra help for those who need it, when they need it</li> <li>• Innovation and efficiency at the heart of our plan giving customers the lowest possible bills</li> </ul>	
Real time systems	<ul style="list-style-type: none"> <li>• Smart grid system</li> <li>• Substation monitoring &amp; control</li> <li>• Operational telecommunications</li> <li>• Smart meter</li> </ul>	<ul style="list-style-type: none"> <li>• Full visibility of network data</li> <li>• Enhanced LV and HV control</li> <li>• New smart meter gateway</li> <li>• Refreshed active network system for DSO</li> <li>• New DSO services</li> </ul>				
Enabling	<ul style="list-style-type: none"> <li>• Data, analytics and integration platform</li> <li>• Digital workplace</li> <li>• Cloud and infrastructure</li> <li>• Cyber</li> </ul>	<ul style="list-style-type: none"> <li>• Modern data architecture</li> <li>• Data sharing portal and enhanced analytics</li> <li>• Refreshed digital device platform</li> <li>• Cloud platform</li> <li>• Improved and enhanced cyber protection</li> </ul>				

# 5. Customer service

At Electricity North West, we believe that exceptional customer service is the foundation of a successful digitisation journey. By prioritising customer engagement and feedback, we are committed to deliver at least a 9/10 customer service experience that meets the evolving needs of our customers.

Our customer-centric approach is deeply embedded in our business planning process, ensuring that customer perspectives are at the forefront of every decision. We actively seek customer input through various channels, including focus groups, cognitive testing of engagement materials, and targeted customer segmentation research. This deep understanding of customer needs and priorities enables us to tailor our digitisation initiatives to deliver a seamless and positive customer experience.

We recognise the importance of clear and accessible communication in fostering trust and building strong relationships with our customers. We strive to use simple, non-corporate language that resonates with our diverse customer base, ensuring that our messages are easily understood and relevant to their specific needs. Additionally, we are committed to local and relevant engagement, tailoring our messaging and engagement platforms to effectively connect with different customer and stakeholder groups.

Our commitment to transparency is evident in our willingness to share our plans and seek customer feedback. We believe in open communication and encourage customers to provide their insights on our proposed initiatives. By incorporating customer feedback into our planning process, we ensure that our efforts are truly customer-centric and aligned with their expectations.



# 5.1 Customer service actions and KPIs

Area	Action	Progress to date	Next steps	Status	Principle
Customer service	Enhancement of digital services relating to general customer enquiries	Our digital service offering survey has been released to capture information on what self-service digital offering preferences our customers have.	<ul style="list-style-type: none"> <li>Boosting self-service: Enhancing webpages for easier self-service enquiries.</li> <li>Streamlining guaranteed standards: Collaborating with vendor and stakeholders to improve the claiming process through customer feedback.</li> <li>Maximising impact: Identifying further actions based on feedback to deliver better customer experiences.</li> </ul>	New	Principle 1 - Prioritising stakeholder benefits
Customer service	Establish the Digital Futures Panel, including terms of reference, panel members, dedicated webpage	part of our wider engagement strategy for RII0-ED2 endorsed through business planning and independent oversight group	first panel session to be held in February, with all terms set up	New	Principle 4 - Communicating what we do
Customer service	Continually improve our digital content and web based services	Continued improvement of our community and local energy web content, based on stakeholder feedback.	Look at connections and info we provide	Ongoing	Principle 1 - Prioritising stakeholder benefits
Customer service	Move to half hourly settlement, ensuring internal billing and information systems are fit for purpose	Complete full business case and approve the programme to run until December 2026.	The business case has been approved. The project now has funding approved through to the scheduled Ofgem Go-live in December 2026.	Ongoing	Principle 7 - Whole system collaboration
Customer service	Create Customer Personas to provide tailored communications and services to stakeholders	Completion of the integration work with our services	Test the new digital surveys, newsletters and events with our stakeholders.	Ongoing	Principle 1 - Prioritising stakeholder benefits

## 5.2 Showcase: Empowering Customers with PING

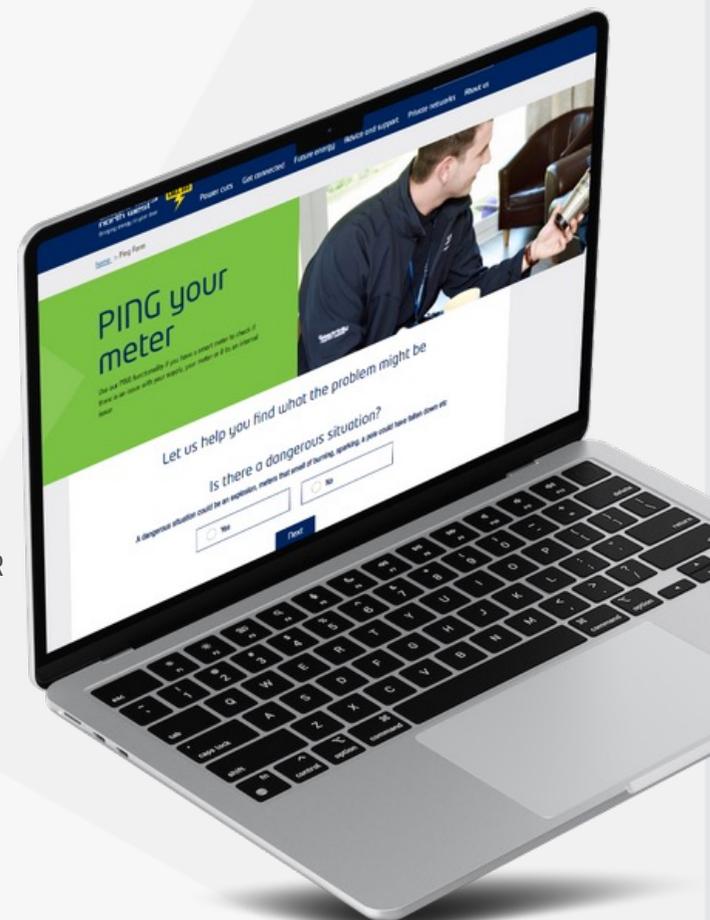
In an era of digital transformation, Electricity North West is committed to empowering customers with innovative solutions that enhance their experience and provide them with greater control over their needs. PING is a testament to this commitment, as an example of one of our self-service solutions, enabling customers to resolve their 'No Supply' issues promptly and efficiently.

