

Distribution Update

# Digitalisation Action Plan

December 2024



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### This Digitalisation Action Plan update reflects on the progress we have made on our digital and data initiatives for our distribution business since June 2024 and shares our plans for the next six months as we progress the delivery of our RIIO-ED2 business plan.

Our Distribution Digitalisation Strategy focuses on enabling the efficient management and operation of the distribution network and the increased use of data to deliver value and benefit for our customers and stakeholders. The drive to Net Zero has led to increasing demand for connections and load on our network and we are developing our data & digital platforms to support this in alignment with our strategic goals, outlined within this document.

In our ongoing digital transformation journey, we are now beginning to treat data as a critical asset. This shift in perspective recognises the immense value that data holds in driving strategic decisions, optimising operations, and enhancing customer experiences.

Reflecting on the progress made throughout the RIIO-ED2 period so far, we have invested wisely in our data & digital tooling across our six digitalisation pillars, delivering benefits across multiple parts of our business to support the critical business processes being carried out. We also continue to comply with the Data Best Practice (DBP) guidance introduced by Ofgem during RIIO-ED1, evolving our maturity level across the defined 11 principles.

Some highlights over the past 6 months include:

#### Mobility & Scheduling

- Deployment of our new field service mobility and scheduling solution to optimise our field operations. Initial use cases have been delivered to change from paper based on-site risk assessment to digital data capture plus the optimisation of our substation inspection process including dynamic scheduling of work for field resource. These initial use cases are part of a long-term roadmap for field technology improvements with many more use cases to be delivered in 2025

#### Fixed Price Quotes

- Development of a customer facing solution which will offer a Fixed Price Quote, initially for a subset of smaller connection job types, giving customers a firm indication of cost without having to submit an application to SPEN. This is the final stages of development and testing and expect this to go live in Q1 2025.

#### National Energy Outage Platform (NEOP)

- We have created a solution and architecture that allows near real-time outage data to be shared through externally facing APIs with the NEOP. This initiative was mandated by the Department for Energy Security and Net Zero (DESNZ) following their review of Storm Arwen. This aims to enhance the visibility and management of energy outages across the UK, contributing to better coordination and visibility during major disruptions, including the recent Storm Darragh.

#### Open Data Portal

- Over the past 6 months our Network Data & Intelligence team have made significant progress in developing our Open Data Portal with a number of enhancements including the publication of 13 new data tables such as data on historical outages and flexibility and have developed feature pages for two of our strategic data sets. We have launched the first in a series of videos, supporting our customers and stakeholders in using our portal while seeing higher demand than ever before for access to our data. This increased activity demonstrates the growing demand for our data and the value it provides to our users.

As we continue to invest in digital technologies and data management & analytics capabilities, we are committed to unlocking the full potential of our data assets to deliver greater value to our stakeholders. We have already begun planning for the RIIO-ED3 period, which will start on April 1, 2028. This planning phase is crucial as it will enable us to align with the government's Clean

Energy Superpower mission, which includes achieving Clean Power by 2030 and accelerating towards net zero by 2050. Our approach involves a comprehensive review of our current digitalisation and data initiatives, building on the successes of our RIIO-ED2 plan and will be submitting a response to Ofgem's ED3 framework consultation issued in November 24.

We will continue to provide separate action plan updates for our distribution and transmission digitalisation strategies, recognising the unique nature of both businesses and their digitalisation needs going forward plus the differing stakeholder needs and priorities.

All updates to our Digitalisation Strategy and our Digitalisation Action Plans are available to view online in a user-friendly, digital format and we will continue to evolve this website based on your feedback. We value your input to ensure we are on the right track to deliver efficiencies for our customers and stakeholders. We welcome all feedback on our plan and you can contact us with your views and submit information requests via our [website](#).

**Lynda Ward**  
Business Transformation  
Director



# 6 Month Highlights

We continue to make good progress delivering our ambitious R10-ED2 programme of work and have seen successes outlined below in the last six months.

## £16m

### Q3/Q4 2024 Investment

Since January 2024 we have invested £28m in our digital initiatives to align with our data and digitalisation strategies within our Distribution Business Plan.

## 33%

### Projects in 2025 Ready for Delivery

We will invest £18m on digital solutions in 2025. We have already planned and authorised 33% of this investment to specific digital projects.

## 80+

### Open Data Requests

In the last six months, our Open Data team have successfully concluded over 80 requests for access to our data. This has included requests for information on the location of our network assets and the capacity of our network.

## 93

### SAP Training Courses Updated

We have comprehensively updated our SAP PM training materials to ensure our workforce is well-equipped to use the Network Asset Management Systems (NAMS) effectively.

## 231,000

### Land Rights Contracts Scanned & Digitised

In the past 6 months we have scanned and digitised 85,000 documents via our 3rd party supplier, taking the total in 2024 to 231,000. Our journey continues as we aim to digitise a total of 450,000 documents.

## 2

### Custom Built Application Interfaces to meet Industry needs

We have successfully created two new Application Programme Interface (API) suites serving real-time outage information to the UK Government and our Connect Direct APIs are automating decisions in our carbon technology (LCT) application process.

## 37M+

### Data Records Published in Open Data Portal

Our [Open Data Portal](#) now hosts over 37M rows of data. These are publicly available, and with detailed descriptions in place.

## 13,000+

### Open Data Downloads

Open Data Portal users are engaging with our datasets, with over 13,000 data downloads through the API function on our Portal in the last 6 months.

# Stakeholder Engagement

At SP Energy Networks, stakeholder engagement is at the heart of our operations and strategic planning. Our approach is designed to foster meaningful interactions with our stakeholders, ensuring that their voices are heard, and their needs are met. This commitment to engagement is a cornerstone of our RIIO-ED2 plans, reflecting our dedication to delivering value and accountability.

## Customer Focus

Our primary focus is on our customers. We believe that understanding and addressing their needs is crucial to our success. Through regular consultations, surveys, and feedback mechanisms, we gather valuable insights that help us tailor our services and improve customer satisfaction. This customer-centric approach ensures that we remain responsive and adaptive to the evolving demands of our stakeholders.

## Continuous Adaptation

We recognise that stakeholder needs and expectations are constantly evolving. Therefore, we continually adapt our engagement strategies based on the feedback we receive. This iterative process ensures that our stakeholder engagement remains relevant and effective. Full details of our current Stakeholder Engagement Strategy can be found [here](#).

## RIIO-ED2 Plans

Stakeholder engagement is a key component of our RIIO-ED2 plans. By actively involving our stakeholders in the planning and decision-making processes, we ensure that our strategies are aligned with their expectations and priorities. This collaborative approach not only enhances the effectiveness of our plans but also builds trust and transparency with our stakeholders.

## Accountability Accreditation

To ensure our stakeholder engagement continues to be fit for purpose, we enlist external accreditors AccountAbility to provide an independent annual audit of our strategy, governance and processes.

AccountAbility's AA1000 Stakeholder Engagement Standard (2015) is founded on the principles of: Inclusivity, Materiality and Responsiveness. It is a generally applicable, open-source framework for assessing, designing, implementing and communicating an integrated approach to stakeholder engagement. The HealthCheck from AccountAbility is a robust and comprehensive assurance and accreditation programme.

## AccountAbility HealthCheck Progress

We are pleased to have once again improved our score in 2024. With a total score of 91%, SPEN continues to be placed within the Advanced stage of the AccountAbility Stakeholder Engagement Maturity Ladder. When we consider each pillar individually, our scoring is now in the Advanced stage across all six pillars, A to F – a first since we began undertaking these audits seven years ago, recognising improvements made. Looking ahead, we remain fully committed to a continual cycle of reviewing and improving our engagement practices. With recommendations from the AccountAbility Healthcheck, we are developing a programme of improvement, working together with our stakeholders to deliver meaningful engagement.

Advanced (81-100%)

Accomplished (61-80%)

Committed (41-60%)

Evolving (21-40%)

Foundational (0-20%)

89%

Health check rating achieved in 2023

91%

Health check rating achieved in 2024

# Stakeholder Priorities Survey

In 2024, we invited all stakeholders to take part in an open survey, covering a number of important business areas including Priorities, Community Benefits, Engagement, and Data & Digitalisation.

For Data & Digitalisation, we tested the use of website services, satisfaction levels, and our Digitalisation Action Plans. The feedback we received from this has been used to inform our future plans, and shape current initiatives. Some examples are shown here:



## Stakeholder Feedback - Open Data

Several stakeholders highlighted the importance of Open Data, emphasising the need for broad accessibility and highlighting its value as a key approach for the future.

### Our response

We actively engage with our Stakeholders to identify datasets for publication and enhancements to our Portal. We do this through our Open Data Stakeholder surveys, feedback forms available on our Portal and through engagement at industry events.

Over the last 6 months we have published an additional 13 data tables, with a total of 83 data tables now available on our Portal. We have created Data Visualisations for two of our strategic datasets, with more in development, and have enhanced our feedback forms - giving Stakeholders the opportunity to provide feedback directly on specific data points. We have also published the first in a series of videos to support our Stakeholders with how to use our Portal. We are enhancing transparency in our Data Triage process and will be shortly publishing our Risk Assessments, along with trends and insights into the requests received into our Open Data mailbox.

## Stakeholder Feedback - SPEN Website

Numerous customers expressed frustration at the online experience on SPEN's website and the lack of self-service functionality.

### Our response

We have initiated a project to carry out a digital modernisation of the entire SPEN website to enhance the ease of navigation and user experience and have expanded our Web & Application team to increase our capacity and create digital-first web delivery capabilities. We have re-designed our customer connections application forms, taking into account direct customer feedback and the development of our fixed price quotes feature will allow customers to obtain a firm indication of connection costs for some smaller types of jobs without the need to contact us.

Looking ahead, we have scoped out a number of additional customer facing solutions as part of our RIIO-ED2 digitalisation strategy which will introduce greater customer self-service tools. For example we will develop a solution giving customers the ability to view available network capacity within a selected area.

# Supporting Vulnerable and Digitally Excluded Customers

Launched on the SPEN Website in November 2024

Part of our digital strategy is to make our digital experiences for customers approachable and accessible. Making sure everyone has the same access to services and information no matter their accessibility needs.

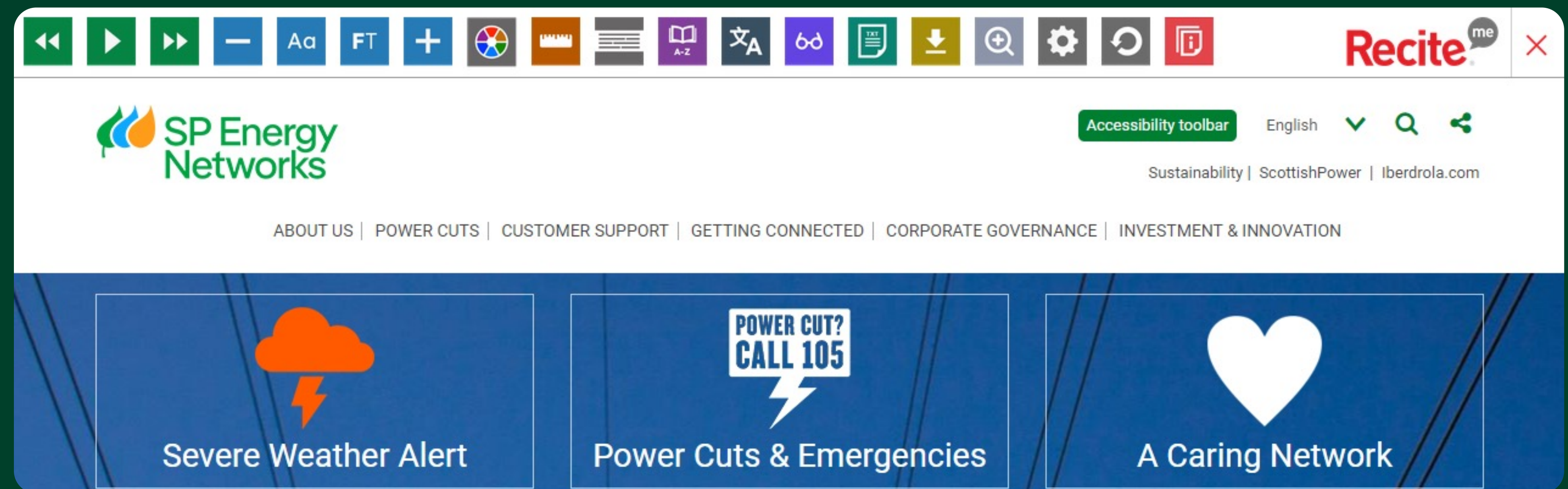
Our plans are to continue to increase our customer engagement to allow further contributions to our future activities.

