electricity north west

Bringing energy to your door

# Digitalisation Strategy

## Safeguarding infrastructure, streamlining operations, pioneering the future

March 2025

# Contents

# 1 Summary of our digitalisation strategy

## 1.1 Welcome

Our digitalisation strategy in 2023 highlighted the role that technology, information and data play in supporting the net zero energy transition and delivering value to our customers. We highlighted plans to increase our use of data to shape decision-making and guide investments. We set out our strategy, as part of wider digital investment plans, to use data and digitalisation to deliver energy in more sustainable, customer-centric ways. Since then, we have seen significant progress in the adoption and use of data to drive our decision making, and the use of innovative digital technologies on our network such as our network management system (NMS) and the implementation of active network management (ANM).

Within a short timeframe of two years and within our current regulatory price control period, we have experienced a wave of technological change. Artificial intelligence (AI) has become much more prevalent with many customers making use of AI systems in their day-to-day lives, and companies across the supply chain using AI technologies to drive efficiency and technical innovation. This, along with other digital technological advancements, has changed the security threat landscape, which is particularly acute for distribution network operators (DNO) as operators of critical national infrastructure.

Our strategy continues to reflect our vision – *to be the most digitalised and cyber secure DNO in GB* – and builds on the themes of data and digitalisation that we set out at the start of RIIO-ED2 (ED2). It does this while recognising that we need to use new tools and approaches to automate our operations and increase our digital innovation activity, all while protecting our services and infrastructure against a growing set of cyber threats.

Of note to our customers are the improvements we have made in making our data accessible to a variety of stakeholders to enable decision-making and transparency of our operations. Our open data portal now serves more than 1,500 unique stakeholders, providing data in a variety of formats from simple visualisations to application programming interfaces (APIs) – we now see over 1.2 million API calls per year.

In ED2 we have already invested £53 million out of a planned £146 million in digital products and technology. We will continue this investment in new technologies in our drive to deliver clean energy and improve our leading reliability metrics. We will also continue to use digital products to improve the reliability of supply to our customers, deploying technologies to monitor our cabling and identify equipment conditions.

Through our funding mechanisms, such as Ofgem's digitalisation and cyber re-openers, we will boost our investment in cyber protection and compliance. We have already met the basic profile requirement under the Cyber Assessment Framework (CAF) and we will make demonstrable progress in protecting our business against a sustained and sophisticated level of attack to achieve the enhanced profile.

Our strategy will ensure that we continue to innovate for the future, maintain our critical infrastructure and develop and grow our network in the service of reliability and best value.

I hope you find that this document useful in outlining our digitalisation strategy. If you have any questions or feedback, please contact us.

**Dave Roberts**
**Digital and Technology Director**
**March 2025**

## 1.2 Executive summary

This strategy builds on our previous digitisation strategy and action plan submissions, and the significant investments we have made and continue to make in digitalisation, while acknowledging rapid technological advancements in fields like AI, cloud computing and smart energy grids. The document describes how we are adapting and investing in these technologies to deliver value for our stakeholders while minimising risk and protecting our critical national infrastructure. It also recognises the changes that our regulator demands of us, including our targets around reliability, sustainability and security.

By 2040, we expect energy demand in the North West to double, mainly driven by the adoption of approximately 3 million electric vehicles and more than 1.2 million heat pumps. Our digitalisation strategy is therefore aligned to our company's strategic vision – *to lead the North West to net zero* – and supports our broader strategic goals as set out in our RIIO-ED2 business plan.

Our digitalisation vision – *to be the most digitalised and cyber-secure distribution network operator in GB* – helps us maintain one of the most reliable electricity networks in GB and supports the delivery of sector-leading customer services.

The objectives of our strategy are to:

- Enhance **cyber security** to meet and exceed regulatory compliance requirements, and to ensure we can continue to take advantage of technological innovation while protecting our assets against threats
- Modernise our **energy grid** using new advances in AI, cloud and data to implement smarter electricity grids that can optimise our operations, increase capacity and improve reliability
- Improve **operational efficiency** by utilising new technology to automate processes and drive efficiencies which we must harness to remain competitive
- Enhance **customer experience** by using technology in service of more personalisation and real-time insights while continuing to support the most vulnerable and digitally excluded in our communities
- Drive the **net-zero transition** by supporting the connection of renewable energy technologies and the empowerment of customers as generators and flexibility providers rather than solely consumers.

To meet these key objectives we have defined three themes which drive all aspects of our digitalisation strategy from our technology portfolio through to the provision of digital services to our customers. These three strategic themes, described further in Section 2, are:

- **Protect:** protecting our critical national infrastructure from digital threats
- **Innovate:** innovating by taking advantage of technology to further enhance our sector-leading reliability and capacity performance
- **Automate:** automating to continue our relentless pursuit of efficiency to deliver stakeholder value.

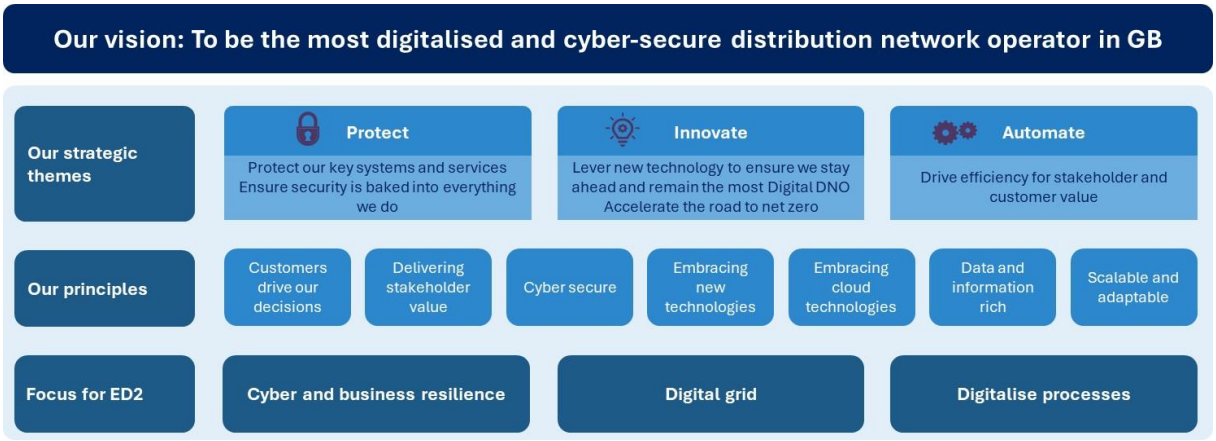
Together these themes create benefit for our 2.4 million customers and provide reliable and clean energy across the North West as we lead and support the transition to net zero.

Figure 1 below provides a high level summary of our digitalisation strategy and shows how the key themes of protect, innovate and automate drive the development of our digitalisation initiatives and the delivery of digital services to our customers.

Our strategy is also guided by our core technology principles which ensure that we have the right systems and processes in place and which are set out in Section 3. It also highlights three

specific focus areas we have identified for ED2, which are explained further in Section 4. Our key stakeholder groups and how they can benefit from the digital services we provide are set out in Section 5.

*Figure 1: Our digitalisation strategy*




## 1.3 Document purpose

This document, which should be read alongside our six-monthly digitalisation and action plan updates, demonstrates that we understand the needs of our stakeholders and shows how we are growing and changing our digital products and services to recognise outside influences, new technology and regulatory changes.