PING, an acronym for Power Interruption Notification Gateway, serves as a digital bridge between Electricity North West and its customers, enabling remote diagnosis of electricity supply disruptions. By harnessing the power of smart meters, PING can swiftly determine whether a power outage originates from our network, with the meter or lies within the customer's premises. This distinction proves invaluable in addressing customer concerns promptly and efficiently.

### PING's Multifaceted Functions

PING's versatility extends beyond fault detection; it seamlessly integrates into Electricity North West's customer service channels, offering a range of functionalities that empower customers to self-serve and resolve their issues without the need for agent intervention.

- **Self-service:** Customers can access PING via our website, initiating a diagnostic process that remotely pings their smart meter and provides real-time feedback. This self-service option eliminates the need for phone calls or engineer visits, saving time and resources for both customers and Electricity North West.
- **Agent-assisted PING:** For customers who prefer phone assistance, our contact centre agents are equipped with PING capabilities. Agents can remotely ping a customer's smart meter, providing immediate insights into the cause of the outage and guiding customers towards appropriate resolutions.
- **Automated IVR integration:** During high-volume call scenarios, PING is integrated with our IVR system, automatically pinging smart meters and providing customers with status updates without the need to speak to an agent. This automation alleviates pressure on call centre operations during peak periods.
- **NMS bulk PING:** In the aftermath of widespread power outages, our network management system (NMS) can initiate bulk PING operations, efficiently checking the power status of affected properties and identifying areas that require further attention. This capability expedites restoration efforts and minimises customer inconvenience.



# 6. Customers in vulnerable circumstances

Electricity North West is committed to ensuring that all electricity users in the North West have access to the services and support they need. The company has developed a new strategy to address the challenges faced by vulnerable customers, including those who are in fuel poverty, have disabilities, or are from ethnic minority communities.

The strategy outlines four key priorities:

- **Simplifying the registration process for the Extra Care Register (ECR).** The ECR is a database of vulnerable customers who need extra support during power cuts. Electricity North West is committed to making it easier for customers to register for the ECR.
- **Improving the reliability of the local network for customers in vulnerable circumstances.** This will help to reduce the risk of power cuts for vulnerable customers.
- **Developing and refreshing the network of partners to provide additional support to customers in vulnerable circumstances.** This will help to ensure that these customers have access to the services and support they need.
- **Minimising the risk of creating barriers to services, such as the move towards Net Zero.** This will help to ensure that customers who are more at risk are not left behind as the energy system changes.

Electricity North West is working with a range of stakeholders to implement the strategy, including local authorities, charities, and community groups. The company is also investing in research to improve its understanding of vulnerability and to develop new services and support.

The company is committed to working with its customers and stakeholders to ensure that everyone in the North West has access to the electricity they need to live a safe and healthy life.



# 6.1 Customers in vulnerable circumstances actions and KPIs

Area	Action	Progress to date	Next steps	Status	Principle
Customer vulnerability	Update our Extra Care webpages to support our stakeholders during the cost-of-living crisis, providing help locating food banks, warm hubs and energy saving support. This improves the relevance of our information and support for our vulnerable customers.	Enhance content for extra care customers. Including tips and resources available.	no further actions now	Complete	1 - Prioritising stakeholder benefits
Customer vulnerability	Priority Service Register (PSR) single portal - Electricity North West and United Utilities along with Citizens Advice Manchester (CAM) have started a pilot scheme to measure the customer experience of signing onto one Priority Service Register.	Considering the option for a wider project to use this service as our single PSR portal.	no further actions now	Complete	1 - Prioritising stakeholder benefits
Customer vulnerability	Contact customers to understand their extra care requirements. Improve the quality of data and additional contact information. 45,000 customers via reference calls and door knocking for the digitally excluded	45,000 customers to be contacted in December and January	Continued contact strategy	On going	1 - Prioritising stakeholder benefits
Customer vulnerability	Take Charge campaign in partnership with Citizens Advice North West and the Energy Savings Trust. Take Charge is here to help you reduce your energy bills, get support with debt, access benefits and financial support, and even secure funding for energy efficient home improvements.	Launched <a href="https://takechargetoday.co.uk/">https://takechargetoday.co.uk/</a> - with a direct phone number to contact, WhatsApp chat and online booking form	The service will be available during ED2 period and marketing efforts will continue to promote the service	On going	1 - Prioritising stakeholder benefits

## 6.2 Case study: The impact of 'Take Charge Today' on customers in vulnerable circumstances

The "Take Charge Today" landing page is a platform designed to direct customers to reliable and accessible energy and money advice. The standalone webpage signposts to a range of services, including support with reducing energy bills, debt assistance, access to benefits and financial support, and assistance in securing funding for energy-efficient home improvements. These services are funded by Electricity North West and delivered in collaboration with Citizens Advice in the North West and Energy Saving Trust.

There are many benefits of "Take Charge Today" for customers in vulnerable circumstances. If we consider the case of a low-income family facing financial challenges and struggling to manage their energy costs:

**Energy bill reduction:** The family, residing in a three-bedroom semi-detached house, is grappling with high energy bills that significantly strain their limited income. They reach out to "Take Charge Today" and receive free and unbiased advice, resulting in potential savings of around £304 per year, alleviating their financial strain.

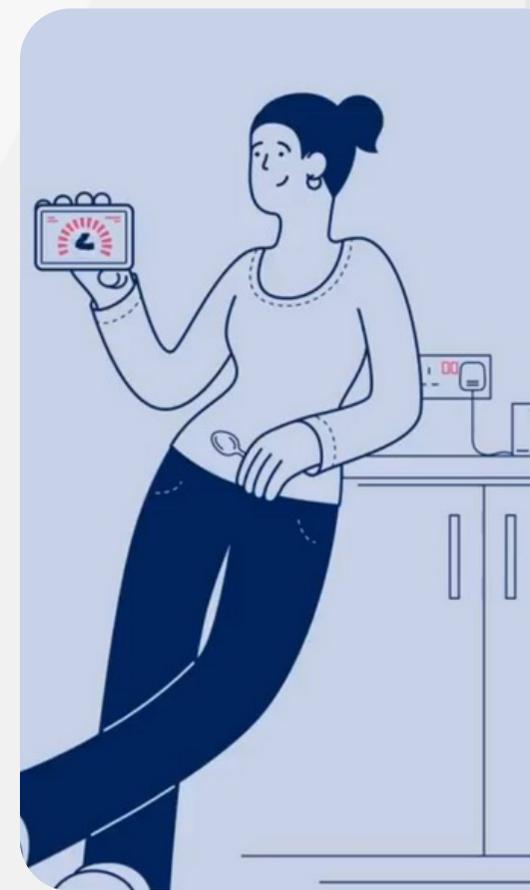
**Money advice and debt support:** The family also faces challenges in managing their finances and debt. With the assistance of "Take Charge Today," they receive practical guidance on claiming entitled benefits and managing their money effectively, empowering them to make informed financial decisions and navigate their debt more confidently.