We are working with third party facilitators to involve lived experts in our decision making, and at the development stage, testing our digital experiences with lived experts.

In the near future, we will redevelop and deliver a fully Web Content Accessibility (WCA) website as part of the WCA industry guidelines 2.2. This will help supporting and also educating our vulnerable customers to the support we provide during circumstances such as fuel poverty and power cuts.

## What is Recite me?

ReciteMe is a cloud-based assistive accessibility toolbar. It offers a range of on-demand accessibility solutions that support us in conforming to WCAG standards and ensure that our website is user-friendly for individuals with disabilities, situational challenges and language support, through customisable options. This went live on our website in November 2024.



# Sharing Data Openly with our Stakeholders

We know that there is a growing demand for access to our data. We want to meet the needs of our stakeholders, and have developed a comprehensive Data Triage framework, aligned with the ENA's Data Triage Playbook, and the NPSA's Triage Process Guidance, which enables us to quickly and effectively meet the needs of our stakeholders whilst protecting our data and our critical network assets. This enables us to categorise our data assets as:

- **Open** – published openly
- **Shared** – published or shared bilaterally but subject to enhanced access rights
- **Closed** – considered on a case-by-case basis under bespoke agreement (e.g. NDA)

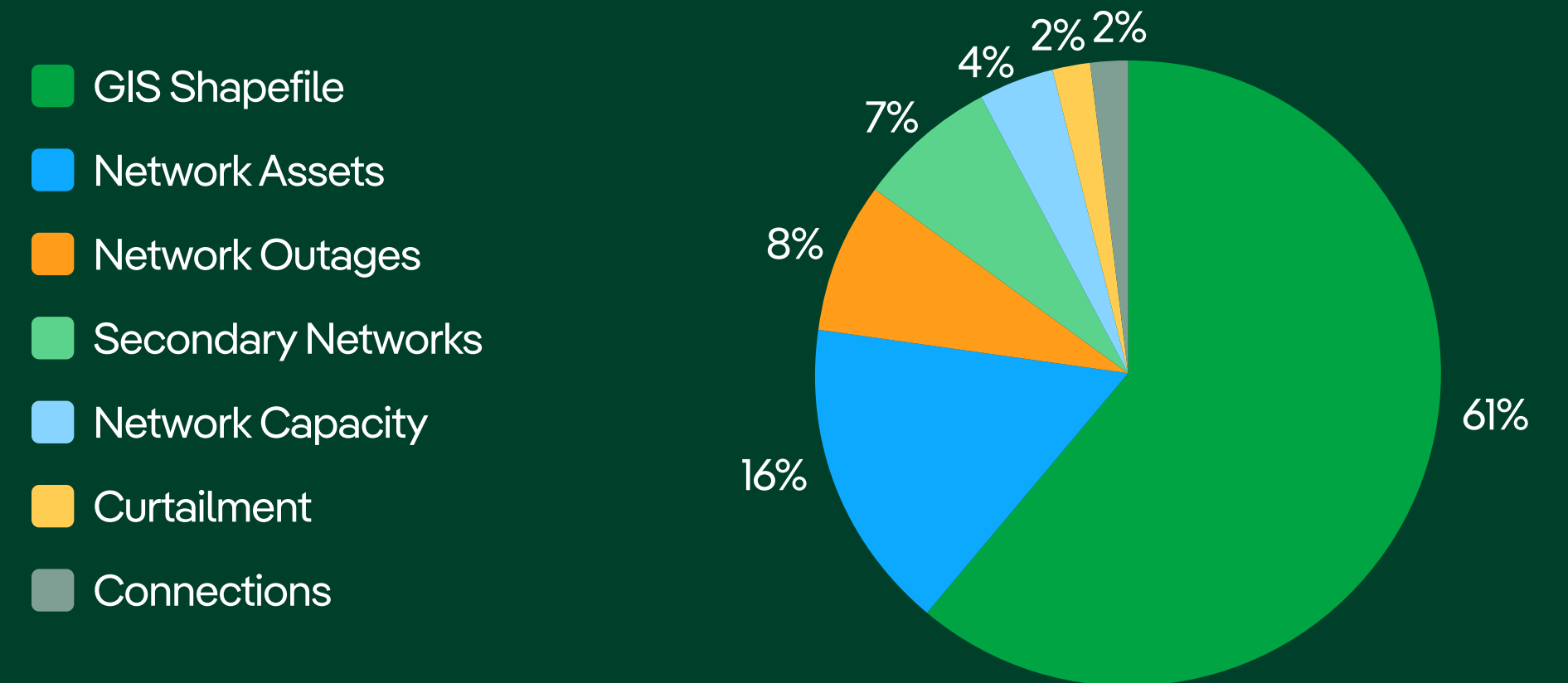
Our aim is to ensure that we can make data openly available for our stakeholders and will identify steps we can take to make all of our data available in line with stakeholder needs, such as redacting or anonymising data – whilst transparently outlining any steps we have taken on our Portal.

Our data is available on our Open Data Portal, a free to use platform which enables users to self-serve, and access data about our network, our operations, and our plans, and where our stakeholders can make use

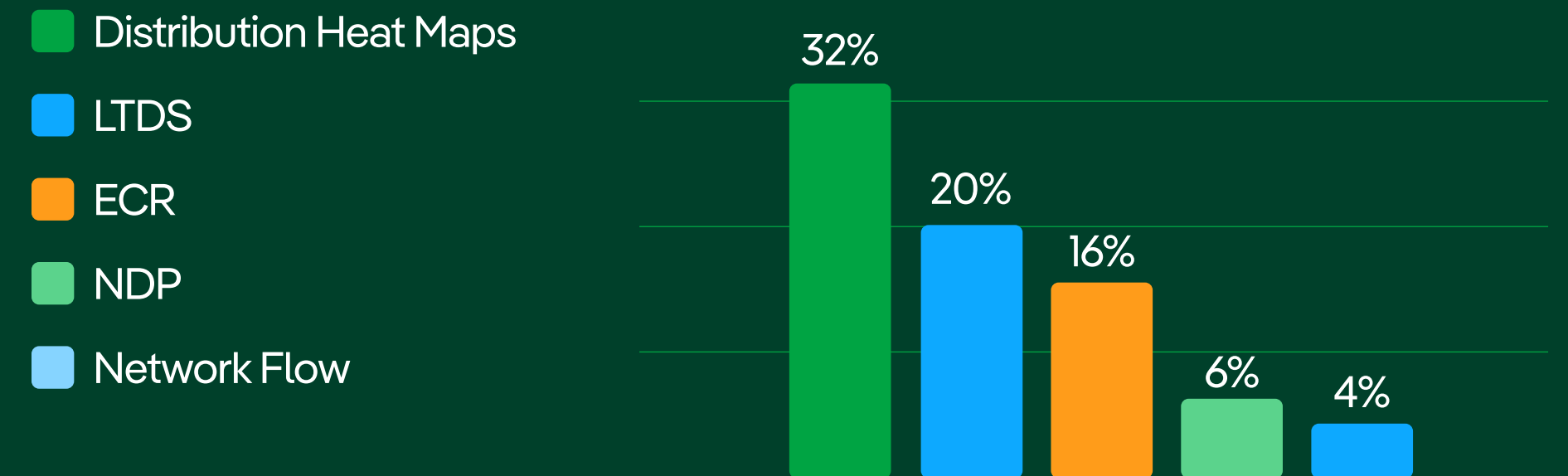
of visualisation capabilities and consume data via an API. All our data is aligned with the Dublin Core metadata standard and published under the industry standard Open Data Licence - Creative Commons (CC BY 4.0). Our shared data is hosted under privileged access rights and published under our Shared data licence, being considered for use across the industry through our lead role in the ENA's Data Licencing working groups.

In 2024, we have been working to improve the provision of our data and our services, supporting our stakeholders in the areas which they have asked us to prioritise. Across SPEN, we have facilitated over 150 bespoke requests for access to our data. We now have 75 data tables openly published, and 8 data tables published under a shared data licence. Our Open data portal now has over 1,700 registered users, has received over 1.35m API calls and our data has been downloaded over 35,000 times. We have published supporting information to support our stakeholders, launching the first in a series of videos, publishing our risk assessments, and improving our contact us and feedback forms. To continue improving our services, we have launched our next Open Data Survey, seeking insights from our stakeholders to inform our 2025 plans.

Open Data mailbox requests 2024



Top 5 data sets downloads








# Our 6 Digitalisation Pillars

Our Digitalisation Strategy is supported by six key pillars that have been developed following customer and stakeholder engagement, to help us to measure and deliver success.

Over the following pages we detail each project's alignment with its digital pillar, breaking down a description of the project and its goals, the progress made over the past six months, an overview of activities planned for the next six months and how we will measure its success.


**Our Digitalisation Strategy Facilitates the Delivery of our RIIO-ED2 Programme:**



**Using Digital Technologies to Deliver Enhanced Customer Service**



**Optimised Asset and Network Management**




**Developing Options to Manage Peaks in Load**



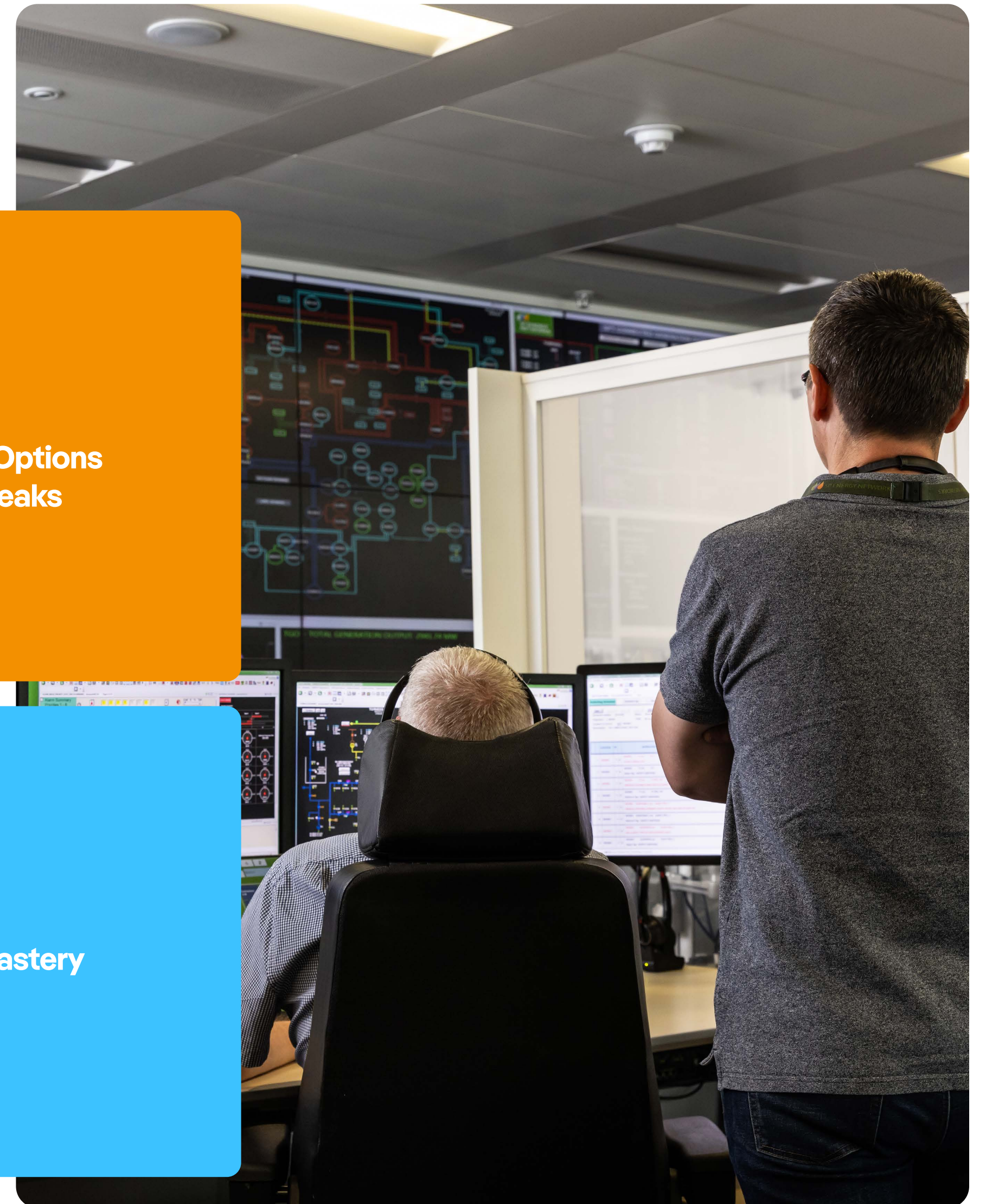
**Supporting the Development of New Business Models and Markets**



**Investing in the Digital Skills of our People**



**Improving Mastery of our Data**





# Using Digital Technologies to Deliver Enhanced Customer Service

Digitalisation of our services helps us create a tailored approach to prioritising the needs of our customers and stakeholders, while continuing to deliver a safe, reliable, and sustainable network.