Its publication not only fulfils our licence obligation under the ED2 price control but also reflects our collaborative efforts with various industry bodies. This includes our work with the National Energy System Operator (NESO) and Elexon. These partnerships ensure that our digitalisation strategy is comprehensive and aligned with the latest industry standards and innovations.

# 2 Understanding our digitalisation strategy: our strategic themes

**This section defines the three themes which drive all aspects of our digitalisation strategy from our technology portfolio through to the provision of digital services to our customers. These three strategic themes are *protect*, *innovate* and *automate*.**

*Figure 2: Digitalisation strategy key themes*

| Theme | Description |
|---|---|
| **Protect** | • Protecting our critical infrastructure to ensure the continued safe and reliable operation of our network and business against cyber threats, recognising the value our regulator places on reliability and resilience |
| **Innovate** | • Maintaining and enhancing our position as the most digitally innovative DNO by embracing new technologies and providing an environment of experimentation and fail fast prototyping to trial new digital ideas |
| **Automate** | • Using new and improved digital tools and technology to ensure we can deliver leading customer service and excellent value |

## 2.1 Protect

The ‘Protect’ theme is fundamental to ensuring the security and reliability of our critical infrastructure. By implementing robust cyber-security measures, enhancing physical security and fostering a culture of security awareness, we safeguard our operations and customer data. These efforts are essential for maintaining a reliable electricity supply, supporting customer wellbeing and complying with regulatory requirements. Our commitment to protection ensures that we can continue to deliver secure, efficient and sustainable energy solutions to the communities we serve. In ED2 we will deploy millions of pounds to strengthen our defences and resilience to cyber and physical threats.

Protecting our digital services and overall electricity network is crucial for several reasons:

- **Reliability of services**: ensuring the integrity, confidentiality and availability of our systems and data is vital for maintaining a reliable electricity distribution network. This reliability is essential for the daily lives and businesses of our customers.
- **Cyber-security threats**: as a DNO managing critical infrastructure, we face an evolving landscape of cyber-security threats. Protecting against these threats is essential to safeguard our operations and customer data.
- **Customer wellbeing**: by protecting our digital services, we ensure the health and wellbeing of our customers, supporting the wider economy and the journey to net zero.
- **Regulatory compliance**: compliance with regulations such as the Networks and Information Systems (NIS) regulations is necessary to support our business objectives and customer-focused strategy.

## 2.2 Innovate

The ’Innovate’ theme is fundamental to ensuring we remain at the forefront of the energy sector. By embracing new technologies, fostering collaboration and supporting a culture of experimentation, we can continually improve our operations and provide greater value to our customers and stakeholders. Our commitment to developing innovative solutions such as CLASS, our ground-breaking voltage control system, ensures that we can deliver reliable, efficient and sustainable energy solutions and support the transition to net zero.

## 2.3 Automate

The ‘Automate’ theme is fundamental to enhancing operational efficiency and improving customer service. By leveraging digital tools and technologies to automate processes, we can streamline operations, reduce manual effort and ensure smooth and efficient service delivery. Our commitment to automation ensures that we can provide leading customer service, maintain our reliability and deliver excellent value to our customers and stakeholders. For example, we are introducing a new customer connections system to automate our process for receiving and assessing connections applications.

# 3 Understanding our digitalisation strategy: our principles

**This section defines the principles of our strategy which ensure that we have the right systems and processes in place.**

## 3.1 Customers drive our decisions

Our customers are at the heart of everything we do. Our digitalisation strategy is fundamentally shaped by the needs and feedback of our customers and stakeholders, ensuring that we deliver value and meet their evolving needs.

In actively engaging with our customers and stakeholders, we ensure that our digital initiatives deliver value, enhance customer experience, support innovation and maintain regulatory compliance. This stakeholder-centric approach is key to our mission of providing reliable, sustainable and customer-focused energy solutions. Stakeholder feedback and insights are crucial in helping us understand their needs and priorities, allowing us to tailor our digital initiatives to deliver maximum value. Together, we can continue to protect, innovate and automate our digital services and electricity network, ensuring a brighter and more resilient future for the communities we serve.

Our approach to digital transformation is guided by continuous and robust stakeholder engagement. We actively seek input from a diverse range of stakeholders, including domestic customers, businesses, local authorities, regulatory bodies and community organisations. This engagement helps us understand their priorities, challenges and expectations, allowing us to tailor our digital initiatives to address these needs effectively.

## 3.2 Delivering stakeholder value

Our digitalisation strategy is fundamentally shaped by the needs and feedback of our stakeholders. We believe that engaging with our stakeholders is crucial to delivering value and ensuring that our services meet the evolving demands of our customers, regulatory bodies and community partners.

### Stakeholder-driven digitalisation strategy

Through regular consultations, surveys and feedback sessions, we gather valuable insights from a diverse range of stakeholders, including customers, local authorities, regulatory bodies and community organisations. This engagement helps us understand their priorities, challenges and expectations, allowing us to tailor our digital initiatives to address these needs effectively. We have also set up a digital futures advisory panel whose role is to ensure customer and stakeholder engagement helps shape the delivery of our digitalisation and data strategies and commitments.

### Delivering tangible value

By incorporating stakeholder feedback into our digitalisation strategy, we ensure that our digital solutions deliver tangible value. For example our open data portal, developed in response to stakeholder demand for greater transparency, provides accessible and valuable data to various user groups. This portal enables stakeholders to make informed decisions, enhances operational transparency and fosters trust in our services.

### Enhancing customer experience

Our digitalisation strategy focuses on improving the customer experience by leveraging advanced technologies. Initiatives such as AI-enabled customer service tools and enhanced communication platforms are designed to provide timely and accurate information to our

customers. These tools help us resolve customer enquiries more efficiently and offer personalised support, particularly for customers in vulnerable circumstances who require tailored assistance.

### Supporting innovation and sustainability

Stakeholder engagement also drives our commitment to innovation and sustainability. By collaborating with community energy groups and local authorities, we develop and implement renewable energy projects that align with our stakeholders' sustainability goals.

### Ensuring regulatory compliance

Engaging with regulatory bodies ensures that our digitalisation strategy aligns with industry standards and compliance requirements. By incorporating feedback from regulators, we enhance our cyber-security measures, data governance practices and overall operational resilience. This alignment not only mitigates risks but also ensures that we continue to deliver reliable and secure services.

### Continuous improvement

Our stakeholder engagement process is not a one-time activity but an ongoing commitment. We regularly review and update our digitalisation strategy based on stakeholder feedback, ensuring that our initiatives remain relevant and effective. This continuous improvement approach helps us stay ahead of industry trends and maintain our leadership in the energy sector.

## 3.3 Cyber secure

Our cyber security strategy is designed to protect our computer systems, networks and data from cyber-attacks and unauthorised access. This ensures the integrity, confidentiality and availability of information, which is crucial for maintaining a reliable and safe electricity distribution network. Our commitment to cyber security directly benefits our customers by ensuring their health and wellbeing and supports the wider economy and the journey to net zero.