**Home improvement support:** Moreover, the family is residing in a home with energy-inefficient features, contributing to higher energy costs. Through "Take Charge Today," they discover grants and funding opportunities for making their home more energy-efficient, leading to long-term savings and a more comfortable living environment.

**Extra Care service:** Given their vulnerability, the family signs up for the free Extra Care service, ensuring they receive additional support during power cuts, further enhancing their safety and well-being.

In this case, "Take Charge Today" has had a great impact on the family, enabling them to take control of their energy costs, manage their finances more effectively, improve their living conditions, and ensure their safety during adverse situations. The personalised and trustworthy support provided has not only alleviated immediate financial burdens but has also provided the family with valuable knowledge and resources for long-term resilience and stability.

To further enhance the accessibility and convenience of "Take Charge Today" there are multiple digital channels for support. Customers can schedule appointments with advisers directly through the website, ensuring personalised and timely assistance. Additionally, a WhatsApp chat feature for real-time communication and support, allowing customers to seek help promptly and conveniently. For those who prefer telephone, a dedicated phone line is available for immediate assistance and guidance, ensuring that vulnerable customers can access the support they need whenever and wherever they may need it. These digital platforms expand the reach of the "Take Charge Today" service, making it more accessible to a wider audience and ensuring that vulnerable customers can receive the support they need without barriers or inconvenience.



## 6.3 Bridging the digital divide at Electricity North West

At Electricity North West, we recognise that access to digital resources and information is essential for all members of our communities. We are determined to ensure that no one is left behind in the digital age. That is why we have developed a comprehensive strategy to meet the needs of the digitally excluded, which includes the elderly population, low-income individuals and families, rural and remote communities, individuals with disabilities, and non-native or low-literate English speakers.

We have established a partnership with One Voice Blackburn, an organisation working with South Asian communities. Through this collaboration, we have funded a video service in the spoken language of the community. The first two videos address crucial topics, such as preparing for winter and the extra care register. These videos will be shown in face-to-face sessions and shared on social media. The partnership will span 12 months, during which we will develop a series of videos based on feedback received. Recognising that individuals who are unable to read English may also struggle to read in their first language, we aim to provide accessible information through visual content.

We have also partnered with GMCA and Age-Friendly Manchester to further promote literature accessibility and inclusivity. Through this collaboration, we make our expertise available to review communications and gather feedback on how they are received. By working closely with these partners, we can tailor our communication strategies to better engage the digitally excluded.

To enhance the accessibility of our key customer literature, we have created a partner print portal. Through this portal, our partners can access and share our materials with the people they work with, ensuring that important information reaches those who may not have access to digital resources. By leveraging the networks of our partners, we aim to extend our reach and support even more individuals who are digitally excluded.

In our efforts to support low-income families in South Manchester, we have upskilled and trained the play workers at Hidden Treasure Trust - Playcentre. These play workers are now well-equipped to educate their families about the support available from Electricity North West,

providing critical information to those who may not have digital access. Additionally, our literature is distributed at the centre, serving as a physical resource for families in need.

In Lancashire, we have partnered with Headway, an organisation that supports individuals with brain injuries. Through this partnership, we offer a bedside service to those transitioning back home. During these meetings, our team discusses the benefits of our Extra Care Register and helps them sign up before leaving the hospital.

In collaboration with AgeUK Lancs and Blackpool, we have allocated funding for an administration person and staff dedicated to connecting with the elderly population in the area. Their role includes signing up individuals to the Extra Care Register, ensuring that they receive the necessary support with a budget of £56,000.

We are also working with Money Skills Bolton to fund a program in schools that engages parents and children through interactive sessions, such as cooking classes. These sessions not only teach families how to make affordable meals but also provide education on finances while promoting our Extra Care Register.

In Cumbria, the Storm Arwen fund has been established to strengthen community resilience, specifically targeting the digitally excluded population. The Cocker mouth community response group maintains its own register of vulnerable individuals, and with their agreement, their details are being added to our Extra Care Register. The Chamber of Trade is actively promoting the Extra Care Register to 17,000 households, and information about our support can be found in Cocker mouth's vaccination clinic.

# Bridging the digital divide at Electricity North West continued

AgeUK Carlisle and Eden are non-funded partners who actively promote our Extra Care services, supporting our efforts to reach and assist more individuals in need.

Last year, we distributed 30,000 thermometer cards in collaboration with the NHS combined authorities. These cards are designed to inform our vulnerable customers when their homes reach a low temperature that could have a negative impact on their health. This initiative aims to ensure the well-being of our customers and provide them with timely information to take necessary actions.

This year, we are expanding our efforts by distributing thermometer cards to 50,000 individuals. Alongside this outreach, we will also be promoting the Extra Care Register, with support from our partner organisations. By working together, we aim to reach and assist more individuals who are digitally excluded, ensuring their safety and well-being.

We are committed to providing multiple avenues for customers to register for our Extra Care Register. To ensure this, we have sent out an Extra Care leaflet to 2.6 million properties. Distribution started in May and will run until the start of Feb 2024. Additionally, we have added a new IVR option that allows customers to speak to an advisor and register over the phone. This option provides us with accurate reporting of uptake and ensures that even those without digital access can register.