Providing digital self-serve options such as interacting with virtual support agents, or a digital customer portal, will enable quicker response times for customers, while helping us manage the anticipated increase in customer inquiries for connection and decarbonisation.

## We will deliver this by:

### 01

We have replaced our Customer Relationship Management Platform (CRM) with a new digital platform to incorporate existing processes, new processes, integration with our self-serve functions and integration to our asset, regulatory and control systems.

### 02

Extend and develop our self-serve capabilities to offer more services, multiple channels and cater for new customer types.

### 03

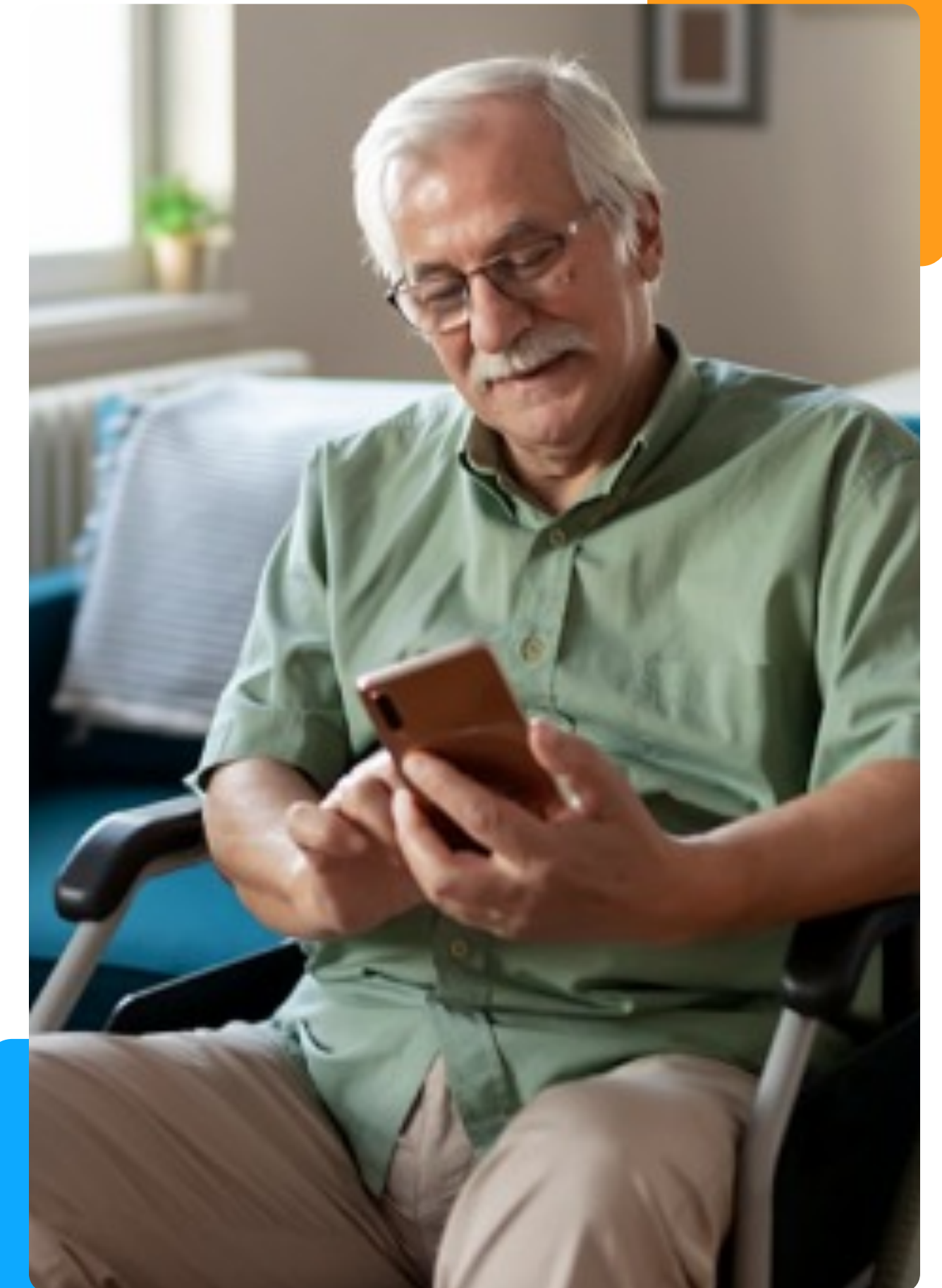
Improve our self-service quotation process to allow customers enhanced clarity over costs of new connections at point of enquiry without the need to speak to internal SPEN staff.

### 04

Creation of a new self-service function to facilitate photo and video capture by customers. The images will be held as part of the customer's information pack which will be available to the SPEN teams during design and delivery.

## This will deliver benefits such as:

- Improved efficiency and quality of service to customers.
- Ability to adapt our offerings in line with customer preferences.
- Ability for customers to self-quote.
- Support the fault identification process leading to quicker resolution times.





Initiatives	Summary	Progress in the last six months	Activities planned for the next six months	Measures of Success / Customer Benefit
<p><b>CRM Platform Implementation</b></p>	<p>Consolidation of multiple customer service solutions that are currently made up of a suite of disparate systems into one single system to manage all customer interactions and provide a 360 degree view of the customer</p>	<ul style="list-style-type: none"> <li>• Successful migration of customer processes relating to General Enquiries, Smart Interventions and low carbon technologies (LCT) into Salesforce CRM.</li> <li>• Migration of survey functionality to Salesforce.</li> <li>• Decommissioning of obsolete systems no longer required as processes will now be carried out in CRM.</li> <li>• Closure of CRM Programme as a delivery vehicle. Future Salesforce enhancements will be carried out through ongoing enhancement and support mechanisms.</li> </ul>	<p>Continuous improvement programme of incremental enhancements.</p>	<ul style="list-style-type: none"> <li>• A single view of all customer interaction across SPEN provides insight and quicker resolution.</li> <li>• Paths for live chats or telephony interactions.</li> <li>• Increased volume of customer enquiries resolved first time.</li> <li>• Reduced volume of enquiries that need more than one person to resolve.</li> </ul>
<p><b>NAVI &amp; LView</b></p>	<p>NAVI &amp; LView is the creation of a connected network model from our geographical information system (GIS) data to allow flexible analytics to be performed without impacting the daily use or structure of the primary GIS system.</p>	<ul style="list-style-type: none"> <li>• Enhanced NAVI power analysis capability.</li> <li>• LView tool rolled out to SPEN field staff.</li> <li>• Creation of Data Visualisation and Low Voltage (LV) network alarm alerts, measurement data and waveform data, along with network traces and notifications to ease fault management.</li> <li>• Data Visualisation from temperature and humidity monitors within substations created.</li> <li>• Integrated LView with AI algorithms designed to provide early warning of potential neutral fault scenarios, phase ID and link box state.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue Power Analysis development to replace legacy tools.</li> <li>• Release new Local Authority Network Insight Tool (LANIT).</li> <li>• Work with other SPEN projects on integrations and additional development for ENZ platform, LV Flex.</li> <li>• Complete LV Monitor integration work to visualise data based on user feedback.</li> </ul>	<ul style="list-style-type: none"> <li>• Faster network analysis for quicker customer responses on new connection quotes.</li> <li>• More accurate and consistent data used for network data analysis.</li> <li>• Significant enhancements to network visibility of our LV connectivity model.</li> <li>• Faster fault finding and customer restorations, leading to reduced power outages.</li> </ul>
<p><b>ESCOMS Replacement</b></p>	<p>Estates, Consents and Management System, which is used to manage and report on land rights and consents. Needs to be replaced as is approaching technical obsolescence.</p>	<ul style="list-style-type: none"> <li>• On-going enhancements following Go-Live to improve workflows and reporting.</li> <li>• Successful adoption and onboarding into twice weekly maintenance and enhancement releases.</li> <li>• Discovery phase complete for integration with GIS which will deliver further efficiencies for our Land &amp; Planning department.</li> </ul>	<ul style="list-style-type: none"> <li>• Further improvements to reporting.</li> <li>• Complete testing and development for mobile solution.</li> <li>• Complete full design and a delivery plan for GIS integration, commence build.</li> <li>• Agree requirements for archiving solution.</li> <li>• Decommission of legacy system.</li> </ul>	<ul style="list-style-type: none"> <li>• Improved ways of working, with significant levels of automation increasing efficiency and ability to prioritise jobs and manage teams and workflows with measured effectiveness.</li> <li>• Centralised, secure and fully supported solution that allows for GDPR transparency, improved data management and enhanced reporting capabilities.</li> </ul>



Initiatives	Summary	Progress in the last six months	Activities planned for the next six months	Measures of Success / Customer Benefit
<p><b>Graphical Design Tool</b></p>	<p>System to improve and automate parts of the process for creating designs for network development and new connections. The system will have the ability to overlay a customer's proposed development onto our network maps, visible to all stakeholders.</p>	<ul style="list-style-type: none"> <li>Phase 1 design and build of the new Graphical Design Tool are complete including user acceptance testing.</li> <li>Phase 1 delivers the new Graphical Design Tool with integration to the SPEN Geographic Information System asset system, enabling development of designs on our network maps that give designers better network visibility and accuracy.</li> <li>Designers are progressing through a familiarisation / training plan before solution is made live.</li> </ul>	<ul style="list-style-type: none"> <li>Deployment of Phase 1 Q1 2025</li> <li>Commence Phase 2 which integrates the Graphical Design Tool further with core SPEN systems, integrating with SAP to optimise the design process. This will reduce the manual aspects of the current process further, speeding up time and accuracy taken to create designs.</li> </ul>	<ul style="list-style-type: none"> <li>Creation of designs will be quicker allowing faster response to customer connection applications.</li> <li>Consistency of designs provided to customers regardless of geographical location.</li> </ul>
<p><b>Connections Online Self-Service</b></p>	<p>A self-serve facility for customers seeking new or upgraded connections and enhancements to the online customer experience / application process.</p>	<ul style="list-style-type: none"> <li>Customer centric workshops complete to determine the future streamlined and informed Connections Self-Service proposition.</li> <li>Refreshed our customer connections website experience with newly transformed customer journeys.</li> <li>Work underway to enhance our Customer Fixed Price proposition with external software company deployed to build prototype for evaluation purposes.</li> </ul>	<ul style="list-style-type: none"> <li>Identify Connections Self-Service solution and begin development.</li> <li>Interrogate web analytics to identify further areas where the user experience could be enhanced.</li> <li>Go Live with Fixed Price proposition and develop further journeys based on customer feedback.</li> </ul>	<ul style="list-style-type: none"> <li>Customer will be able to get a cost estimate for a connections job online without the need to contact SPEN to understand if this fits within their budget before formally applying.</li> <li>Improved customer application experience with a simpler online application process.</li> <li>Consistent connection cost provided to customers with up front clarity.</li> <li>Tailored online experience depending on the customer type and type of connection being requested.</li> </ul>
<p><b>Land Rights Digitisation</b></p>	<p>Scanning and digitalisation of records relating to SAP and Land GIS, to deliver a digital and integrated solution to manage their workflow.</p>	<ul style="list-style-type: none"> <li>85,000 land rights contracts scanned and digitalised.</li> <li>Total 231,000 now scanned and digitalised at end of 2024.</li> <li>Lessons learned identified and process optimised to deliver the remaining work in the scope of this project.</li> </ul>	<ul style="list-style-type: none"> <li>Continued scanning &amp; digitisation records to reach overall 450,000 target.</li> </ul>	<ul style="list-style-type: none"> <li>Quicker turnaround for Land Rights information requests.</li> <li>Creation of consolidated digital document database.</li> </ul>
<p><b>Variations and Refunds</b></p>	<p>Improve the connections Variations and Refunds process that is used when a design varies from the original quote and costs.</p>	<ul style="list-style-type: none"> <li>The complex workflow functionality that manages the interaction from the end users to the Commercial and Performance teams and in turn administration department has been coded and delivered into test. Integrated testing is underway.</li> </ul>	<ul style="list-style-type: none"> <li>Project go-live is planned for January 2025.</li> </ul>	<ul style="list-style-type: none"> <li>Streamlined and simpler process on occasions where additional costs are required to complete a connections due to unforeseen circumstances. Quicker turnaround of refunds from when it is identified that a refund is required through to the money being paid into a customer's bank account.</li> </ul>