We implement robust cyber security measures, such as the ISO270001 standard and follow the eCAF framework, to safeguard our systems against digital threats. For example, we are replacing older tools and platforms with modern cloud-based solutions, reducing the opportunities for attack from cyber criminals and protecting important data. Additionally, our investment in systems to digitalise processes helps us to respond better in the event of storm damage and faults, improve overall reliability and ensure a continuous and reliable electricity supply.

To date, we have initiated 28 projects as part of a comprehensive programme aimed at implementing and embedding practical and lasting interventions across our critical technical and physical estate. This programme is designed to ensure sustainable compliance and is supported by ongoing business process changes. We have recently submitted a request to Ofgem as part of our cyber re-opener to fund additional projects, which, if approved, will bring the total number of projects to 32.

Our efforts to safeguard the business include the deployment of new technologies that enhance our ability to prevent unauthorised access to our systems. We have also strengthened our threat detection and vulnerability management capabilities through the implementation of security monitoring tools, policy enforcement mechanisms and hardening activities. Additionally, we have significantly increased the efficiency and scope of our patching capabilities across our IT estate, allowing for quicker elimination of vulnerabilities and reducing overall risk. A similar programme of risk reduction and technological measures is underway across our operational technology estate.

We have continued to refine our incident response capabilities through regular exercises and have conducted repeat phishing email campaigns, sending over 28,000 emails to colleagues in the past 12 months to educate and test our workforce. Furthermore, we have conducted several disaster recovery tests, including isolating our key control system from the rest of the IT network to ensure operational continuity and prevent potential contagion from other technology systems.

Our ‘Be Sure. Be Secure’ culture change programme remains a key focus, with ongoing communications, briefings and training sessions conducted across the organisation. In terms of physical security, we have introduced new access controls at various sites and are actively working to meet compliance with the new objectives in this area. This includes conducting risk and threat analyses, sample site surveys and recommending measures for implementation as part of our physical control remediation plan.

We have developed a comprehensive Identity and Access Management (IdAM) strategy, complete with a detailed plan to deliver the necessary IdAM capabilities to ensure that only authorised parties have access to organisational resources, applications and data. Our security operations centre (SOC) continues to evolve as we onboard managed security service partners (MSSP). These partners will collaborate with our internal team to provide 24/7 monitoring, detection, analytics and response capabilities.

Lastly, we are implementing a comprehensive target operating model design, supported by the phased permanent recruitment to our operational cyber team. This approach will ensure that the controls we have put in place are embedded and sustained over the long term.

### Protecting critical assets

To provide our customers with uninterrupted and secure electricity services, we prioritise the protection of our most critical assets against cyber threats. By implementing the highest security measures, we ensure the reliability of our services, which is vital for our customers' daily lives and businesses.

### Enhancing cyber resilience

As a highly innovative and digital DNO, we are fully aware of the environment of increasing cyber-attacks. Our programme of change aims to enhance our cyber resilience, ensuring that we can continue to deliver secure and reliable services to our customers. This includes compliance with NIS regulations, which is aligned with our business objectives and customer-focused strategy.

## 3.4 Embracing new technologies

Embracing new technologies is fundamental to our mission of delivering reliable and sustainable energy solutions. One of the most transformative technologies we will integrate into our operations is AI. Levering AI will allow us to enhance our services, improve efficiency and drive innovation across the organisation. Additionally, we are committed to implementing AI responsibly, ensuring that our AI systems are transparent, ethical and aligned with our values. By prioritising responsible AI practices, we aim to build trust and safeguard the interests of our stakeholders while harnessing the full potential of AI to advance our vision.

### AI integration and benefits

AI is not just a trend; it represents a profound shift in how we interact with technology. We are already using AI in various areas, from optimising storm response to predicting asset conditions. For example, by incorporating AI with our geographic information systems (GIS), we can predict where future vegetation might grow and when it will require attention, helping us maintain our

infrastructure more effectively. Additionally, AI-driven demand forecasting allows us to predict energy needs more accurately, ensuring we can meet customer demands efficiently.

### Enhanced customer service

AI will also play a crucial role in enhancing customer service. AI-enabled chatbots and natural language processing tools will allow customers to interact with us more seamlessly, whether they are resolving issues or querying new connections. These tools will help to ensure that customers receive timely and accurate information, improving their overall experience with us.

### Innovation and continuous improvement

Innovation is at the heart of what we do. Our commitment to embracing new technologies extends beyond AI to include various digital tools and platforms that drive our operations such as our active monitoring system, LineSIGHT. Using sensors installed on the network, this groundbreaking safety management system allows us to detect damage to overhead lines and make a repair before it becomes a danger to the public.

### Strategic goals and governance

Our AI strategy is part of a broader roadmap that includes goals for AI value, our organisation, people and culture, governance, engineering and data. We have established a community of practice, launched AI literacy training programmes and set up governance frameworks to ensure that our AI initiatives are ethical and aligned with our business objectives. By continuously measuring our AI maturity and analysing external trends, we will stay ahead of the curve and ensure that our AI projects deliver maximum value.

### Collaborative efforts and partnerships

We recognise that embracing new technologies requires collaboration and partnerships. We work with external experts and organisations to shape our AI governance framework and develop innovative solutions. Our partnerships have helped us implement a robust data governance framework, ensuring that our data is secure, accurate and accessible.

## 3.5 Embracing cloud technologies

Embracing cloud technologies is a key component of our digitalisation strategy, aimed at enhancing our operational efficiency, security and the quality of our service delivery. Projects such as our platform modernisation underline our commitment to leveraging cloud solutions to meet the evolving needs of our stakeholders. For example, replacing internal processes based on paper or spreadsheets with new software as a service (SaaS) systems or applications. We will invest over 3 million pounds over the next three years as we work towards our target of hosting 75% of non-operational IT systems in the cloud by 2028.

### Addressing out-of-date technology and enhancing security

Our current infrastructure faces challenges such as ageing hardware, limited support for end-of-life software and complex configurations. These issues affect the availability of business-critical systems and can pose significant security risks. Modernising our platforms and migrating suitable applications to the cloud will enable us to implement advanced security measures, ensuring that our systems are robust and resilient against cyber threats. For example, out of a total volume of 15TB we have moved over 60% of our onsite storage to the cloud and will complete the migration within the next 12 months.

### Increasing agility and meeting regulatory compliance

The cloud offers flexibility, allowing us to scale our operations up or down based on demand. This agility is crucial for maintaining seamless operations and responding swiftly to market

changes. Our cloud strategy will also ensure that we remain compliant with regulatory requirements and industry best practices.

### Optimising costs and improving efficiency

One of the significant benefits of cloud adoption is cost efficiency. This allows us to optimise our resources, deploy new features and updates quickly and avoid unnecessary expense. This delivers benefits to customers more quickly and provides better value for our stakeholders.

We have already carried out an assessment and re-planning of our onsite systems and services, to develop a cloud readiness plan and roadmap for the next three years. We have also delivered five low code applications which have migrated legacy and expensive processes to the cloud, improving operational efficiency.

### Supporting innovation and sustainability

Embracing cloud technologies supports our broader goals of innovation and sustainability. By reducing the size and complexity of our on-premises infrastructure, we can lower our environmental footprint and support our net zero targets. Cloud solutions provide the foundation for adopting new technologies which are essential for our future development.