In partnership with Cadent and United Utilities, we are launching a pharmacy campaign to raise awareness about the Extra Care Register with tips from the local electricity, gas and water network on how people can safe, warm and connected. During January and February 2024, our collaborative Pharmacy campaign involved distributing 700,000 Pharmacy Bags across 350 pharmacies over an 8-week period. These bags, along with accompanying leaflets, were designed to reach an estimated audience of 2,537,500 individuals, ensuring widespread visibility and engagement. This campaign aims to connect with our vulnerable customers, reinforcing our commitment to digital inclusivity and accessibility for all.

Electricity North West remains steadfast in its commitment to bridging the digital divide and ensuring that no one is left behind. Through partnerships with community organisations, and the creation of accessible visual content, we are actively working to meet the diverse needs of the digitally excluded. We will continue to listen, learn, and develop new strategies based on feedback, as we strive for a digitally inclusive future for all.



# 7. Network Management & Resilience

We are committed to delivering a reliable, resilient and safe electricity network for our customers. We recognise the strategic value of digitising the network management process as digitisation not only enhances the operational efficiency of the network but also enables us to better manage the network's reliability and resilience in the face of increasing demand and changing climatic conditions.

Our digitalisation approach has four key strands:

- Over the course of RIIO-ED1 we digitised our entire network at all voltages into a connected network model such that we know which customers are fed from which elements of the network, and we continue to work hard to maintain this as the underpinning of our network management system. This allows us to use advanced power management applications to automate restoration after faults, optimise voltage on our network and enable the flexible connection of distributed energy resources, and also to translate the performance of our network into the experience of individual customers so that we can identify customers experiencing multiple interruptions and identify the causes and potential interventions.
- We have installed enhanced monitoring and remote switching devices on the network. Combined with the connected network model, this allows us to identify and begin to respond to faults as they develop, and often before the first customer call is received, as well as to better understand the power flows on our network, enabling active management of distributed energy resources.
- We fuse information about the location, condition, connectivity and loading of our assets to target investments in areas where power cuts are most likely and have the greatest impact on our customers. By carefully analysing data and identifying areas with the most significant potential for improvement, we can allocate resources more effectively to reduce power cuts and enhance customer experience.
- Putting better and more accessible information into the hands of our teams to enable them to better support customers through more resilient communications and improved tools.

Climate change poses significant challenges to electricity networks, and we are taking proactive measures to enhance the resilience of our infrastructure. Investments in flood defences, vegetation management and cybersecurity are crucial to safeguarding the network against extreme weather events, malicious attacks, and other potential disruptions. As part of our submission for the Storm Arwen Re-opener, we are proposing to develop a resilience modelling framework to enable us to better target investment to improve the resilience of our network to storm events incorporating weather modelling, the ability of the network to cope with damage and the operational response factors to minimise the risk of long duration outages for our customers following severe weather.

Digitalisation is also playing a vital role in our safety initiatives. Additionally, digital tools are being used to enhance training and awareness programmes, ensuring that all personnel are well-equipped to operate safely.

# 7.1 Network Management & Resilience actions and KPIs

Area	Action	Progress to date	Next steps	Status	Principle
Network management and resilience	Implement Power Interruption Notification Gateway (PING), which serves as a digital bridge between ENW and its customers, enabling remote diagnosis of electricity supply disruption	All functionality now delivered.	Now Live.	Complete	Principle 1 - Prioritising Stakeholder benefits
Network management and resilience	Creation of report on damage functionality on our website	No further action.		Complete	Principle 1 - Prioritising stakeholder benefits
Network management and resilience	Enhance our process for submitting information from the field for faults, capturing more information to improve customer engagement.	This is now implemented and live and we are undertaking continuous improvement.		Complete	Principle 1 - Prioritising Stakeholder benefits
Network management and resilience	Presense - 95% of our customers covered by pre-sense by the end of R110-ED2	Roll out of equipment continues	Continue	New	Principle 1 - Prioritising Stakeholder benefits
Network management and resilience	ENWL has raised a grid code modification (GC0139) to precipitate changes to the Planning Code of the Grid Code that will bring about the increased information exchange in CIM format.	Ongoing		New	Principle 7 - Whole system collaboration

# 7.1 Network Management & Resilience actions and KPIs continued

Area	Action	Progress to date	Next steps	Status	Principle
Network management and resilience	Digital Mobile Radio - Enhance our digital communications capability to provide communications to our hard-to-reach mobile signal areas, helping us improve control over our network and increasing the resilience of our network for our customers	Start the deployment of enhancements in the field. Initial roll out will target 5000 customers	Continue deployment of enhancements.	Ongoing	Principle 2 - Delivering the vision
Network management and resilience	The first phase of Smart Street, introducing low voltage regulation to support the reduction in demand on the network and cost to customers.	We have implemented this in spring 2023, with capability to control LV voltage. Through the next period, this control will be further enhanced.	We continue to develop and optimise this capability.	Ongoing	Principle 1 - Prioritising Stakeholder benefits
Network management and resilience	Deploy a proof of concept to test and refine the requirements for our new GIS system to ensure we procure a solution that enables the provision of efficient services to our customers	Deferred due to reprioritisation of our RII0-ED2 portfolio in the period. We are commencing this activity in next six-month period and are set to have a proof of concept available by Winter 2023, to support selecting application vendor.	Work is due to begin Apr-24.	Ongoing	Principle 2 - Delivering the vision
Network management and resilience	Improve fault location detection for overhead lines, improving safety and fault response, which will improve the service we deliver to our customers.	We have progressed with this action and implemented the capability in May 2023 and have successfully seen early detection the location of overhead faults on our network. Over the next period, we will increase the coverage of this capability and enhance the detection of faults and hazards on our network.	Over the next period, we will further increase the coverage of this capability and enhance the detection of faults and hazards on our network.	Ongoing	Principle 1 - Prioritising stakeholder benefits

## 7.2 Showcase: Electricity North West's Smart Street Initiative

We are at the forefront of network digitalisation and the Smart Street initiative is transforming the management and optimisation of low voltage (LV) electricity networks. We are continually developing and deploying cutting-edge technologies to improve the efficiency and sustainability of our operations. One such initiative is the Smart Street project, a ground breaking programme that utilises Conservation Voltage Reduction (CVR) technology to reduce energy consumption and emissions on its low voltage (LV) network.