# Optimised Asset and Network Management

Our network will experience an unprecedented volume of change, and we must maintain continuous supply levels to meet our customers expectations.

To ensure we deliver on this it is crucial that we invest in more efficient approaches to manage our assets, planning, scheduling, delivering field work and managing our supply chain & logistics. This will support better decision making when planning the work needed on our network, reducing costs for customers, and lowering our carbon footprint.

## We will deliver this by:

01

Use of connected construction technology to digitalise our delivery of capital projects.

02

Automation, fault location technology, and predictive analytics for outage detection.

03

Digitalise our inspection regime using aerial LiDAR and drone footage image processing technology.

04

Development of advanced field technology such as wearables and the use of virtual reality training techniques.

## This will deliver benefits such as:

- Increased network reliability and reduced outages through proactive management of defects.
- Accurate, timely, verified, and accessible geospatial data about our network, our assets and their environment underpin much of our ED2 programme.
- Improved workforce efficiency through access to rich dataset of geospatial data at the point of decision
- Efficiencies in the design process will lead to increased capacity to deliver against the needs of our customers as they seek to transition to low carbon transport, heating, and industrial energy supply.
- Acceleration in our response time to outages.





Initiatives	Summary	Progress in the last six months	Activities planned for the next six months	Measures of Success / Customer Benefit
<p><b>GIS Platform Upgrade</b></p>	<p>Our Geographic Information System (GIS) is an integral system for our asset master data and is used throughout our asset management systems. Investment in the migration of our GIS platform from the current software to a new platform using the Utility Network data model bringing enhanced functionality.</p>	<ul style="list-style-type: none"> <li>Completed initial version of strategic data model upgrade (Utility Network model).</li> <li>2 of 29 interfaces developed and currently being tested to be compatible with data model upgrade.</li> <li>75% of redevelopment work completed on current web applications to make them compliant with the new data model.</li> <li>Integration with What3Words geolocation tool build complete.</li> <li>Test strategy drafted and signed off.</li> </ul>	<ul style="list-style-type: none"> <li>Complete data readiness activities to enable testing of new data model.</li> <li>Complete remaining development of interfaces.</li> <li>Migration plan to new data model to be finalised and signed off.</li> <li>Testing activities to be carried out in line with signed off testing strategy.</li> <li>Stakeholder engagement with end users to be carried out across our distribution licence areas.</li> </ul>	<ul style="list-style-type: none"> <li>Migration to UN (Utility Network) data model will enable new capabilities for analysis and manipulation of information as well as for representation (3D and 4D).</li> <li>Improved functionality out of the box in new platform allows for more configuration over customisation of tools – reducing future obsolescence and therefore expenditure.</li> <li>Increased accuracy of the real world location of our assets within our corporate systems improves our ability to effectively manage them.</li> </ul>
<p><b>Mobility and Scheduling</b></p>	<p>Streamline processes related to field activities for planned and reactive work to improve Operational Efficiency, Customer Service and Safety and Environmental Performance.</p>	<ul style="list-style-type: none"> <li>Majority of SAP integrations for field service solution completed.</li> <li>Salesforce Field Service roll out completed for Substation Inspections across our two distribution licence areas.</li> <li>6 stand alone forms now completed on Salesforce, that were previously completed on either on paper, or in one of many stand alone data capture systems.</li> <li>All SPEN sites visited and over 150 users now active in Field Service.</li> <li>Significant progress made with Substation maintenance planning with development commenced in October.</li> </ul>	<ul style="list-style-type: none"> <li>Begin delivery of new mapping solution enabling the delivery of our roadmap of further use cases.</li> <li>Roll out of Substation Maintenance across our two distribution licence areas.</li> <li>Continued focus on User Experience (UX) for users across all work delivered.</li> <li>Further engagement with Stakeholders across central functions to ensure delivering value as efficiently as possible.</li> </ul>	<ul style="list-style-type: none"> <li>Improved Health &amp; Safety through better visibility of data and information in the field.</li> <li>Improved Customer Service through quicker response times.</li> <li>Improved operational efficiency through optimised scheduling and better visibility of resources and field work.</li> </ul>
<p><b>SDIF and Field Online</b></p>	<p>The Smart Data Integration Fabric (SDIF) platform manages large volumes of network monitoring and event data, using standardised interfaces between systems and automating complex sequences of actions to automate business processes.</p>	<ul style="list-style-type: none"> <li>Full technical refresh of the SDIF infrastructure and middleware, providing SPEN with a new integration platform running the latest software versions.</li> <li>Increased processing capacity by 50% to ensure planned work over coming 4 years can be accommodated on SDIF.</li> <li>Developed new interfaces to transfer data from LV Monitors to allow reporting and visualisation of locations of electrical faults on the network.</li> </ul>	<ul style="list-style-type: none"> <li>Migration of our existing solutions to the technically refreshed SDIF platform, taking advantage of latest features and functionality from the newest software versions.</li> </ul>	<ul style="list-style-type: none"> <li>Improved information on the location of a fault to accelerate restoration.</li> <li>Inclusion of monitoring data, analysis and orchestration of alarms.</li> <li>Enhanced analytics on LV network from data captured by third party LV sensor solutions.</li> </ul>



Initiatives	Summary	Progress in the last six months	Activities planned for the next six months	Measures of Success / Customer Benefit
<p><b>Internet of Things (IOT) Platform</b></p>	<p>Build of an IOT (Internet of Things) platform to manage a wide array of sensor types to enhance our ability to manage the LV Network and assets.</p>	<ul style="list-style-type: none"> <li>Building on the minimum viable product delivered earlier in 2024, we enhanced the solution providing a production ready system capable of managing thousands on LV Monitor devices.</li> <li>Using the data available from the IOT Platform, developed new management reports and enhancements to SPEN's LV management systems, expediting the fault location process.</li> </ul>	<ul style="list-style-type: none"> <li>Next phase of IOT Platform development to provide enhanced functionality.</li> <li>Monitoring of environmental factors within substations, such as temperature and humidity, which can impact the operation and longevity of switchgear.</li> <li>Sharing IOT device data with SPEN's analytics platform to help drive further insights into LV Network performance and inform operational/strategic investment decisions.</li> </ul>	<ul style="list-style-type: none"> <li>Instant awareness of faults on the networks leading to quicker response and resolution times, in some instances predicting a fault before it occurs.</li> </ul>
<p><b>SAP Enhancements</b></p>	<p>Facilitate the realisation of effort/time efficiencies through reduction of manual transactions and human error within our core asset management platform using an automated solution implementation.</p>	<ul style="list-style-type: none"> <li>We have built, tested and deployed 43 improvements to the current SAP ERP that improve/streamline business processes, enhance data quality and/or remove bottlenecks.</li> </ul>	<ul style="list-style-type: none"> <li>Commence work on the 2025 programme of enhancements to support further business efficiency opportunities to be delivered.</li> </ul>	<ul style="list-style-type: none"> <li>Quicker internal productivity across multiple internal process resulting in quicker processing of customer related tasks.</li> <li>Improved data accuracy – Reduction in system errors and issues.</li> </ul>
<p><b>Asset Risk Management Tool</b></p>	<p>New Tool to allow SPEN to identify potential condition based issues across our asset range and make any required interventions.</p>	<ul style="list-style-type: none"> <li>Development of core system functionality completed and the system outputs are being analysed alongside existing condition based risk management (CBRM) outputs to ensure consistency and accuracy.</li> <li>Staff training commenced.</li> </ul>	<ul style="list-style-type: none"> <li>Development of Reporting requirements.</li> <li>Test outputs analysis to be completed</li> <li>Completion of staff training</li> <li>Full go-live following training</li> <li>System optimisations following go live</li> <li>Decommissioning of old CBRM platform</li> </ul>	<ul style="list-style-type: none"> <li>Increased network reliability and reduced outages through proactive management of defects.</li> <li>Reduction in customers off supply due to faults and increased network resilience against extreme weather events.</li> </ul>
<p><b>Condition Based Assessment</b></p>	<p>Alignment of two overhead line inspection and maintenance processes by creating a function to take asset and defect information provided by external contractors and load them into our corporate systems.</p>	<ul style="list-style-type: none"> <li>Technical build complete, tested and implemented into business as usual operations.</li> <li>Training of new technical processes rolled out to relevant internal staff.</li> </ul>	<ul style="list-style-type: none"> <li>Project close down.</li> </ul>	<ul style="list-style-type: none"> <li>Removal of duplicate visits to SPEN assets on customers land.</li> <li>Greater visibility within corporate systems of potential health and safety issues on the network which can be reacted to and rectified.</li> </ul>



# Developing Options to Manage Peaks in Load

The electrification of transport and heat will dramatically expand the loading on our network, particularly our 'last mile' low voltage network.

Without this intervention, when customers install Electric Vehicles and heat pumps on network areas without sufficient capacity it will overload the network, leading to power outages, shortening of network asset life, higher overall costs for customers, and possible safety concerns. To manage this load increase we are using a combination of traditional engineering (business as usual) and new digital solutions. We also manage vast increases in volume and frequency of data from technologies such as remote sensors, IoT devices, wearable technology, and drones. The initiatives within this digital pillar are critical to how SPEN will deliver the capacity that our customers and communities need.

## We will deliver this by:

01

Deployment of advanced digital monitoring and control equipment on our low voltage network including 14,000 monitors.

02

Deployment of 10 constraint management zones in SPD and 12 in SPM enabled by data and digital solutions.

03

Innovative technology to enable new choices for our customers 'beyond the meter' to support the low carbon transition.

04

Development of our Engineering Net Zero (ENZ) platform enabling data driven visibility, planning and operation of the network.

## This will deliver benefits such as:

- Increase in network data, allowing us to monitor and make more informed decisions on load management.
- Improved network asset lifespan, reducing replacement and repair costs.
- Reduced likelihood of network overloading, making it safer for engineers to complete vital work.