## 3.6 Data and information rich

Our enterprise data strategy is a cornerstone of how we deliver exceptional services to our customers. By leveraging rich data and information, we are becoming an increasingly data-driven organisation, ensuring that our decisions are well-informed, efficient and effective. This strategy is designed to support our business objectives, outperform cost targets, maximise our performance against our incentives and grow our regulated asset value.

### Empowering business users with data

We have introduced tools like Power BI, which empower our business users to visualise data and derive valuable insights. This capability was previously unattainable, but now with the help of Power BI champions across the organisation, we are promoting the importance of data and its role in driving business decisions. For example, our new executive leadership team (ELT) performance pack, which is regularly used across the business, demonstrates the value of timely and accurate insights.

### Ensuring data trustworthiness

As we rely more on data to inform our decisions, ensuring its trustworthiness is paramount. We have therefore invested in moving data into our strategic data platform (SDP), including quality assurance components, enabling business users to access and manage their data confidently. This platform allows us to provide trusted data from various sources, ensuring that our decisions are based on accurate and reliable information.

### Delivering tangible benefits

Our data strategy has already delivered significant benefits across various projects. For instance, our Extra Care Register (ECR) data initiative will save over £170K in stationery costs and deliver improved customer satisfaction through better targeted engagement. Similarly, our reliability performance team uses daily reporting and drill-down data to enable better management decisions, reducing manual effort and providing insights into vegetation and equipment conditions.

### Automating processes for efficiency

Automation is a key aspect of our data strategy. By automating processes like our ELT performance pack, we have reduced manual effort by 20 days a month, enabling quicker and more accurate report delivery. Our winter payments project, which calculates customer compensation amounts and verifies contact details, has significantly reduced manual effort and ensured compliance with regulatory targets, but more importantly ensured that we are able to pay customers in a more accurate and timely way.

### Implementing a data governance framework

To manage our data efficiently and provide excellent customer service, we are implementing a robust data governance framework. This framework empowers users to manage data appropriately, giving easy access to those who need it for their roles and to gain business insights. We are working with specialists to shape a framework that works for our business and the utilities sector, ensuring that our data governance practices are effective and sustainable.

## 3.7 Scalable and adaptable

Solutions that we develop and procure need to be both scalable – applicable to small and large business situations – and adaptable, so they can be changed over time with the minimum of effort (and therefore cost). When we choose our design solutions, we need to ensure they stand the test of time and can be modified without fuss.

### Cost efficiencies

Scalability means that we can start small and incrementally size up, rather than having to pay a large amount upfront. This means that costs are encountered only as they are required. For example, in embracing Microsoft database technology, we can extend the size of the database as and when required, rather than investing heavily before we know if and when the additional capacity is needed.

### Accommodating growth

As users realise the value of solutions, they often make more use of them, which means there is growth in usage and data. We continue to ensure we build solutions that can perform, flex and stretch without having to make significant or costly changes.

### Anticipating changes in requirements

As business needs and market conditions evolve, we will continue to build and procure solutions that can be modified easily, without the need for extensive rework. We have embraced agile development practices across a number of key areas including our work and asset management and data teams. We are also continuing to develop business agile and fusion teams to increase our delivery speed and to work more closely with colleagues across the business.

### Accounting for technical advances

Since technology moves along quickly, solutions that are designed to be adaptable can integrate new innovations quickly. We have invested in integration capabilities that enable us to make use of these new innovations and emerging components and enhance the usefulness of existing solutions. An example of this is where we are using our new metadata engine to extend the capability of the SDP to make data more searchable and accessible, but without needing to change the underlying application.

# 4 Understanding our digitalisation strategy: our focus for ED2

**This section sets out our key digitalisation focus areas for the current price control period: Cyber and business resilience; Digital grid; and Digitalisation of processes**

## 4.1 Cyber and business resilience

During the ED2 period, our focus on cyber and business resilience is paramount to ensuring the security and reliability of our critical infrastructure.

The following initiatives are designed to enhance our cyber resilience, protect our critical infrastructure and ensure the continuous delivery of secure and reliable electricity services to our customers. By preparing these projects in ED2, we are laying the groundwork for their successful completion in ED3.

### Security operations centre

We are making further improvements to our SOC to enhance our in-house capabilities. The SOC monitors, detects, responds to and prevents cyber-security threats, ensuring continuous protection of our networks, systems and applications. This minimises potential disruption to electricity supply through proactive threat management.

### Identity and access management

We are laying the groundwork for implementing strict authentication and authorisation processes through our IdAM, building on existing work to tighten access control and work on essential processes. This will ensure that only authorised users have access to relevant technology resources, safeguarding sensitive data and protecting our customers from unauthorised actions that could impact their service.

### Physical security

Enhancing physical security measures for critical national infrastructure and critical cyber assets is another key initiative. Current work in ED2 includes improving CCTV systems, ensuring these systems have appropriate access on our network and installing access control and intruder detection systems to ensure the physical protection of our assets.

### Business continuity and disaster recovery

We are also investing in capabilities to minimise the impact of cyber security incidents, focusing on maintaining business continuity during disruptions and ensuring rapid recovery and restoration of services. This will reduce downtime and data loss, ensuring minimal disruption for customers.

### Culture and training

Recognising that our people can be one of our highest security risks, our strategy includes implementing strong access controls, clear policies and comprehensive training. By educating our colleagues on cyber security best practice and threat detection, we reduce the risk of unintentional harm and enhance the overall security of our services.

### Target operating model for cyber

Finally, we are designing a comprehensive target operating model supported by a dedicated operational cyber team to ensure we maintain robust security controls. By adopting a proactive approach and following international standards and best practice, we will keep our people, data and assets secure, ultimately benefiting our customers.

## 4.2 Digital grid

We are committed to providing reliable, efficient and sustainable electricity services, remaining one of the most innovative DNOs in GB. To stay competitive and deliver value amid changing technologies and stakeholder expectations, we will continue investing in our digital grid. This advanced network uses digital technologies, sensors and software to match electricity supply and demand in real-time, integrating renewable energy sources, improving reliability and reducing costs and emissions. By leveraging digital technologies we create a smarter, more resilient and efficient distribution system. Additionally, the data from our network can be shared in various ways, from customer visualisations to interactive models for suppliers, enhancing their forecasts and informing our future planning.

As part of our digital grid development in 2021 we launched our new NMS to replace our legacy in-house systems with a brand new, technologically advanced system to support our transition to net zero and distribution system operation (DSO). Our NMS allows us to control and run our network as a smart power network so that we can restore the network, connect generators, wind farms, solar panels, electric vehicle charge points and heat pumps far more safely and efficiently.

Building on our existing digital grid systems, we will approach the next phase of Its development in three stages.

### Awareness, control and connectivity

During this phase, completed in our ED1 price control period, we established the foundation of our digital grid by enhancing visibility and control over our network. We implemented technologies that act as the ‘eyes and ears’ (visibility) and ‘arms and legs’ (control) of our grid. These investments, including starting projects such as LineSIGHT, Perch and the full rollout of smart meters supported by other industry partners, have allowed us to create a real-time digital twin of our network. This digital twin helps us monitor and manage the grid more effectively, ensuring a reliable electricity supply for our customers. However, while data from this digital twin was used in the company for control and planning purposes, it had limited ability to make control decisions and therefore limited visibility for our stakeholders.