The Smart Street initiative means that Electricity North West can reduce the supply voltage to our customers to an optimum level so that the network and customer appliances work more efficiently. This can lead to a number of benefits for customers, including:

- Reduced electricity bills: Smart Street can save customers up to £70 a year by reducing the amount of electricity consumed.
- Reduced carbon emissions: Smart Street can also reduce carbon emissions by up to 13% by reducing the amount of energy lost in the distribution system.
- Improved network capacity: Smart Street can also help connect more low-carbon technologies to the network without having to upgrade the network.

Following the success of the Smart Street trial, Electricity North West committed to the rollout of Smart Street to 180 sites on our network. The rollout has targeted areas with high uptake of low carbon technologies, such as heat pumps and electric vehicles, particularly where these overlap with areas with high levels of fuel poverty. The technology has been implemented and will continue to enhance the capabilities.

Throughout the development and rollout of Smart Street, Electricity North West has engaged with our customers. The company has conducted multiple focus groups with customers to understand their concerns and ensure that Smart Street can operate effectively for everyone. Electricity North West has also been transparent about the project from the beginning, providing customers with updates on the progress of the trial and the rollout.

The Smart Street project is a clear example of our commitment to innovation and sustainability. The project has the potential to save customers money on their electricity bills, reduce carbon emissions and improve network capacity.



## 8. Distribution System Operation

Distribution System Operation (DSO) represents a pivotal transformation in network management, propelling the North West towards a future defined by customer-centric benefits, cost-efficient operations, and enhanced network accessibility. Our unwavering commitment is to elevate customer experiences and facilitate seamless network connectivity, using enhanced data and digitisation and establishing a robust foundation for an energy landscape that prioritises efficiency, accessibility, and customer responsiveness.

Our overarching goal is to provide customers with reliable and affordable access to network capacity, ensuring the seamless integration of renewable energy sources and distributed energy resources while enabling the transition to Net Zero. We will achieve this through a strategic approach that emphasises data-driven decision-making, stakeholder engagement, and a holistic approach to network planning. Our comprehensive action plan focuses on enhancing network understanding, refining network capacity forecasting, prioritising flexibility services, and strategically investing in network upgrades. By embracing collaboration, whole-system thinking, and stakeholder engagement, we are committed to forging a sustainable and equitable energy future for all.

As the North West's network operator, we are uniquely positioned to drive the transition to a sustainable and equitable energy future. By harnessing digitalisation and prioritising customer needs, we can seamlessly integrate renewable energy sources, reduce carbon emissions, and ensure that our customers have access to reliable, affordable, and sustainable energy solutions.

Through this steadfast commitment to digitalisation and customer-centricity, we can empower our customers which will increase optimised network performance, and accelerate the transition to Net Zero. Together, we are forging a path towards a more sustainable, equitable, and customer-responsive energy landscape.



# 8.1 DSO stakeholder engagement

To effectively fulfil our responsibilities, the Distribution System Operation team fosters close collaboration with a diverse range of stakeholders. This includes online webinars, interactive forums, in-person events, and one-on-one sessions. Additionally, we engage in cross-collaboration with network operators and industry experts to share knowledge, best practices, and experiences.

In the area of Distribution Network Operator (DNO) flexible services, we engaged stakeholders in 2022 and 2023 through formal consultations, comprehensive responses are documented in the [2022](#) and [2023](#) reports. The feedback received led to the expansion of data sharing, including making data accessible on Open Data Portal in various formats and providing API access. Stakeholder feedback on previous procurement and dispatch activities resulted in the publication of raw data from our Distribution Flexibility Services Procurement Report in an API format. We will maintain this data-sharing frequency and increase granularity in case of flexible services dispatch or procurement activities.

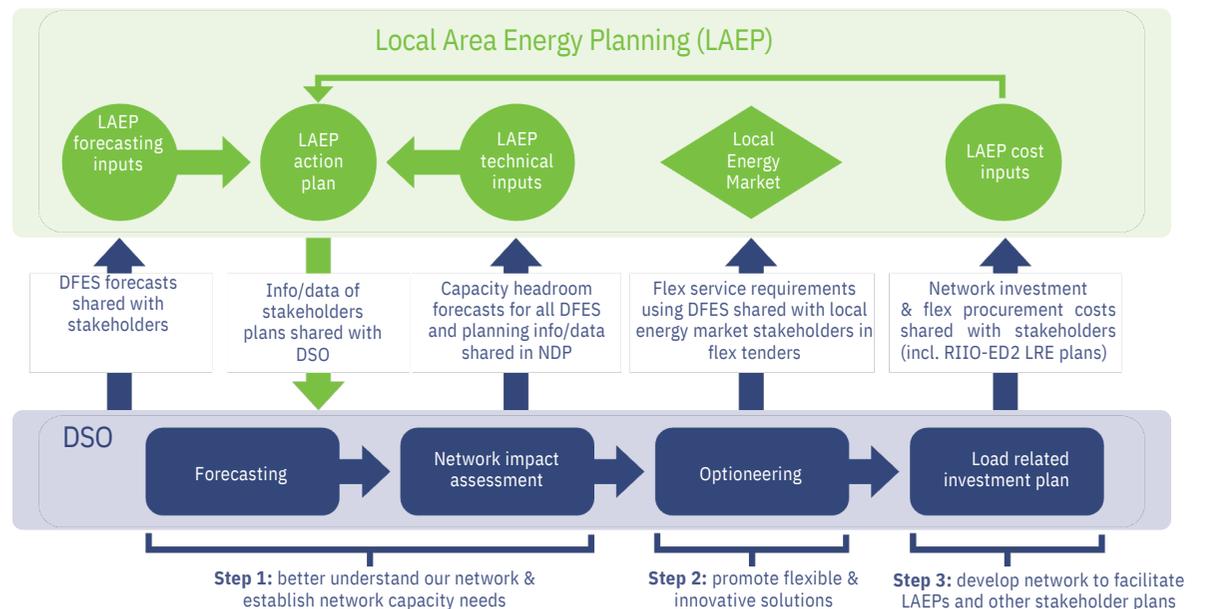
For the 2023 consultation, we enhanced participation by offering written responses, conducting one-on-one meetings, and hosting a webinar. This approach was refined based on feedback from previous consultations and ongoing engagements throughout the year. After collating feedback, we individually reached out to participating stakeholders, offering both general and personalised feedback.