Initiatives	Summary	Progress in the last six months	Activities planned for the next six months	Measures of Success / Customer Benefit
<p><b>LV Monitoring Rollout Programme</b></p>	<p>Installation of over 14,000 LV Monitors across substations to manage and visualise real-time network operating data.</p>	<ul style="list-style-type: none"> <li>• Successful testing and configuring of LV Monitor devices and successful roll out of 807 LV monitors.</li> <li>• Proprietary solution created for LV monitoring and connection to SPEN systems.</li> </ul>	<ul style="list-style-type: none"> <li>• Continued rollout of devices in Q1/2 2025 on the new IOT solution.</li> <li>• Visualisation developed and available within user front end tool LView.</li> </ul>	<ul style="list-style-type: none"> <li>• Instant awareness of faults on the networks leading to quicker response and resolution times, in some instances predicting a fault before it occurs.</li> <li>• Ability to view and manage peaks in Load.</li> </ul>
<p><b>NCP Rollout Programme</b></p>	<p>The deployment of Network Controllable Point (NCP) devices that monitor the network at scale, in order to improve the network reliability and outages.</p>	<ul style="list-style-type: none"> <li>• Increase in volume of NCPs installed.</li> <li>• Standardisation of the rollout to increase the efficiencies in the process.</li> <li>• Improve the asset monitoring to increase the device availability</li> </ul>	<ul style="list-style-type: none"> <li>• Building new tool to automate some parts of the process and have a single platform for all stakeholders involved in the process.</li> </ul>	<ul style="list-style-type: none"> <li>• Significant enhancements to network resiliency and fault resolution resulting in less unplanned power outages.</li> <li>• Ability to view and manage peaks in Load.</li> </ul>
<p><b>LV - Smart Meter Automated Fault Prediction</b></p>	<p>Development of Artificial Intelligence tools to identify patterns in Smart Meters fault data to identify cables that have a neutral fault risk.</p>	<ul style="list-style-type: none"> <li>• Pilot project commenced and completed during 2024.</li> <li>• LView updated to show network trace of network faults and potential location.</li> </ul>	<ul style="list-style-type: none"> <li>• Pilot results will help inform future Network Digitalisation investment in AI detection algorithms during 2025</li> </ul>	<ul style="list-style-type: none"> <li>• Improved network resilience by intervening ahead of failure, resulting in reduction in customer interruptions.</li> </ul>
<p><b>Smart Metering Data and Analytics</b></p>	<p>Delivery of a new cloud-based solution to manage network event and time series data for analytics activities. Visualisation of data to end users for analysis and decision making.</p>	<ul style="list-style-type: none"> <li>• Development of integrating LV Monitoring data into current systems now complete, with visualisation available in LView and PowerBI reporting tool.</li> <li>• Initiated upgrade of unified analytics platform.</li> <li>• Further algorithms developed in analytics platform for additional analysis scenarios.</li> </ul>	<ul style="list-style-type: none"> <li>• Begin system replacement tender process.</li> <li>• Complete integration for storing and visualising LV Monitor data.</li> <li>• Complete migration for unified analytics environment.</li> <li>• Develop further use cases within analytics platform.</li> </ul>	<ul style="list-style-type: none"> <li>• Facilitation of better reinforcement planning and forecasting to prevent asset failures resulting in power outages.</li> <li>• Optimised maintenance planning and historical data used to build predictive fault modelling.</li> <li>• Improved visibility to LV network allowing more informed decisions when designing customer connection requests.</li> </ul>



Initiatives	Summary	Progress in the last six months	Activities planned for the next six months	Measures of Success / Customer Benefit
<p><b>Engineering Net Zero (ENZ) Platform</b></p>	<p>Development of a near real-time analytical platform, enabling data-driven visibility, planning and operation of the network which relies on four integrated data sources (network monitoring, smart meters, enhanced forecasting and asset condition).</p>	<ul style="list-style-type: none"> <li>Financial authorisation for the development of ENZ Platform Minimum Viable Product (MVP) has been obtained.</li> <li>The MVP comprises migration of the ENZ Model functionalities (conclusive with the linear optimiser engine deciding the combination and sequence of solutions to manage constraints in the network) onto NAVI platform.</li> </ul>	<ul style="list-style-type: none"> <li>The Delivery of the ENZ Platform MPV will take place by the end of Q1 2025.</li> <li>Once the MVP is validated on NAVI, a new set of inputs (network connectivity model, updated asset features, and demand forecasts) will be used to obtain a new set of refreshed results to be used by the business.</li> </ul>	<ul style="list-style-type: none"> <li>More informed network operations and optimised network investment planning to reduce target network reinforcement ahead of time and avoid capacity overloads.</li> <li>Improved customer connections processes.</li> <li>Flexibility tendering will be improved.</li> </ul>
<p><b>RHYTHM - Flow Orchestration</b></p>	<p>Implementation of the Salesforce Flow Orchestration technology to standardise, streamline and enhance the current NCP Deployment and LV Monitor Rollout programmes.</p>	<ul style="list-style-type: none"> <li>Implementation of an MVP end to end tool allowing tracking and management of the installation process. (MVP excludes any system integrations).</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of multiple system integrations, allowing automated gathering of multiple data fields.</li> <li>Implementation of reporting elements allowing visibility and transparency around the installation process and any associated bottlenecks.</li> </ul>	<ul style="list-style-type: none"> <li>Less manual effort involved with the installation process (admin tasks).</li> <li>Improved ownership of each stage of the processes.</li> <li>Enhanced data accuracy.</li> <li>Visibility of current status of all jobs and identification of any blockers/bottlenecks.</li> </ul>



# Supporting the Development of New Business Models and Markets

Our commitment to reaching Net Zero will require alternatives to traditional working practices, and the development of New Business Models and Markets which will be enabled through digitalisation.

Firstly, digital solutions will be fundamental in our transition to Distribution System Operation (DSO). Digitalisation will enable the functions and activities such as flexibility procurement and Distributed Energy Resources (DER) dispatch. By adopting an open, collaborative approach, we will harness innovation to lower costs for customers, accelerate the low carbon transition and take steps on our journey towards becoming a DSO. Secondly, it is our vision to embed sustainability into how we operate, ensuring decisions are made with a detailed consideration of environmental impacts upstream and downstream of our activities. To enhance UK network interoperability, a number of these solutions are in collaboration with other DNOs/DSOs.

## We will deliver this by:

### 01

Deployment of a solution to capture and automate information on waste generated in the supply chain and its disposal or reuse.

### 02

Introducing an Active Network Management (ANM) platform, to monitor and allocate power capacity to customers in areas at risk of exceeding network capacity.

### 03

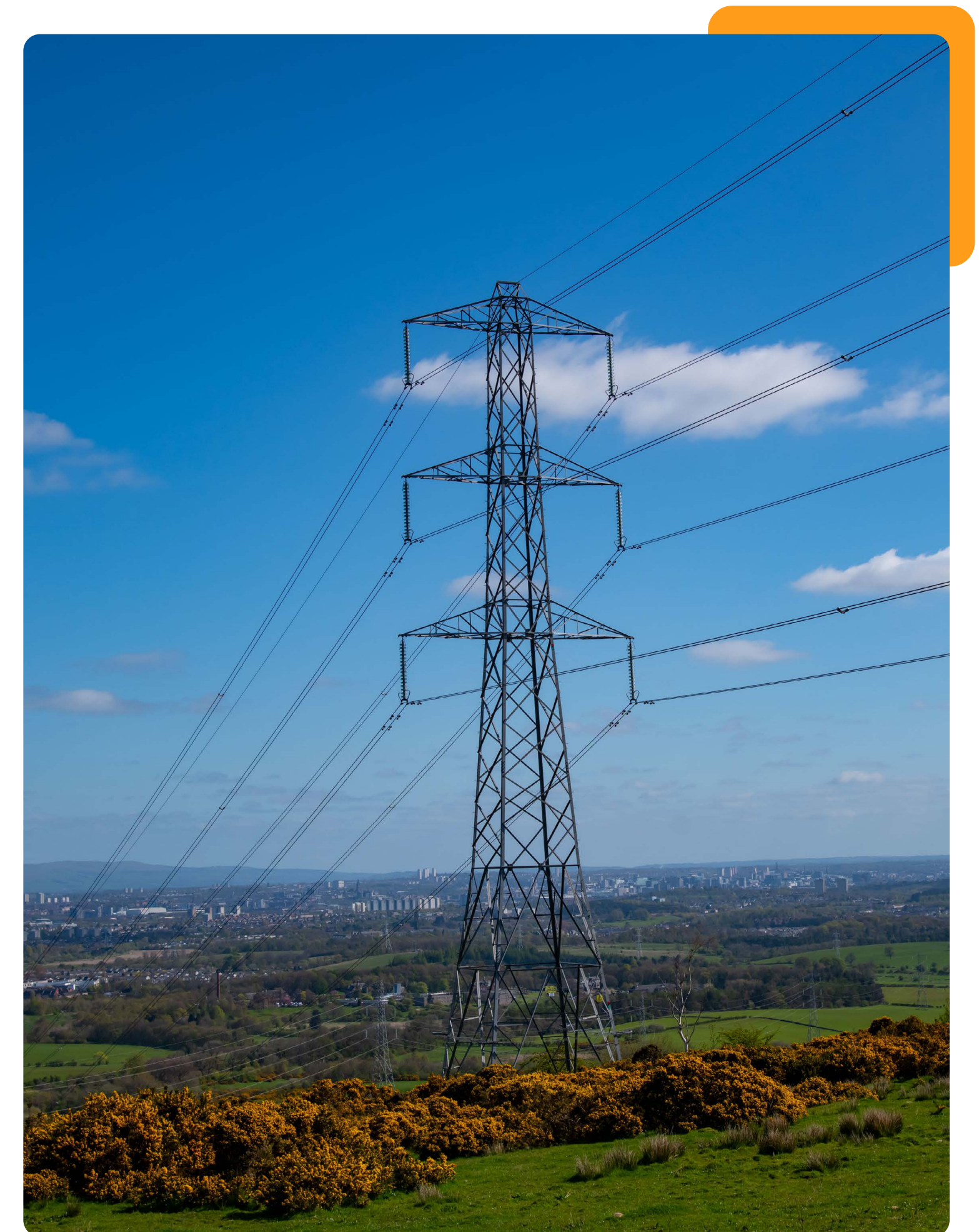
Providing stakeholders with a platform to manage flexibility processes from procurement through to settlement.

### 04

Development and pilot of methodologies and tools for Biodiversity and Natural Capital assessment, including Carbon Accounting methodologies and tools.

## This will deliver benefits such as:

- Supporting our customers and stakeholders to develop solutions and innovations through provision of data and information.
- Enabling customers to connect ahead of conventional reinforcement solutions by unlocking capacity in our network.