### Autonomy and visibility

In this phase, which is ongoing, we have focused on developing autonomous applications such as Fault Location, Isolation and Service Restoration (FLISR), Large Area Restoration (LAR) and Customer Load Active System Services (CLASS). These applications use data to automate supply restoration, grid reconfiguration and demand control, delivering many benefits to our customers, most notably fault reduction and flexibility. With the go-live of our ANM application, we can now control thousands of flexible loads, distributed generation (DG) units and battery energy storage systems (BESS). This maximises the use of our grid and supports the growth of net zero technologies.

Additionally, our sensors can predict asset failures and accurately identify fault locations, improving service reliability, especially during extreme weather events. We have also provided much of the data that drives these improvements via our open data portal to allow others to draw insight and inform their own planning. However, we still need to go further in embracing new technology and being more open and collaborative with our data and to move to machine intelligence-driven solutions.

### Intelligence and digital grid

As we move into the future, we will harness the power of machine learning and AI to make our grid truly intelligent.

Our ForeSight programme of projects goes beyond the traditional annual forecasting and planning cycle and introduces an automated and high-frequency (weekly) tool for the whole network. This allows us to capture the dynamic landscape of connections activity, optimise our load-related investment and provide our customers/stakeholders with better pre-connection tools and more frequently updated data.

Successors to our Foresight programme will enable all stakeholders to access real-time and future digital twins, facilitating flexibility trading, automated connections and optimised investment planning. By predicting failures and transitioning from reactive to planned maintenance, we can enhance the efficiency and reliability of our services. This intelligence will not only reside within our systems but will empower stakeholders to develop their own innovative uses of our digital twins.

This will allow us to make available data that has been locked into our internal systems and enable third parties and other ecosystem partners to visualise both the current view of the network (how it is operating in near real-time) as well as a planning view of the network, with the ability to roll forward and backward in time. We will work closely with stakeholders to enhance and refine this capability and provide the ability to create several ‘what-if’ scenarios, from local decision-making to global geopolitical events.

Starting with key systems such as our network management system and GIS, we will extend the initiative to include more of our internal operations as we build out. Anticipating developments in technology, particularly AI, we envision our digital grid not just as the development of twins to facilitate planning, but also as a comprehensive 'digital utility'. This involves:

- Developing smart assets that provide data with potential external control
- Enabling customer interaction with their devices, especially with new connections
- Evolving business systems such as enterprise resource planning (ERP) and work management systems.

As we make progress on our digital grid, we will unlock many customer benefits, including:

- **Enabling the best future path for the North West’s electrical network**: enabling our partners to run full simulations of future states of our network, and allowing us to work out the most optimum future models and quickly reject less beneficial options
- **Stimulating the green economy of the North West**: unlocking previously unavailable data to as many stakeholder partners as possible, increasing the number of assets connecting to the network in the optimum way
- **Devising the national standard of a digital grid**: producing an exemplar to the rest of the industry, providing a common language and way of interacting, our template will be used by other DNOs to connect back to us and to each other, giving GB-wide coverage of a network of digital grids
- **Anticipating different outcomes**: modelling current and future states to plan for a multitude of eventualities, creating a ‘no surprises’ future and reducing waste and reinforcement spend that is not required.

## 4.3 Digitalisation of processes

The digitalisation of our processes is crucial for enhancing operational efficiency, improving customer service, supporting our sustainability goals and delivering stakeholder value. These processes work together with our investment in technology, our focus on innovation and our commitment to security. This is why we have several key initiatives as part of the strategy which involve process digitalisation.

### Enhancing customer management systems

One of our key initiatives is improving our customer management systems to enhance contact centre efficiency, streamline customer journeys and provide better support for our ECR customers. By automating these processes, we can offer more tailored services and improve overall customer satisfaction. For example, our new customer management system will help improve fault and storm response times, leading to shorter telephone queue times and better customer communications.

### Driving operational efficiency with digital processes

Our field force's own application, Chime, enables the efficient dispatch of teams to ensure that assets are well maintained, and that the digital record we have of those assets is correct. This assures the long-term condition of assets which results in fewer faults over time.

### Improving high-volume call handling

We are also replacing our high-volume call handling systems to increase call volumes and scale up during storms. This includes introducing non-English language support and tailored services for customers in vulnerable circumstances. By automating these processes, we can ensure that all customer groups receive timely and accurate information, improving their overall experience.

### Streamlining connections and disconnections

This involves streamlining and improving the customer-facing and internal aspects of our connections and disconnections processes. New systems will support contractor interfaces, customer invoicing, regulation compliance and supplier payments. By standardising processes and providing accurate asset and customer information, we can better manage customer requests and offer greater flexibility, ultimately enhancing the customer experience. We will also further improve integration between our ERP platform and other systems, reducing data duplication and manual processing, improving customer contact time and supporting the growth of low carbon technologies. By streamlining these processes, we can operate more efficiently and provide a better service to our customers.

### Data management processes

Our commitment to digitalisation extends to data management as well. Through new approaches to data pipelines and integration we will focus on improving the collection, processing and delivery of data in a structured manner. This will reduce the efforts of manual data extraction and manipulation, support a cloud-first approach and facilitate real-time data processing. We are also adopting a cloud-based centralised solution for data storage through our data warehousing projects. This provides scalability, flexibility and a single source of truth for data, ensuring that we can handle increasing data volumes and meet regulatory requirements. By enhancing our data capabilities and maintaining accurate and reliable data, we will improve decision-making and enhance our service delivery.

### Enhancing mapping and geospatial processes

We are implementing a modern GIS platform, which includes significant and transformative process changes to the way we manage and store one of our most valuable data sets – the location of everything we own and operate. Its implementation will ensure we reduce manual data entry and improve data quality. By facilitating the real-time handling of spatial data and events, we will enhance decision-making and ultimately provide more reliable services to our customers.

### Automating defect management

Our defect management processes are also being automated to reduce the need for multiple disruptions for customers and repair faults more quickly. This ensures that our network remains in a good state of repair and reduces the average service interruption duration.

# 5 What it means for our stakeholders

**The following section provides an overview of each of our stakeholder groups and describes some of the initiatives we have already delivered, or are currently delivering, and how our future activities will support them.**

*Figure 3: Our stakeholders and services*

| | |
|---|---|
| **Customers** | Providing reliable electrical supplies, supported by trusted and accessible digital services. Delivering flexible trading services, easy to find digital information, timely and relevant multi-channel communications supported by reliable and useful open data and digital end-to-end processes |
| **Political, regulatory and public sector** | Providing secure, accurate and trusted metrics. Delivering enhanced feedback mechanisms. Providing help and digital tools to support local energy action plan production |
| **Sector and supply chain** | Enabling easy and secure digital collaboration, using modern integration tools and supporting industry standard data sharing. Providing access to enhanced data via a digital twin platform for real-time and planning information |
| **Charities and NGOs** | Providing information and advice for vulnerable customers. Partnering with other organisations to provide data driven and targeted support |
| **Legal and financial** | Giving assurance of ongoing security. Creating and managing innovative platforms for trading and flexibility |
| **Media and advisory** | Providing access to trusted key information sets containing accurate and timely information. Working closely to provide information to media outlets during faults |
| **Regional, social and environmental** | Providing funding, information and support to community initiatives. Promoting sustainability and driving towards our ambitious carbon and environmental targets |
| **Digitally excluded** | Improving our Extra Care register, promoting via non-digital means. Providing information in non-digital and accessible ways. |

## 5.1 Customers

We are proud to distribute electricity to over 2.4 million properties covering around five million people across the North West. These include a broad range of customers such as domestic customers, businesses, developers and community and local energy groups.