Furthermore, our collaborative efforts with other DNOs using the Piclo Flex platform were evident through full-day in-person Flex forums held in 2022 and 2023. These forums facilitated engagement with Flexible Service Providers and industry stakeholders, culminating in a summary of outcomes shared with attendees and accessible via the Piclo website.

To address stakeholders' feedback on data accessibility, we made our flexible services data available on the Open Data Portal. This includes various formats for easy analysis, mapping, and download, along with a dedicated section specifically for flexible services data. Responding to Flexible Service Providers requests, we made our Spring and Autumn tenders available via API. Additionally, improvements in data tagging and signposting were made based on stakeholder suggestions for easier navigation.

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Stakeholder engagement as part of Electricity North West's DSO load-related investment cycle



## 8.2 Distribution System Operation actions and KPIs

Area	Action	Progress to date	Next steps	Status	Principle
DSO	Publish Long Term Development Statement via "digital storytelling application".	The latest version of the LTDS has been shared in a digital format giving readers greater control of how they consume information as well as a PDF version for those who prefer to print		Complete	Principle 1 - Prioritising Stakeholder benefits
DSO	Share templates via our dedicated LAEP webpage to simplify the process for capturing local authority development plans to ensure they are reflected within our DFES, and that LA's without the resources to develop full LAEP's are not excluded. Treating all customers the same	Now live	Continue to update and enhance our content to support customers and stakeholder	New	Principle 1 - Prioritising Stakeholder benefits
DSO	Create educational short-form video content demonstrating how our data can be used to benefit stakeholders with worked examples relevant to their business	During recent events we have demonstrated worked examples of how our data can be used and benefit a verity of stakeholders. We asked attendees what other examples would they like to see demonstrated which has been fed in to the short form video content plan	Create the content and share on website, social media and promote with stakeholders	New	Principle 1 - Prioritising Stakeholder benefits
DSO	Electricity North West is a founding partner of a new government backed website supporting small and medium sized enterprises to net zero. The objective is to develop a comprehensive national digital advice service for small businesses to enable them to take practical action in decarbonising their business and transition to net zero.	Initial launch of the website in July 2023 to trial the service with stakeholders.	use our own digital channels to promote and signpost to the website	On going	Principle 1 - Prioritising Stakeholder benefits
DSO	Deploy our open data portal to enable stakeholders to view our asset data.	Our open data portal went live end-December 2022, with the embedded capacity register. A further 35 elements have been added to the data portal in this period.	Continually add more data to the Open Data Portal and consult on additional datasets to be included, and formats available	On going	Principle 7 - Whole system collaboration

## 8.2 Distribution System Operation actions actions and KPIs continued

Area	Action	Progress to date	Next steps	Status	Principle
DSO & Customer	Enhance capabilities to collaborate with housing associations to support their low carbon ambitions.	After further analysis the need for this activity has reduced; we will reassess this in six months' time.	This action remains on hold pending further analysis	On hold	Principle 1 - Prioritising stakeholder benefits
DSO	Building the market for our BiTrader innovation project. The focus is to engage with the customers, find out their requirements and feedback on how they would like this to operate and begin early stages of design.	Working with our partners we will establish how to implement the service and understand the interactions between our systems and third parties.	Our live trials will be held over 2025-26	On track	Principle 2 - Delivering the vision
DSO	Improve collaboration across the energy system to create a consolidated approach regionally and nationally.	Continue with collaboration in the industry forums.		Ongoing	Principle 7 - Whole system collaboration
DSO	Collaboration as part of the SOO - establish common API for sharing of standard licence documents and information	Development of collaboration plan continues	Open consultation on collaboration plan in Feb 24 and amend accordingly	Ongoing	Principle 7 - Whole system collaboration
DSO	Engaged with the Ofgem lead LTDS Review working group.		Publish LTDS grid models in Common information format (CIM). This will be a staged delivery commencing in May 2024 and completed in November 2024	Ongoing	Principle 7 - Whole system collaboration

## 8.3 Showcase: BiTraDER - A market for trading curtailment obligations

In the dynamic landscape of energy distribution, there is increasing opportunity for integration of renewable energy sources and distributed energy resources (DERs) presents a double-edged sword. While these advancements pave the way for a cleaner and more sustainable energy future, they also pose challenges in managing network congestion and ensuring reliable power supply. To address these challenges and unlock the full potential of DERs, Electricity North West developing an innovative project called BiTraDER.

BiTraDER is an innovation project that aims to address this challenge by investigating, developing, and trialling – live on our network – options for introducing a transparent, independent trading market for DER to trade curtailment obligations bilaterally. This market would allow customers to trade their curtailment obligations with each other, rather than being forced to accept curtailment from the network operator.

The approach offers several key benefits:

- **Encourages participation:** By providing customers with control over their curtailment obligations, BiTraDER incentivises more DERs to participate in flexibility, thereby increasing the availability of flexibility services and reducing whole system costs.
- **Reduces curtailment risk:** Curtailable customers can negotiate curtailment periods that align with their operational needs, minimising their exposure to curtailment events and enhancing their business cases.
- **Flexible engagement:** Existing customers can offer flexible services on an ad hoc basis, maximising their value and optimising their contributions to network stability.
- **Drives DER adoption:** By enhancing the value proposition of DERs, BiTraDER encourages the connection of even more low-carbon technologies, accelerating the transition to a sustainable energy future.
- **Optimises network efficiency:** Access to a broader pool of flexibility services improves the overall efficiency of the network, making it more resilient and cost-effective to operate.

BiTraDER is a collaborative project involving Electricity North West, Electron, AFRY, and LCP Delta. The project team is currently developing the detailed designs for the end-to-end system, which will be completed by early 2024. The build phase will commence thereafter and run until September 2024. Following this, simulation trials will take place from September 24 to April 25, followed by live network trials from April 25 to April 26. Upon completion of the trials and evaluation of feedback from stakeholders, the project team will finalise recommendations for transition to business as usual.

From the outset of the project, Electricity North West has actively engaged with potential customers through interviews, workshops, and calls to solicit their input and feedback on the trading rules and customer interfaces. LCP Delta, a project partner, is managing this customer engagement process. The recruited customers will remain involved throughout the project, providing valuable insights into their willingness to participate in BiTraDER and their perceptions of curtailable connections and flex services. Additionally, Electricity North West has engaged with ESO and initiated discussions with Open Networks to align efforts and ensure BiTraDER seamlessly integrates into the overall electricity system.