Initiatives	Summary	Progress in the last six months	Activities planned for the next six months	Measures of Success / Customer Benefit
<p><b>Contractor Sustainability Resources Tool</b></p>	<p>Solution to capture and automate information about waste generated in the supply chain and its eventual disposal, recycled and reused content of our materials and the carbon emissions associated with our operations. This includes the deployment of IT solutions to automate the capture of emission information across both our network activities and Scope 3 emissions (those produced indirectly across the wider supply/ value chain), e.g., carbon emissions.</p>	<ul style="list-style-type: none"> <li>• A tendering process was undertaken to select a supplier for the Contractor Sustainability Resources Tool. A supplier has now been chosen and we are currently working on an implementation plan to ensure all current contractors using the previous platform are migrated by the end of November.</li> </ul>	<ul style="list-style-type: none"> <li>• Set up of the new Contractor Sustainability Resources Tool will be completed. There will be communication and training provided to the internal and external users of the tool and a smooth transition and onboarding of existing contractors and a selection of new priority contractors will take place.</li> </ul>	<ul style="list-style-type: none"> <li>• Understand the fate of waste being produced and source of materials consumed to inform business decisions to increase reuse and recycling as per our Sustainable Business Strategy.</li> <li>• Inform infrastructure design decisions to minimise greenhouse gas emissions during development</li> </ul>
<p><b>Biodiversity and Natural Capital</b></p>	<p>Development and pilot of methodologies and tools for delivering Biodiversity and Natural Capital assessment. Creation of a desk based baseline of Natural Capital across our network using GIS capabilities, in collaboration with stakeholders and other DNOs.</p>	<ul style="list-style-type: none"> <li>• Reduced sites needing digitised for input to tool.</li> <li>• Obtained digitalised SPEN land ownership file for running in tool.</li> <li>• Commenced sandbox sessions on natural capital tool.</li> <li>• Eco Uplift Tool procurement, and build of Natural Capital Baseline of the Network.</li> </ul>	<ul style="list-style-type: none"> <li>• Delivery of Natural Capital and Biodiversity Baseline Project</li> <li>• Procurement and Cyber compliance testing of tool for use in SPEN.</li> <li>• Obtain license for Eco-Uplift and roll out training for use across all three licenses.</li> </ul>	<ul style="list-style-type: none"> <li>• Natural Capital tool and Optioneering tool successfully embedded in routing/ siting decision making processes.</li> <li>• Minimisation of impacts on biodiversity from development of network.</li> <li>• Enhancement of natural capital across the network where possible.</li> </ul>
<p><b>Carbon Accounting</b></p>	<p>Development of a digital tool to replace manually edited spreadsheets used to gather lifecycle sustainability information from electrical equipment suppliers.</p>	<ul style="list-style-type: none"> <li>• Carbon Product Calculator Tool development is complete and the 'Launch' Event is scheduled for January 2025.</li> </ul>	<ul style="list-style-type: none"> <li>• Stakeholder engagement (internal and external) and change management process (internal) to ensure the tool is used.</li> </ul>	<ul style="list-style-type: none"> <li>• Digital Carbon Product Calculator Tool successfully embedded in tender contracts.</li> <li>• Minimise the greenhouse gas (carbon) emissions from the development of infrastructure."</li> </ul>
<p><b>Active Network Management Portal Implementation</b></p>	<p>A customer portal giving a view of our distributed control system that continually monitors the limits in a given area of the network and then allocates the maximum amount of capacity to customers in that area.</p>	<ul style="list-style-type: none"> <li>• System requirements fully defined and documented.</li> <li>• Approval of funding to commence build of ANM Customer Portal.</li> </ul>	<ul style="list-style-type: none"> <li>• Commence design of a secure data platform to receive ANM Data and present the data to our customers in an event-driven fashion via a secure login within our Customer Portal.</li> </ul>	<ul style="list-style-type: none"> <li>• Customers able to Self-Serve ANM Data, creating data engagement with customer without requiring additional SPEN resources.</li> <li>• Improved Governance, increased data security and compliance with license obligations.</li> </ul>



# Investing in the Digital Skills of Our People

Investing in our people will enable us to accelerate adoption of digital technology and empower our people to identify new and innovative ways of performing their tasks. We will support our people in this transition by equipping them with the right agile and digital skills.

We recognise the value that these skills bring to our customers and provide exciting opportunities for our people to play their part in the creation of a modern digitalised energy system. We have now started tracking the specific training activities being carried out across each of our key project deliveries to ensure successful adoption of these products, which are detailed in the following pages.

## We will deliver this by:

### 01

Implementing a cultural change programme so that our people recognise the value data and digital skills can unlock for our customers, stakeholders, and our own organisation.

### 02

Specialist training delivered by external and internal subject matter experts.

### 03

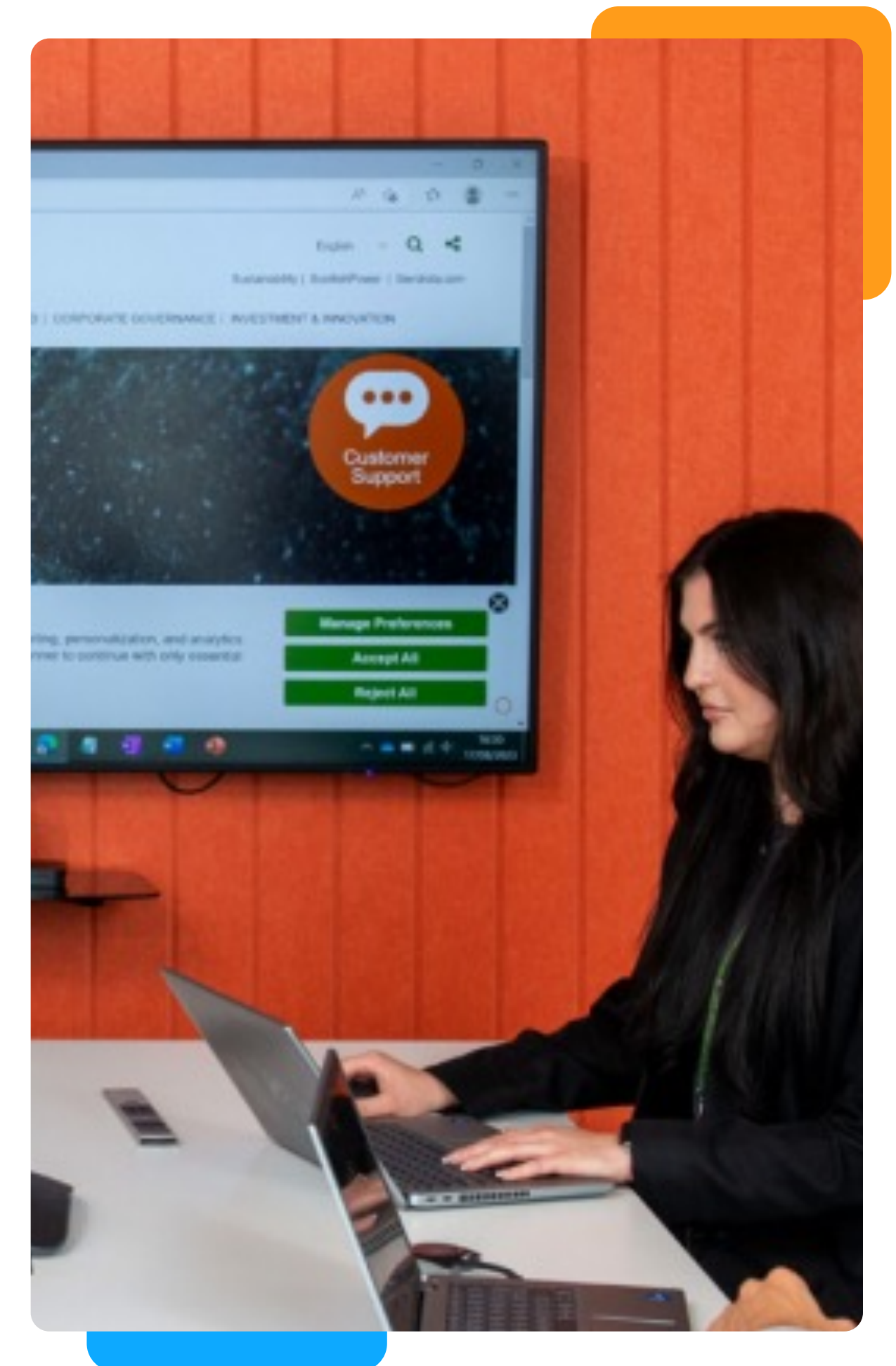
Expanding our graduate programme and recruitment policies to include digital skills.

### 04

Using gamification of training and knowledge-based AI assistants to enhance our learning and development programmes.

## This will deliver benefits such as:

- Expertly skilled staff / More diverse employee skillset.
- Accelerate the adoption of digital technology in SPEN to allow early delivery of benefits for our customers.
- Provide crucial skills to adapt to industry change.
- Embed a culture of continuous learning and development.





Initiatives	Summary	Activities completed and planned for the next six months	Measures of Success / Customer Benefit
<p><b>LView Tool Training</b></p>	<p>The LV Training Tool LView provides a near real-time digital connectivity model of the network, and is used to train the workforce in its functionalities and potential uses.</p>	<ul style="list-style-type: none"> <li>• Training has been successfully rolled out to all LView users to expand the functionalities, use and knowledge of LV room within SPD and SPM.</li> <li>• Training to be incorporated into Technical Training programs delivered at our training centres.</li> <li>• Superuser focus group established to continue knowledge, adoption and improvements of LView within each district.</li> <li>• Online learning repository including guidance notes, troubleshooting, and FAQs.</li> </ul>	<ul style="list-style-type: none"> <li>• Increase user engagement and use of LView tool.</li> <li>• Reduction in fault identification and resolution.</li> <li>• Reduction in queries received by LV Control Room.</li> <li>• Training to includes specific modules, demos, practices, and quizzes.</li> <li>• Increase understanding and management capabilities related to required changes in the business.</li> <li>• Align training with our agile strategy.</li> </ul>
<p><b>PROSCI Practitioner Training</b></p>	<p>To raise awareness of why change is being introduced and to make sure the context is understood in terms of people, processes and systems, a number of our workforce have completed Prosci Practitioner training. This training aligns with our Agile strategy as we implement an Agile form of the Prosci ADKAR model to drive successful change at an individual level.</p>	<ul style="list-style-type: none"> <li>• All cohorts for 2024 have successfully completed PROSCI training. Candidates are being identified to be included in our 2025 training incentive.</li> <li>• Participants to embed the proficiencies gained through training to drive change while fostering a change ready culture.</li> <li>• Implementation of monthly Change Practitioners Forum, allow for the share of knowledge, best practice and support the development of new practitioners.</li> <li>• The business now has 60 trained Change Management Practitioners.</li> </ul>	<ul style="list-style-type: none"> <li>• Increase understanding and management capabilities related to required changes in the business.</li> <li>• Increased project success and return ROI.</li> <li>• Improved adaptability across the organisation.</li> <li>• Reduction in stress and anxiety for those involved in change leading to increased engagement.</li> <li>• Align training with our agile strategy.</li> <li>• Increase understanding and management capabilities related to required changes in the business.</li> </ul>
<p><b>Knowledge Transfer Portal</b></p>	<p>A new SPEN specific training platform to improve our training delivery. The Knowledge Transfer Portal has greater flexibility with more options for users depending on learning level or preference.</p>	<ul style="list-style-type: none"> <li>• Development of training material to sit within the portal.</li> <li>• Training modules, process and procedural documentation will be aligned to business areas and defined roles.</li> <li>• Content for each business area and role continues to be gathered and populated.</li> </ul>	<ul style="list-style-type: none"> <li>• Communication system where employees can ask questions and receive answers in a quick and agile way.</li> <li>• A user-friendly and intuitive platform.</li> <li>• Greater flexibility with more options to obtain feedback, evaluations, and reporting.</li> </ul>
<p><b>NAMS Training</b></p>	<p>The Network Asset Management Systems (NAMS) are integral systems within SPEN and so is critical the workforce has the training, skills, and knowledge to use these systems effectively.</p>	<ul style="list-style-type: none"> <li>• Updated training content to be reviewed and validated with Business SMEs.</li> <li>• Training materials to be published to internal learning Management System.</li> <li>• Tailored training paths to be curated for each role to assign relevant training materials.</li> </ul>	<ul style="list-style-type: none"> <li>• Targeted role based training for all New Starts allowing for a reduction in training time.</li> <li>• Standardised approach to upskilling and refresher training.</li> <li>• Updated training for existing staff within SPEN that reflects all system and process changes.</li> <li>• Continuous training and process updates through BAU.</li> </ul>