Our digitalisation strategy is designed to support the delivery of a safe, reliable and resilient electricity supply by helping reduce unplanned interruptions, empowering our customers by providing easy-to-use and useful digital services across all our customer segments. Our progress against these goals can be seen in our improvements in regulatory metrics such as Customer Minutes Lost (CML) and Customer Interruptions (CI). Our continuous improvements in reducing the length and duration of outages improves customer service and network resilience.

We continue to use digital technologies to drive customer satisfaction. For example during storm Eowyn in 2024 we delivered over 110,000 outbound voice messages to keep customers up to date, reducing the need for them to call our contact centre. In addition our power cut reporting tool took reports of 6,824 faults which allowed us to build an accurate picture of affected customers and target our response more effectively.

### Empowering customers with PING

We have rolled out a 'power interruption notification gateway' (PING) which 'talks to' a customer's smart meter. When a customer reports a no supply fault to us, either by phone or through our website, we can validate their details and send a 'ping' to their smart meter. Within a minute, we can identify the cause of the possible loss of supply, whether it is an external supply issue or a potential fault on the domestic circuit. This improves the customer experience and supports our continued focus on delivering value for customers from our digital services. In this case the smart meter service allows us to gain insight into our low voltage distribution network and in some cases see and resolve a fault before the customer is even aware of it.

### Supporting customers in vulnerable circumstances

We have enhanced our systems to provide better information during a power cut to customers on our ECR. We provide this information to our contact centre team and where needed to our wider business during incidents. We have enhanced our communication services to improve our ability to contact customers and provide more tailored services to make sure they get the help they need. During storm Eowyn, we were able to proactively contact over 25,000 customers over four days.

### Smart Street

A project which won the Smart Systems and Flexibility Project of the Year, Smart Street uses intelligent software to control smart devices installed on our low voltage network and is enabled by our NMS. This stabilises and lowers voltage levels, which saves money for customers by making appliances perform more efficiently. Smart Street also supports voltage management across the low voltage network as more low carbon technologies connect to the network. In ED2 we are installing Smart Street at 1,000 sites which will benefit 250,000 customers across the region.

### CLASS

CLASS is a ground-breaking voltage control system which can help keep the entire national electricity grid stable and secure, all without our customers noticing a difference to their service. When it is needed, control engineers in the national control centre can operate the tap changers in our primary substations to reduce (or increase) the voltage and therefore reduce (or increase) the electricity demand – all within a minute of activating the service. This ground-breaking system helps reduce costs for our customers.

### BiTraDER

As part of a Network Innovation Competition project, we are developing a highly innovative market-based trading platform called BiTraDER. The platform will enable customers connected to our network on a flexible connection (a connection type which allows us to curtail customers to resolve network constraints) to pay another customer to curtail for them if a constraint occurs. This will allow our customers to maximise the use of their assets by continuing to operate, while allowing others to generate additional revenue for curtailing when they can.

### QUEST

We are also building on CLASS, Smart Street and our ANM through another Network Innovation Competition project, QUEST, which will allow us to optimise the whole network ensuring that CLASS, Smart Street and ANM operate together and work as efficiently as possible for our network and our customers.

*Figure 4: How our digitalisation strategy will deliver for our customers*

| Theme | Future action | Outcome |
|---|---|---|
| **Protect** | Decommission older customer management tools and replace with cloud-based tools | Reduce the risk of cyber-attacks and protect customer data |
| **Innovate** | Deliver AI where it will enhance the customer experience, via a new AI-enabled customer management system | Better response (shorter telephone queue times) and improved customer communications |
| | Deliver a new website and improve processes across all stakeholder groups including the ability to personalise information for those who need it | Deliver new ways for customers to contact us, and receive information, such as an AI-enabled online chat |
| **Automate** | Improve internal processes using a new customer management system | Improve contact centre efficiency, streamline customer journeys and improve support for priority customers |
| | Enhance our high-volume call handling systems | Increase our ability to handle large call volumes and scale up during storms |
| | Introduce non-English language support and tailored services | Improve experience for customers in vulnerable circumstances |
| | Provide new and improved connections tools using accurate and timely information about the network | Allow all customer groups to easily make and track network connection requests |
| | Deliver improved map-based information in a range of formats | Allow customers to get a clear view of assets in their area, fault conditions or current and future capacity |
| | Deliver improved defect management processes | Reduce the need for multiple disruptions for customers and help repair faults more quickly |

## 5.2 Political, regulatory and public sector stakeholders

We work with our region's MPs, 35 district-level local authorities, five county councils and combined authorities, as well as government departments, academic institutions and emergency services, recognising that the wider political and regulatory landscape is an important strategic driver.

Our digitalisation strategy is designed to deliver secure, accurate and trusted metrics on the performance of our business, information on our wider business strategy and relevant communications and support for specific public sector stakeholders tailored to their needs, for example, providing specific services for the creation of local energy action plans (LAEPs).

### Data portal

We provide digital information that supports our engagement with stakeholders, for example providing data via our open data portal. This helps local authorities to understand the potential electrical capacity for future connections on a particular part of the network. This is via the provision of geospatial and network data along with future demand scenarios, allowing groups to build a picture of the future shape of the network. This allows for better planning and investment decisions. Our wider programme of support for local authorities also includes 'Our

support for local authorities' webpage and templates which outline the LAEP process on our website.

*Figure 5: How our digitalisation strategy will deliver value for our political, regulatory and public sector stakeholders*

| Theme | Future action | Outcome |
|---|---|---|
| **Protect** | Implement cyber standards across our IT services, including ISO270001 and (eCAF) | Protect our critical national infrastructure |
| | Further strengthen and expand our security operations centre | Enhance our 24/7 managed response to threats and network, systems and application monitoring |
| **Innovate** | Make appropriate use of AI tooling | Provide better and more focused data sets via our open data portal |
| | Deliver a digital grid solution which provides visibility of our network alongside the ability to use full and transparent data for modelling and merging with other data sources | Allow local authorities and other stakeholders to download our data to use with their own modelling |
| | Provide improved geospatial information (including maps) that identifies our assets | Allows data sets to be downloaded or used in conjunction with stakeholder data sets to improve future planning |
| | Deliver improved operational data stores | Provide flexibility and scalability to adapt to industry innovations |
| **Automate** | Allow authorised stakeholders to view our outage data alongside data from other DNOs | Provide a true national picture of any outages based on accurate data from our network management systems |
| | Allow data to flow automatically via APIs and web services | Allow access for trusted partner and third-party systems |
| | Improve ongoing data governance processes | Ensure data exchanges with industry parties are secure |
| | Improve our data quality and maturity of data management processes | Better support for regulatory requirements around data retention |

## 5.3 Sector and wider supply chain

We work closely with a broad range of suppliers including other electricity network operators, suppliers, flexibility providers, generators, independent distribution network operators, other utilities and specialist consultants. Our colleagues are also our stakeholders and customers so we work to ensure that their work is as efficient and effective as possible, knowing that doing this directly benefits our customers and other stakeholders.