BiTraDER represents a groundbreaking step towards unlocking the full potential of DERs in the context of a modern, flexible, and resilient electricity distribution network. By providing customers with control over their curtailment obligations and enabling bilateral trading of flexible services, BiTraDER addresses the key challenges hindering the adoption of curtailed connections and flex services. The project's collaborative approach and proactive engagement with stakeholders ensure that BiTraDER will not only enhance network efficiency and reduce costs but also foster a more flexible and customer-centric energy future. As the project progresses, Electricity North West is committed to demonstrating the transformative power of BiTraDER in driving innovation and unlocking the true potential of DERs in the journey towards Net Zero.

## 8.4 Innovation

Electricity North West is proud of its dedication to innovation and the role it has played in progressing electricity distribution. The company has consistently invested in developing new technologies and solutions to meet the challenges of the energy industry, driving down costs for customers and enhancing the reliability and sustainability of the network.

One key project that exemplifies Electricity North West's commitment to innovation is CLASS, a low-cost solution that helps balance electricity grids by using voltage control to lower demand at peak times. This innovative approach has been assessed by Ofgem, and in December 2022 Ofgem published its decision to enable the system to be rolled out nationally demonstrating the revolutionary potential of CLASS for system balancing. Ofgem in its impact assessment anticipates CLASS delivering net savings across the industry of between £0.9bn and £1.2bn over the next 30 years.

CLASS has already proven its effectiveness in the North West, where it has helped to reduce peak-time demand and stabilise the network and we are keen to support the roll out CLASS nationally, unlocking greater benefits to customers across Great Britain and further expanding its positive impact on the energy landscape.

Another innovation project is QUEST, which aims to improve the efficiency, flexibility, and reliability of the electricity distribution network. The project is being led by Electricity North West and is funded by Ofgem's Network Innovation Competition (NIC). It is currently in the pilot stage and is being tested on Electricity North West's Whitegate Network, which covers approximately 10% of its full network.

QUEST's core objective is to develop and deploy a holistic voltage optimisation system that seamlessly coordinates multiple voltage control and optimisation techniques. This approach will leverage established technology and cutting-edge software within the Network Management System (NMS) to harmonise existing and planned techniques, such as Active Network Management (ANM), CLASS and Smart Street.

The project emphasises interoperability, ensuring seamless data exchange between distribution networks, renewable energy sources, consumers, and grid operators. QUEST meticulously measures and enhances interoperability to deliver a robust solution that maximises customer benefits, reduces energy consumption, and maintains a secure energy supply.

Integrating CLASS-like functionality into 132/33 kV BSP transformers, QUEST utilises NMS (EMS and DMS) models to assess voltage response and select appropriate control strategies. Additionally, QUEST employs an ICCP to facilitate data transfer between real-time systems, the QUEST Dashboard, and Smarter Grid Solutions (SGS) ANM systems.

A digital model of the Whitegate Network has been created in collaboration with SGS, which enables the evaluation of potential responses provided by QUEST optimisation.

QUEST's business case estimates a reduction in reinforcement costs, freeing up approximately 2,236.7MVA of capacity and saving approximately £266.7 million by 2050. This cost-saving benefit will be disseminated to customers across GB, promoting a more efficient and sustainable energy landscape.

The project is scheduled for completion in 2025, with ongoing trials to refine the technology and optimise its impact. QUEST stands as a testament to the power of innovation in enhancing the distribution network's capabilities.

[Decision - Regulatory treatment of Customer Load Active System Services as a balancing service in the RIIO-ED2 price control \(ofgem.gov.uk\)](#)

# 9. Open Data

We have launched our open data portal, a valuable resource for our stakeholders. The portal offers a wide range of data sets, totalling 35 datasets which can be accessed in various formats such as tables, maps, and through an API. Additionally, users have the option to export the data for their convenience.

Part of our Data Strategy involves maximising the value of our data for community benefit. This includes promptly handling requests for data. We triage these requests swiftly, aiming for transparency, fairness, and consistency. All requests are triaged promptly so we can understand the requirements of the individual making the request and manage their expectations about what can be provided and in what timescales. Whenever feasible, we aim to use commonly available data to ensure consistency in our responses to all requests.

In September 2023, we hosted a DSO discussion forum on data sharing, responding to feedback from stakeholders needing guidance on how to utilise the data sets. Half the session was dedicated to presenting the current Open Data Portal sets and use cases. The response to this approach was positive with requests to develop more use cases, soon to be available as short videos on our website.

We actively participated in technical groups within the Open Network Project—Primacy, Operational Data sharing, and DER Visibility—to enhance whole system data sharing. Additionally, we've joined a new ESO and Capgemini group focusing on future data needs for informed decision-making and system collaboration.

Utilising the Open Data Soft portal, shared across UK DNOs and 3rd parties, offers stakeholders common access. We have also made strides on a whole system perspective at forums such as the Data and Digitalisation Steering Group (DDSG) to standardise on items such as standards for metadata.

Our industry-wide data sharing efforts aim to provide the ESO visibility into distribution network assets, processes, and activities. This visibility enhances operational decisions, as seen with flexible services utilising distribution network resources. By sharing enhanced operational data, potential primacy rule needs are reduced, increasing network operation efficiency and market liquidity. Ensuring ESO and TO data access on contracts, boundary flow, forecasting, outage planning, and operational restrictions allows for informed network operating decisions, critical system support, and efficient network management.

Collaborating with ENA, DNOs, and Ofgem, we've contributed to improving the reporting of Flexible Services SLC31A data. Identifying and implementing changes in reporting templates and guidance aims to standardise reporting across DNOs for better comparison and insights from this data. Electricity North West commits to adopting these changes in both annual and bi-annual reporting within our Data portal.



# 10. Internal operations

Our digitalisation journey includes a comprehensive plan to transform our internal operations, covering procurement, safety, fleet management, digital workplace, management information (MI) reporting, workforce skills development, work and asset management, authorisation processes, digital training capability, integration hub, and strategic data platform.

Our procurement framework initiatives are streamlining the procurement process, enabling us to collaborate more effectively with partners, and reduce costs. The implementation of a new safety, health, and environment service aligns with our cloud strategy and further enhances our safety system.