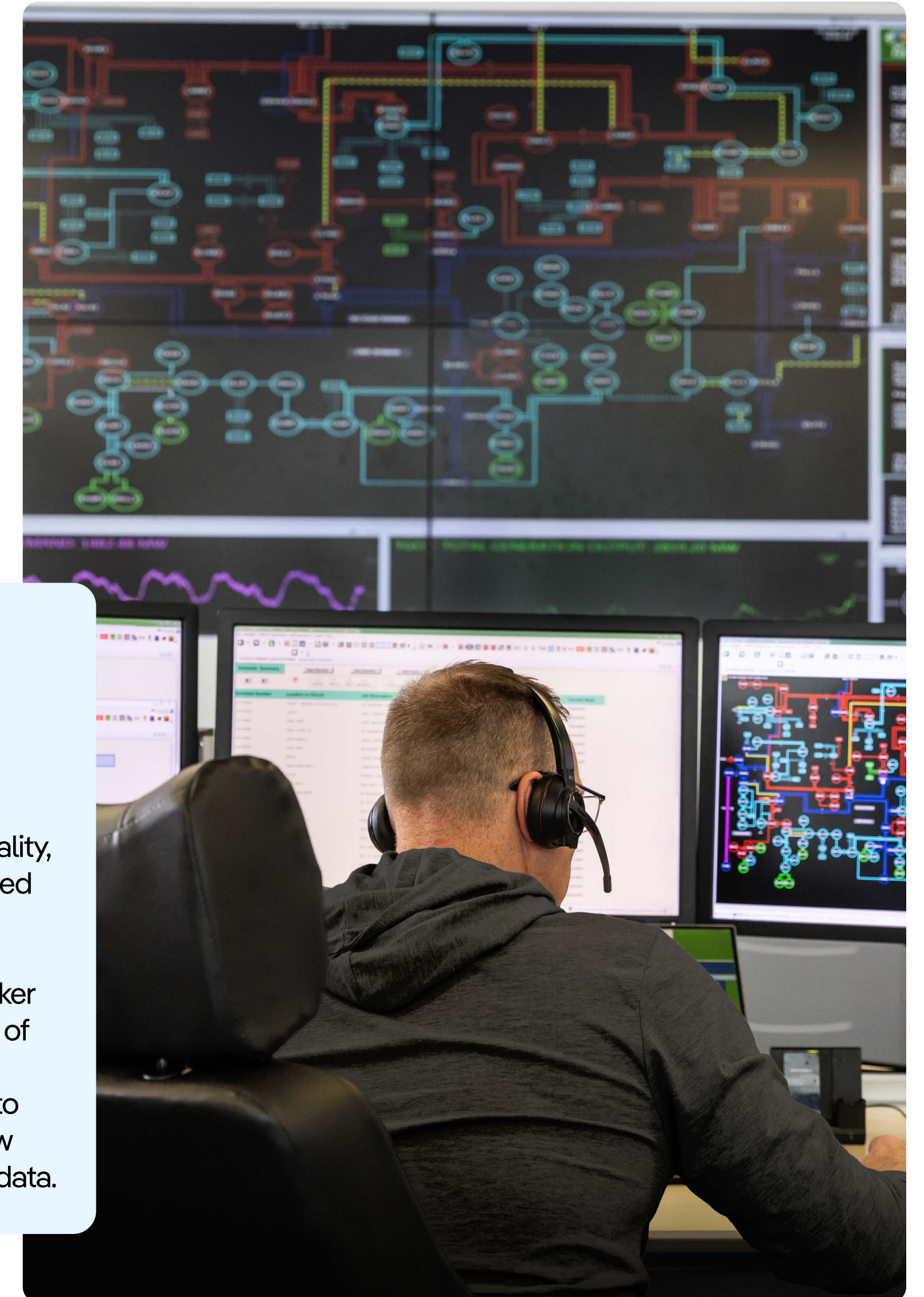
Initiatives	Summary	Activities completed and planned for next six months	Measures of Success / Customer Benefit
<p><b>Agile Methodologies</b></p>	<p>Adopting Agile methodologies plays a key role in steering our Digital Skills strategy, we have continued to invest in the enhancement of our workforce's proficiency in Agile principles and practices.</p>	<ul style="list-style-type: none"> <li>• The Scottish Power Agile Academy will be offering new training courses strategically focusing on 3 areas, Agile Leadership, Scrum Master and Product Owner training for 2025:</li> <li>• Facilitate the seamless integration of agile methodologies within our team, through targeted training and resources.</li> <li>• Expert led coaching and mentoring to aid in adoption of ways of working and to promote an agile mindset.</li> <li>• Promote a collaborative environment to share knowledge, best practice and lessons learned between different teams.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased knowledge and capability to deliver projects in an agile manner with the minimal viable product developed and released as early as possible followed by continuous, iterative improvements.</li> <li>• Early realisation of project benefits for customers.</li> <li>• Improved product quality through continuous testing and feedback.</li> <li>• Greater flexibility for the customer to adjust and improve throughout the development process.</li> </ul>
<p><b>Skills Matrix- Skills Mapping</b></p>	<p>A Skills Matrix is a visual tool used to identify, assess and track the skills and competencies of the workforce. It involves listing all relevant skills and competencies required for each role within the team and then assessing each employee's proficiency in those skills. This helps in identifying skill and knowledge gaps, curating training paths, priorities learning and provides clarity on the skills needed for each role.</p>	<ul style="list-style-type: none"> <li>• A Pilot Group of Application Analysts and Application Consultants has been selected to trial and refine the process prior to rolling out to the wider team.</li> <li>• Line managers to hold Development Discussion with each employee to align where they are on their skills development journey and identify skill and knowledge gaps.</li> <li>• Tailored training paths to be curated to support and promote continuous learning and development.</li> </ul>	<ul style="list-style-type: none"> <li>• The implementation of a Skills Matrix aid in:</li> <li>• Identifying the core skills required to drive skill growth and development on an individual and business level business.</li> <li>• Monitor and visualise the skills development to ensure the chosen training incentives deliver ROI.</li> <li>• Automates training needs assessments, identifying priority areas of skills development used to guide appropriate training solutions.</li> <li>• Produce tailored training plans outlining training required to bridge skill gaps and foster continuous learning and development on our digitalisation journey.</li> </ul>
<p><b>Mobility &amp; Scheduling Training- Salesforce Field App</b></p>	<p>Comprehensive training in use of Salesforce Field App to support the transition to the new platform. This allows the streamlining of processes related to field activities for planned and reactive work to improve operational efficiency, customer service and environmental performance.</p>	<ul style="list-style-type: none"> <li>• Training has successfully been delivered for Substation Inspection and key Health and Safety forms to SPD and SPM with positive feedback and adoption.</li> <li>• Training to be incorporated into Technical Training programs delivered at our training centres.</li> <li>• The next focus will be to develop training for Inspection and Maintenance.</li> <li>• Conduct a training needs analysis for each effected user group.</li> <li>• Develop a robust training plan.</li> <li>• Design Train the Trainer sessions to support training roll out.</li> <li>• Deliver and distribute support documents and reference guides.</li> </ul>	<ul style="list-style-type: none"> <li>• Improved Health &amp; Safety through better visibility of data and information in the field.</li> <li>• Improved Customer Service through quicker response times</li> <li>• Improved operational efficiency through optimised scheduling and better visibility of resources and field work.</li> <li>• Significant reduction in Applications required to complete operational activities.</li> </ul>



# Improving Mastery of Our Data

Data is a key enabler of a decarbonised, decentralised, and digitised energy future. It's the tool that will bridge the gap between where we are now versus where we need to be – to achieve Net Zero by 2050.

Data is essential to optimising the value of assets, driving innovation, better understanding risks, and increasing system resilience. As the owner and operator of three licence businesses, data about our assets, our services, and our capabilities, will be key in supporting the transition to Net Zero. Improving the mastery of our data allows us to quickly, and more effectively, make information available, and improves our ability to manage data security. Sharing our data with external parties will lead to better whole system solutions and new, innovative ways of working.



## We will deliver this by:

### 01

Implementing our Data Governance platform and establishing a SPEN data catalogue, which will support delivery of our Data Governance Framework.

### 02

Developing the policies and procedures required to standardise the way that we manage data within our organisation.

### 03

Continuing to develop our Open Data Portal by incrementally increasing the number of datasets published, aligning with stakeholder needs.

### 04

Deploying fully integrated analytics capability through Azure and AWS platforms, and realising value add data use cases.

## This will deliver benefits such as:

- Improvements in data quality, enhancing data sets shared with our stakeholders.
- Improving our data triage processes, enabling quicker and more secure transfer of data to our stakeholders.
- Develop data use cases to support customers in how they access and use our data.





Initiatives	Summary	Progress in the last six months	Activities planned for the next six months	Measures of Success / Customer Benefit
<b>Data Governance Platform</b>	Implementation of our Data Governance platform (Informatica) will enable us to monitor, control and report on our data assets. The solution includes establishment of a data catalogue; a detailed inventory of all our data assets, with key attributes, which enhances data access to our business users	<ul style="list-style-type: none"> <li>• Deployed Informatica to the Production environment.</li> <li>• Robust assessment of data quality for a specific use case SMART data completed.</li> <li>• Demonstrations of functionality of the data catalogue undertaken with various stakeholders.</li> </ul>	<ul style="list-style-type: none"> <li>• Customer Address Database Metadata imported onto the platform.</li> <li>• Building the roadmap for user cases to be deployed across 2025 and beyond.</li> </ul>	<ul style="list-style-type: none"> <li>• Establishment of data accountabilities in SPEN.</li> <li>• Development of a SPEN data catalogue – providing a detailed inventory of all data assets and their associated metadata.</li> <li>• Data quality metrics in place.</li> </ul>
<b>Prosper Replacement</b>	Power Systems performance reporting system used to produce information on customer interruptions and equipment failures, and to report on customer statistics for customer service and equipment reliability.	<ul style="list-style-type: none"> <li>• User Interface (Front End) developed in line with business requirements.</li> <li>• Automation of data collection repositories.</li> <li>• Testing and validation of the new platform.</li> </ul>	<ul style="list-style-type: none"> <li>• Completion of user testing.</li> <li>• Validation of the business logic associated with the reports generated.</li> <li>• Production Deployment.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased security and data encryption for protection of data.</li> <li>• Improved audit capabilities.</li> <li>• Prosper and Transactional Data response time improvements, measured against expected time.</li> </ul>
<b>SMART Replacement</b>	Smart Meter Systems analyse all network data, including smart meter and substation monitoring data for a better understanding of network operations and conditions.	<ul style="list-style-type: none"> <li>• Implementation of Data Model for EnergyIP and NAVI data semantic model for Smart Meter reports.</li> <li>• Testing of Smart Meter reports completed.</li> <li>• 13 Smart Meter reports deployed to Power BI Premium Service.</li> <li>• Design of LV Monitoring data model.</li> </ul>	<ul style="list-style-type: none"> <li>• Deployment of various Power BI reports (HV Backfeed, ESRI Connectivity, EnergyIP).</li> <li>• Migration of Data Science Processes.</li> <li>• Migration of LV Monitoring data and Power BI reports.</li> <li>• Migration of PSAlerts data and Power BI reports.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased security and data encryption for protection of data.</li> <li>• Increased data encryption.</li> <li>• Improved audit and reporting capabilities.</li> <li>• Transactional Data response time improvements, measured against expected time.</li> </ul>
<b>ENSAPMIG</b>	Case to utilise Azure Synapse Data platform to migrate ENSAPMIG, an obsolete oracle database used for operational & regulatory reporting	<ul style="list-style-type: none"> <li>• Completion of development and testing.</li> <li>• Validation of the business logic associated with the reports generated.</li> <li>• Production Deployment.</li> </ul>	<ul style="list-style-type: none"> <li>• Parallel Running of both systems.</li> <li>• Embedding new ways of working.</li> <li>• Decommissioning of the old system.</li> </ul>	<ul style="list-style-type: none"> <li>• As more data use cases are implemented on the platform, this will increase accessibility to data and potentially produce instances where this data can be accessible externally via our Open Data Platform.</li> </ul>
<b>NEOP</b>	To provide outage data in a standard format to the new National Energy Outage Platform (NEOP).	<ul style="list-style-type: none"> <li>• Testing successfully completed.</li> <li>• Go Live into Production and the system now fully operational.</li> </ul>	<ul style="list-style-type: none"> <li>• Project Closedown.</li> </ul>	<ul style="list-style-type: none"> <li>• Successful supply of outage data to the regulator in the agreed standard format and regularity.</li> </ul>



Initiatives	Summary	Progress in the last six months	Activities planned for the next six months	Measures of Success / Customer Benefit
<p><b>Open Data Portal</b></p>	<p>Our Open Data Portal was implemented in 2023. We are now focused on continuous development of this Portal to facilitate sharing data with our customers and stakeholders in a way that aligns with their needs.</p>	<ul style="list-style-type: none"> <li>• Publication of 13 new data tables, including data on historical outages and flexibility.</li> <li>• Publication of the outputs of our Data Triage Risk Assessments.</li> <li>• We have enhanced the feedback forms available on our Portal.</li> <li>• We have launched the first in a series of videos, supporting our customers and stakeholders in using our Portal.</li> <li>• We have launched our second open data survey which will gather feedback from our stakeholders to inform our 2025 plans.</li> </ul>	<ul style="list-style-type: none"> <li>• Continued engagement with our customers and stakeholders.</li> <li>• Publish additional videos to continue to support our customers and stakeholders in using our Portal and making the most of our available data.</li> <li>• Expanding our Portal to include additional datasets to meet the needs of our customers and stakeholders.</li> <li>• New visualisations to enhance the data on our Portal.</li> </ul>	<ul style="list-style-type: none"> <li>• Stakeholder feedback through Open Data Surveys and use of feedback forms.</li> <li>• Trend analysis of user interactions with our Portal.</li> <li>• Incremental improvements in Data Quality across our available data.</li> </ul>

# Data Best Practice

At the start of RIIO-ED2, Ofgem introduced Data Best Practice (DBP) guidance, a suite of 11 principles designed to ensure data is treated as an asset and used effectively for the benefit of consumers, stakeholders, and the public interest.