Our digitalisation strategy is designed to provide services that make interaction with us as easy as possible, providing the data that our supply chain and sector partners need and sharing information that allows them to become true partners in our journey to net zero.

### Flexibility services tendering

We have deployed a digital platform with end-to-end capabilities to support providers taking part in our flexibility service tenders. This user-friendly interface provides a single access point to participate in diverse electricity markets and promotes participation and innovation in flexibility services.

### Active network management

We have implemented an ANM system, the latest technology in real time network management tools. The system carries out network modelling activities in real time to manage network constraints using flexible network assets, flexible connections and flexibility services.

*Figure 6: How our digitalisation strategy will deliver value for our sector and wider supply chain*

| Theme | Future action | Outcome |
|---|---|---|
| **Protect** | Provide improved and more secure methods of working with our business | Ability to provide and receive real-time data via secure APIs and web services |
| | Provide assurance on our internal processes and governance, as well as templates | Allow suppliers to work within our IT delivery frameworks |
| **Innovate** | Provide the ability for trusted partners to have access to internal network data and feedback data | Create future models such as our digital grid |
| **Automate** | Provide improved ways to view and interact with supply point data | Provide visibility of current and future supply point data to trusted partners and electricity suppliers |
| | Update our billing infrastructure | Provide improved data and support for future billing systems |
| | Improve interaction with contractors | Allow contractors to communicate digitally and access improved map and other data |
| | Reform our ERP platform | Improve contractor interfaces, customer invoicing and supplier payments |
| | Support a cloud first approach to data exchange | Reduce the need for manual data extraction techniques |

## 5.4 Charity partners and non-governmental organisations (NGOs)

Our partnerships with this stakeholder group enable us to deliver on our commitment to provide safe, reliable and sustainable energy to the communities we serve.

Our involvement in cyber resilience forums ensures that we are at the forefront of protecting our network from cyber threats, safeguarding the integrity and reliability of our services.

Our collaboration with consumer protection representative bodies ensures that the rights and interests of our customers are safeguarded, while our engagement with agricultural representative bodies helps us address the unique energy needs of the farming community.

We also work closely with environmental campaign groups to promote sustainable practices and reduce our environmental footprint. Our partnerships with information suppliers enable us to stay informed and make data-driven decisions that benefit our network and customers. By collaborating with landowners, we ensure the responsible use of land for our infrastructure projects.

Furthermore, our relationships with trade associations allow us to stay connected with industry developments and advocate for policies that support the energy sector. We also engage with community and local energy representatives to support local energy initiatives and empower communities to take control of their energy future. Through our responsibility framework partners, we uphold high standards of corporate responsibility and ethical practices.

### Take charge

Working with Energy Saving Trust and Citizens Advice in the North West, we launched a free energy-saving advice programme called Take charge that will benefit 125,000 customers across the region. As part of this project we have created 'Go low today' a dedicated website for our customers with free expert advice on how to manage their energy use effectively, save money and play their part in the net zero future.

*Figure 7: How our digitalisation strategy will benefit our charity partners and NGO stakeholders*

| Theme | Future action | Outcome |
|---|---|---|
| **Protect** | Ensure that our infrastructure is protected against physical and digital attacks and identify areas of risk | Identify areas with previous supply vulnerabilities or people or communities who are vulnerable |
| **Innovate** | Support the provision of tailored information | Provide support for our customers in vulnerable circumstances |
| | Align with the goals of our charity partners and NGOs | Provide support for the digitally excluded |
| **Automate** | Automate the use of our smart meter transactional data | Ensure we can target support for priority customers |

## 5.5 Legal and financial partners

Our shareholders are integral to our growth and we strive to deliver consistent value through strategic investments and robust financial performance. We work closely with investment banks and bondholders to secure the necessary funding for our infrastructure projects, ensuring the continued reliability and expansion of our network. Our collaboration with insurers helps us manage risks effectively, safeguarding our assets and operations. Additionally, we maintain transparent and proactive communication with ratings agencies, ensuring they have the information needed to accurately assess our financial health and stability.

*Figure 8: How our digitalisation strategy will benefit our legal and financial stakeholders*

| Theme | Future actions | |
|---|---|---|
| **Protect** | Continue to protect against cyber threats and follow sound principles of governance and security | Ensure that our key commercial information is protected |
| **Innovate** | Continue to invest in trading platforms and flexibility services | Provide more efficient electricity usage and prevent the need for asset re-enforcement where possible |
| **Automate** | Replace our wayleaves payment management system | Ensure that landowners are effectively compensated |
| | Ensure our digital infrastructure supports modern cloud computing | Support interoperability and data transfer |

## 5.6 Media and advisory

We understand the importance of maintaining strong relationships with various media and accreditation bodies to effectively communicate our initiatives and achievements. We engage with local and regional media to keep our communities informed about projects and developments that impact their daily lives, such as our rural network resilience investments.

Our collaboration with national media ensures that our significant contributions to the energy sector, like our innovative projects funded by Ofgem, receive widespread recognition. We also work closely with trade media to share insights and advancements in the industry, highlighting our leadership in innovation and sustainability.

Our commitment to excellence is further demonstrated through our interactions with accreditation bodies, where we consistently achieve high standards and receive accolades for our projects and initiatives. Additionally, we use social media platforms to engage with a broader audience, sharing updates on community energy projects and fostering transparent communication with our stakeholders. For example, in the recent storm Eowyn we received 480,000 impressions on Facebook and over 1,000 comments on our social media posts.

We have implemented a media ‘plug-in’ as part of our website which has streamlined our process for engaging with the media, enabling them to have ready access to press releases, images and other downloadable resources.

*Figure 9: How our digitalisation strategy will benefit our media and advisory stakeholders*

| Theme | Future action | Outcome |
|---|---|---|
| **Protect** | Continue to invest in cyber security | Protect our critical national infrastructure |
| **Innovate** | Deliver digital grid visualisation tools, improve the reporting of network data and allow the viewing of asset data | Help media and advisors to understand and communicate key messages and supporting data |
| **Automate** | Provide toolkits and training, including the use of AI to build custom data sets and provide tailored visualisations | Allow media and advisory bodies to better understand our information and drive insight from our key data sets |

## 5.7 Regional, social, economic and environmental stakeholders

We actively engage with customer community groups through our dedicated community energy manager and support them with the Powering our Communities Fund, which supports local energy projects and promotes resilience. Our collaboration with consumer representative bodies ensures that we address the concerns and needs of our customers, particularly those in vulnerable circumstances. We work closely with regional environmental charities to support projects that reduce carbon emissions and promote sustainability. Additionally, we partner with regional fuel poverty charities to tackle fuel poverty and improve energy efficiency, helping our customers in vulnerable circumstances to stay safe and warm. These partnerships are crucial in helping us deliver reliable, sustainable and equitable energy solutions to the communities we serve.

### Cross-utility priority services register

We have worked with other utility companies to launch a national website to make it as simple as possible for energy customers to sign up to their local priority services register. The website is designed to be a simple, single reference point to which the NHS, local authorities, charities and other partners can direct their service users.

### Community energy interface

After consultation with stakeholder groups we have worked to produce better web-based tools that allow community energy groups to implement energy projects. These new online, interactive interfaces help community energy groups understand how feasible it is for them to install a community energy project in their local area. For example, helping to understand how a solar panel scheme could be used in a shared space such as a school or community building, including being able to understand if there is network capacity, what the costs might be and how to best present the scheme to ensure a smooth transition from idea to operation.