Optimising our fleet management system and telematics is enhancing operational efficiency, maximising customer service, and fostering safer driving practices. Our MI reporting service is being transformed to enhance reliability and efficiency, providing our colleagues with the insights they need to make informed decisions. Workforce training programs are equipping our employees with the skills and knowledge required to harness the power of data analytics.

Continuous improvement and digitalisation of our work and asset management systems are streamlining processes, improving data visibility, and enhancing efficiency. We are also enhancing our authorisation processes through our e-learning portal to maintain our excellent safety track record. The development of a new strategic data platform is consolidating critical business data, enabling us to optimise customer service and enhance decision-making. Power BI will provide a modern reporting and visualisation solution, reducing manual data manipulation and improving the speed of reporting delivery.

Electricity North West's digitalisation journey is not solely focused on a technical upgrade; it is a fundamental transformation that is empowering us to operate more efficiently, deliver exceptional customer service, and pave the way for a more sustainable and customer-centric energy future.



# 10.1 Internal operations actions and KPIs

Area	Action	Progress to date	Next steps	Status	Principle
Internal operations	Source procurement frameworks for RIIO-ED2 to enhance our responsiveness and move quicker with framework partners to deliver services.	Begin initial work with our framework partners to increase our speed to deploy and reduce procurement costs. Refine our ways of working collaboratively.	Continue to work with the Framework partners, further refining the process as we do.	Complete	Principle 3 - Time to market
Internal operations	Improvements to our Management Information (MI) reporting service, making it more reliable and more efficient for our colleagues	Migration of information and reports is scheduled implemented in July 2023	No further action	Complete	Principle 6 - Measuring success
Internal operations	Deploying a new safety, health and environment service to further enhance our safety system, aligned to our cloud strategy.	Approval of the business case to progress with the detailed approach and plan to define the new service and implementation timescales.	During 2023, we refocused efforts on ensuring a number of initiatives were given a high priority of delivery - notably, cyber security. As a result, a decision was taken to keep the Health and Safety software solution project on hold until the new year. There already has been a decision on a preferred option with a known supplier nominated, so the project can restart in a partial state without needing to be started from zero. The key objectives for the project remain, including the additional safety information in real time which is a key benefit for the project."	New	Principle 2 - Delivering the vision
Internal operations	Optimising our fleet to increase operational efficiency and effectiveness for our customers while increasing driver safety.	Progress a business case to propose the enhancement of our fleet management service and telematics.		New	Principle 2 - Delivering the vision

# 10.1 Network Management & Resilience actions and KPIs continued

Area	Action	Progress to date	Next steps	Status	Principle
Internal operations	Continuous improvement and digitalisation of our work and asset management systems	Introduced digitised processes for inspection that were previously done manually on paper. Improving data flows for visibility of reactive maintenance. Continuous improvement of existing digitised processes for quality and efficiency.	MI used to measure team performance relating to number of scripts completed. Vehicle checks to be completed Timeliness of updates while on site.	Ongoing	Principle 1 - Prioritising stakeholder benefits
Internal operations	Creation of a modern integration hub for providing open data and also for sharing data between different systems in ENWL	Additional functionality added and platform rolled out as redline with architecture.	Support and maintenance team created to ensure resilience and optimise efficiency.	Ongoing	Principle 3 - Time to market
Internal operations	Creation of a new strategic data platform containing all critical data critical for managing business performance and optimising customer service. Power BI will access this data to provide a modern reporting and visualisation solution	Phase 1 data and initial roll out of Power BI capability		Ongoing	Principle 1 - Prioritising Stakeholder benefits

## 10.2 Showcase: Electricity North West's Data-Driven Transformation

Electricity North West is initiating a data-driven transformation that is changing its operations and customer service. This comprehensive initiative centres on the creation of a cloud-based data lakehouse, a centralised repository of valuable information that will enable us to gain insights into our network performance, business processes, and customer behaviour.

The data lakehouse will be populated with data from all of the company's key operational systems over the next 18 months, providing a thorough view of the organisation's operations. This enhanced reporting capability will empower Electricity North West to delve deeper into trends, patterns, and anomalies, uncovering valuable insights that can be utilised to optimise network performance, expedite fault resolution, and enhance customer communication.

One immediate example of the potential of this data lakehouse is its ability to provide a deeper understanding of the Extra Care Register (ECR) customers. By analysing granular data, we can tailor our communication strategies to this specific customer segment, ensuring that its messaging is tailored to their unique needs and preferences. This targeted approach will enable us to provide more personalised and effective support to our most vulnerable customers.

Data security and loss prevention are paramount in the cloud-based platform, with modern access management techniques and data sensitivity measures ensuring the protection of sensitive information.

The data lakehouse will also streamline the production of open data, enabling Electricity North West to meet its regulatory obligations while simultaneously fostering transparency and engagement with stakeholders. By making data more readily accessible, we can foster a more collaborative and informed environment, empowering its customers and stakeholders to better understand the network and its operations.

Furthermore, the data lakehouse will reduce the manual effort required to maintain data accuracy and timeliness, leading to significant efficiency gains across the organisation. By automating data cleansing and manipulation processes, we can free up our workforce to focus on more strategic initiatives and operational improvements.

Over the next 12 months, a cloud-based reporting and visualisation tool (Power BI) will be embedded within Electricity North West, which will enable business areas to carry out their own data analysis and investigation. This initiative will include complete training for staff and the establishment of a Centre of Enablement to provide ongoing support. The reporting will be leveraging the data lakehouse to ensure consistent reporting practices while maintaining data security and accessibility.

# 11. Have your say

For Electricity North West stakeholder feedback is crucial to ensure informed decision-making. We welcome your views on our action plan and our digital progress. Kindly send your thoughts to [StakeholderEngagement@enwl.co.uk](mailto:StakeholderEngagement@enwl.co.uk).

A large array of solar panels is shown from a low angle, extending towards the horizon. The panels are dark blue with a grid of white lines. The sky is bright blue with scattered white clouds. In the background, there are green trees and a grassy area.

Electricity North West  
Borron Street  
Portwood  
Stockport  
SK1 2JD  
[www.enwl.co.uk](http://www.enwl.co.uk)