Compliance with DBP is at the heart of our data strategy and is stewarded by our Network Data and Intelligence function. The table below summarises how we currently comply with all 11 principles of the guidance. For information on the ambitious targets that we have set for improved compliance throughout RIIO-ED2, please refer to our RIIO-ED2 Digitalisation Strategy.

DBP Principle	How we comply
<b>1</b> Identify the roles of stakeholders of Data Assets.	We have good practices deployed in critical business areas, with well-maintained responsibility matrices in place. In the last six months we have signed off our new Data Governance policy, which will be rolled out in 2025 and will be used to steward the implementation of Informatica across our SPEN business, and build a centralised catalogue of all data assets, alongside a quality framework.
<b>2</b> Use common terms within Data Assets, Metadata and supporting information.	We have standardised our business terminology through our core financial and asset management services, which are aligned to industry standards including Regulatory Instructions and Guidance (RIGs) where relevant. We have also implemented Dublin core in our Open Data Portal and our data catalogue tool.
<b>3</b> Describe data accurately using industry standard Metadata.	Our Open Data Portal and Informatica align with the Dublin Core Metadata standard. In the last 6 months we have developed our metadata management policy which sets out core principles and expectations and will be rolled out in 2025.
<b>4</b> Enable potential Data Users to understand Data Assets by providing supporting information	Our Open Data Portal provides detailed descriptions on each of our published datasets. We have also developed a suite of risk assessments and quality assessments of our data sets, which will be published in Dec/Jan.
<b>5</b> Make Data Assets discoverable for potential Data Users	Well managed processes in place across critical business areas for managing and controlling access to data and information, which includes standardised single sign on for all system developments, and enables centralised access control for our systems. Going further, our Informatica catalogue POC has now concluded which focused on our asset data, and this will be incrementally developed going forward.

DBP Principle	How we comply
<b>6</b> Learn and deliver to the needs of current and prospective Data Users	Following our Q1 Open Data survey, and through feedback forms and direct engagement with stakeholders, they have told us they wanted more access to operational data sets, including outage data, and more help in navigating and understanding our data. They also wanted easier mechanisms to engage with us. We have delivered improvements in all of these areas, launching the first in a series of instructional videos to help users of our portal, creating new data sets including historic outage data, and improving our feedback and data request forms on our website. Our next stakeholder survey has launched and will support the development of our 2025 plans.
<b>7</b> Ensure data quality maintenance and improvement is prioritised by Data User needs	Our newly developed data quality policy sets out our approach to the principles we will adhere to. This will be rolled out in 2025. Informatica will allow us to quantitatively assess the quality of our data assets which we can monitor and track.
<b>8</b> Ensure Data Assets are interoperable with Data Assets from other data and digital services	We have revised our data pipeline and data warehouse design to enable data to be interoperable and for re-use across systems, this is being applied in the current scope of our migration of Network Asset Risk Metric (NARM) to the Azure cloud. Moreover, we have put extra emphasis on revising our data modelling to ensure this data is compatible across source systems. We are also active participants in the Data Sharing Infrastructure (DSI) working groups, working to ensure that future datasets shared through this mechanism will be interoperable.
<b>9</b> Protect Data Assets and systems in accordance with Security, Privacy and Resilience best practice	Prior to sharing datasets on our Open Data Portal, data triage is undertaken by the Data Owner in conjunction with our Cyber Security and Data Protection colleagues. This triage process includes conducting risk assessments for all data publications and has been re-tested throughout 2024 as evolving information has been developed in conjunction with industry working groups. We take a prudent view to security, privacy and resilience, and ensure that the balance of open data is aligned with managing risks.
<b>10</b> Store, archive and provide access to Data Assets in ways that ensures sustained benefits	In the last 6 months we have developed our Data Lifecycle policy. This will be rolled out in 2025.
<b>11</b> Treat all Data Assets, their associated Metadata and Software Scripts used to process Data Assets as Presumed Open	Our new reporting suite, which will be available on our website from December, sets out our approach to data triage, and provides insights into our decision making in what we shared under our open license or our shared license, and when we determine data cannot be shared. We aim to fulfill the needs of our stakeholders, whilst sharing only the data they require, in a secure and transparent manner. Our methodologies are also now nearing completion, which will be published on our Portal in Q1.

# Setting Ourselves Up For Success

Our Business Transformation Directorate has been created, introducing additional capacity and new roles into the team. This enhances our capabilities to better serve our business and deliver outcomes for our customers and stakeholders.

Our Digitalisation Strategy drives and shapes our programme. Our delivery programme has been segmented into Value Streams, where each Value Stream is responsible for the design, development and delivery of projects aligned to a specific theme. We supplement our Value Streams with strategic partners to increase capacity, capability, and technical expertise to ensure we have the right mix of skills and support to deliver on our digital plan commitments. Our Value Streams have clear accountability for end-to-end products and systems lifecycle, providing application support for systems within their remit.

Our delivery model is underpinned by two central support functions, providing change management and solution architecture expertise to make sure the programme delivers quality, outcomes and value.. One of the key principles of our delivery model is to ensure the right delivery method for each initiative with the right mix of internal and external resources and skill sets. This hybrid resourcing model utilises a combination of external partners and SPEN staff, allowing us

to develop our people and build more skills and capability internally, driving cost and efficiency. In the past 6 months we have recruited 7 additional staff to bolster our internal capability and capacity.

Functionality and technology change impacts our internal stakeholders, and to enable and manage that change we use the Prosci ADKAR Change Management methodology. Operating a 'hub and spoke' model, the Transformation Team are viewed as experts in Change Management and provide coaching and upskilling to our network of Change Practitioners across our organisation. We have also established our Network Data & Intelligence and Network Digitalisation teams who sit outside of the Business Transformation Directorate and bring the additional skill sets and experience required to supplement our core project delivery function. These teams play a critical part in ensuring our ability to successful deliver our digitalisation programme and will continue to do so as we progress throughout RIIO-ED2.

## Architecture and Strategy Team

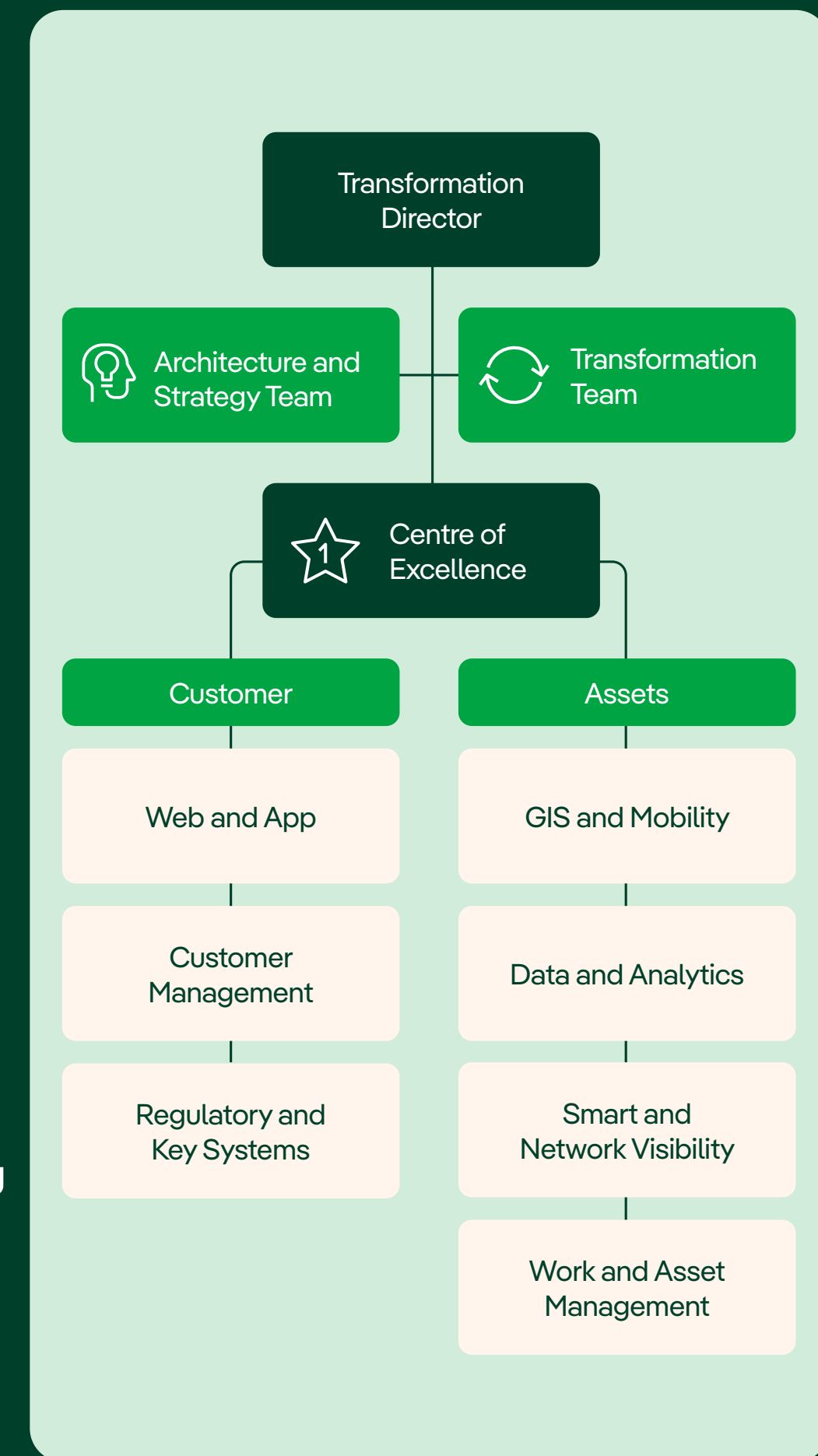
Our Architecture and Strategy Team own our Digitalisation Strategy and Roadmap and are responsible for developing and driving our digital strategy. They provide architectural oversight and test solutions for compliance with Digital and Data roadmaps. They are responsible for all our Digital submissions and publications which provide updates on our Digital Strategy and delivery progress. The number of Architects in this team has grown to ensure we have expertise available across our growing suite of projects, whilst we continue to align our team with SPEN's Cyber function to ensure solutions are secure by design.

## Centre of Excellence

Our Centre of Excellence is our delivery engine. We have created a delivery model which is efficient, and ensures clear accountability for delivering outcomes for our customers and stakeholders. This structure strengthens our delivery capability, capacity, agility and provides us with resilience to grow in the future as and when we need to. Our team of experienced technology delivery professionals provide their domain expertise and stewardship into all our project delivery teams.

## Transformation Team

Our Transformation Team ensure change is managed holistically across our programme, and that changes for people, processes, and systems are fully impact assessed, communicated, and trained. A team of Sigma Black Belts are deployed on key Strategic Transformation projects, using their expertise to enable transformation. Our PMO branch of this team underpin the entire Business Transformation Directorate to make sure the programme is well defined, managed, delivers planned outcomes and committed value for our Customers and Stakeholders. This team have dedicated Communication experts who support effective communication as solutions and new technology is implemented.





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