*Figure 10: How our digitalisation strategy will benefit our regional social, economic and environmental stakeholders*

| Theme | Future action | Outcome |
|---|---|---|
| **Protect** | Continue to invest in systems including a new tree-cutting and vegetation management system | Protect our infrastructure and better protect the network against storm damage |
| **Innovate** | Improve the data quality and control of our overhead line planning | Drive efficiencies and support wider regional infrastructure development |
| | Introduce AI powered dynamic scheduling | Support resource planning and training programmes and provide new opportunities to benefit regional employment and skills development |
| **Automate** | Improve visibility and access to the Powering our Communities Fund | Support local energy projects and promote sustainability |

## 5.8 Digitally excluded

We recognise that not all our customers will have the same access to technology as others and therefore we work hard to ensure we provide alternative ways to access our services and ensure that no one is left behind. We provide accessible communication channels including phone, postal mail and in-person visits and provide printed materials to cover content that is available

on our website. These are distributed via our partner organisations, and we have recently made these available via MP surgeries to increase their visibility.

We have worked hard to improve the data on our ECR and work with our partner organisations and engage with local communities to promote this service as widely as possible. This enables us to proactively contact registered customers during emergencies and provide assistance as appropriate.

We have also trained more colleagues across the business to make proactive calls to customers in vulnerable circumstances – making a total of 420 colleagues – and we have improved our ability to handle incoming calls during an incident.

# 6 Customer and stakeholder engagement

Our digitalisation strategy is shaped and refined by engagement with our customers and stakeholders. This ensures that all areas of the strategy have received broad customer and stakeholder input, along with being able to refine and enhance individual and specialist areas of the strategy through groups of subject matter experts.

The core principles of our stakeholder engagement processes are:

- **Inclusivity:** we engage with a diverse range of stakeholders, including distributed generation owners and operators, local government and councillors, trade associations, environmental groups, communities, government/regulators, the energy industry, businesses, colleagues, suppliers, customers, politicians, community energy groups, shareholders, utilities, charities, pressure groups and the media
- **Responsiveness:** we actively listen to stakeholder feedback and act on the insights gained. This responsiveness is embedded and tracked throughout the business, enabling everyone to identify and act on opportunities
- **Materiality:** we ensure that our engagement efforts are aligned with the most relevant and significant issues for our stakeholders and our business.

To engage across such a broad range of stakeholders, we use several different engagement methods. These include a structured programme of workshops, engagement events and advisory panels to engage with stakeholders, businesses and communities. These activities provide opportunities to seek feedback on specific subjects such as connections, consumer vulnerability, future network innovation trials and future business planning priorities. Specific to the digitalisation strategy we have the digital futures advisory panel which provides specific input on digital technology themes, as well as reviewing and contributing to this digitalisation strategy and the regular action plan updates.

Our approach to stakeholder engagement is aligned with the Accountability AA1000SES standard and informed by stakeholder mapping. This ensures that we engage appropriately and keep our stakeholder network current and representative of the communities we serve.

### Annual reporting

Each year, we report our stakeholder engagement and consumer vulnerability activities to our regulator, Ofgem. This transparency ensures that our efforts are recognised and that we remain accountable to our stakeholders. You can read these annual reports on our website.

# 7 Conclusion and feedback

As technology trends change in our fast-moving world, we need to remain adaptive and open to adjusting and refining our strategy and thus we need you to join us in shaping the future of our digitalisation strategy. As we continue to invest in digital products and services to drive forward our business to 2028, we need to remain committed to keeping our customers and stakeholders at the heart of our digital services.

Your feedback and insights are crucial in helping us understand your needs and priorities, allowing us to tailor our digital initiatives to deliver maximum value. Please email us and share your thoughts, questions and suggestions or write to us at Electricity North West Limited, Hartington Road, Preston, PR1 8AF. Together, we can continue to protect, innovate and automate our digital services and electricity network, ensuring a brighter and more resilient future for the communities we serve.

# 8 Glossary

| Acronym | Meaning |
|---|---|
| AI | Artificial intelligence |
| ANM | Active network management – real time network management tool |
| API | Application programming interface |
| BESS | Battery energy storage systems |
| CAF | Cyber Assessment Framework – developed by the National Cyber Security Centre (NCSC) the CAF is aimed at helping an organisation achieve and demonstrate an appropriate level of cyber resilience |
| CI | Customer interruptions – measured as the total number of supply interruptions as a percentage of our 2.4 million connected customers |
| CLASS | Customer Load Active System Services – voltage control system developed from Electricity North West innovation project |
| CML | Customer minutes lost – average length of a power cut experienced by customers, measured by taking the total number of minutes for all our customer interruptions divided by our total number of customers |
| DG | Distributed generation – embedded generation and distribution connected generation usually connected to the distribution system |
| Digital grid | An advanced electricity network that uses digital technologies, sensors and software to better match the supply and demand of electricity in real-time |
| DNO | Distribution network operator – a company that owns and operates the network of towers and cables that carry electricity to homes and businesses from the transmission network |
| DSO | Distribution system operation – the systems and processes needed to operate energy networks in the net zero carbon future |
| eCAF | Enhanced Cyber Assessment Framework. This is the enhanced profile of the CAF, which defines a more stringent set of requirements that must be met compared to the basic profile. |
| ECR | Extra Care Register, our priority services register |
| ED2 | See RIIO-ED2 |
| ELT | Electricity North West's executive leadership team |
| ENS | Electricity not supplied |
| ERP | Enterprise resource planning |
| FLISR | Fault Location, Isolation and Service Restoration |
| GB | Great Britain |
| GIS | Geographic Information Systems – system for capturing, storing, checking and displaying data related to our assets |
| IdAM | Identity and Access Management |

| Acronym | Meaning |
|---|---|
| IoT | Internet of Things |
| ISO270001 | International standard for information security, cyber-security and privacy protection |
| IT | Information technology |
| LAEP | Local area energy plan – action plan to help local communities meet their future energy plans in a sustainable and affordable way |
| LAR | Large Area Restoration |
| MSSP | Managed security service partners |
| NESO | National Energy System Operator for Great Britain |
| NGO | Non-governmental organisation |
| NIS | The Security of Network & Information Systems Regulations (NIS Regulations) provide legal measures to boost the level of security (both cyber and physical resilience) of network and information systems for the provision of essential services and digital services |
| NMS | Network management system |
| PaaS | Platform as a Service – computing service model that provides a complete development and deployment environment in the cloud |
| PING | Power interruption notification gateway – a method of remotely checking whether or not a customer meter is energised |
| Power BI | Interactive data visualisation software product developed by Microsoft with a primary focus on business intelligence (BI) |
| RIIO-ED2 | Ofgem's energy network price review framework based on Revenue = Incentives + Innovation + Outputs. RIIO-ED2 is the second RIIO price control period specifically for electricity distribution network licensees, running from April 2023 to March 2028 |
| SaaS | Software as a service – cloud computing service model where application software is accessed online |
| SDP | Strategic data platform – an internal term that expresses our strategic desire to use a central data platform to drive information and insight |
| SOC | Electricity North West security operations centre which monitors, detects, responds to and prevents cyber-security threats |