

Digital Strategy A Strategy for Net Zero

Revised - March 2024

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About Us

We are SSEN Transmission, the trading name for Scottish Hydro Electric Transmission.

We are responsible for the electricity transmission network in the north of Scotland, maintaining and investing in the high voltage 132kV, 220kV, 275kV and 400kV electricity transmission network.

Our network consists of underground and subsea cables, overhead lines on wooden poles or steel towers, and electricity substations. It extends over a quarter of the UK's land mass, crossing some of its most challenging terrain.



Scotland's transmission network has a strategic role to play in supporting delivery of the UK and Scotland's Net Zero targets



Our first priority is to provide a safe and reliable supply of electricity to our communities. We do this by taking the electricity from generators and transporting it at high voltages over long distances through our transmission network for onwards distribution to homes and businesses in villages, towns and cities.

Our operating area is home to vast renewable energy resources and this is being harnessed by wind, hydro and marine generation. Working closely with National Grid, the GB Transmission System Operator, we also enable these electricity generators to connect to the transmission system by providing their connections and allowing the electricity generated by them to be transported to areas of demand across the country.

Scotland's transmission network has a strategic role to play in supporting delivery of the UK and Scotland's Net Zero targets. We're already a mass exporter of renewable energy, with around two thirds of power generated in our network area exported to demand centres further south. By 2050, the north of Scotland is expected to need 40GW of low carbon energy capacity to support Net Zero delivery. For context, we currently have over 9GW of renewable generation connected in the north of Scotland.





Since our original strategy was created, the investment in our Pathway to 2030 programme has increased from circa £10bn to over £20bn, meaning we are delivering one of the biggest investment programmes in the north of Scotland for almost a century. Working together, this investment will help unlock cleaner, more secure energy for generations to come.

In SSEN Transmission, we have an exciting opportunity to deliver unprecedented growth and it's important that we are continually evolving to operate at our best, whilst also delivering value for our shareholders, customers, and stakeholders.

As a regulated business, we adhere to the guidelines and structure defined by the GB energy regulator, Ofgem, who determines how much revenue we are allowed to earn for constructing, maintaining and renovating our transmission network in the north of Scotland. These costs are shared between all those using the transmission system, including generation developers and electricity consumers.

Following a <u>minority stake sale</u> which completed in November 2022, we are now owned 75% by <u>SSE plc</u> and 25% by <u>Ontario Teachers' Pension Plan Board</u>.



SSE is a purpose-led energy company that creates value by investing in the electricity infrastructure and businesses needed in the transition to Net Zero.

Learn more about SSE here



Ontario Teachers' Pension Plan is a purpose-driven, long term-oriented investor that is driving positive environmental and social impact.

Learn more about OTPP here



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Executive Summary

Our March 2024 Digital Strategy update represents the latest evolution in our planning for digital initiatives throughout RIIO-T2. Guided by our Vision and informed by Ofgem's FSNR (Future Systems and Network Regulation), our delivery will enhance our maturing technology foundations and digitally transform end-to-end value chains to achieve timely, efficient and effective data exchange and integration.

Digitalisation and its implications for a Transmission Operator have developed significantly since our last Digital Strategy was published in March 2022 and our IT and Digital investments are being prioritised. In line with Ofgem's FSNR, we are committed to digitalisation that enables transformational system-wide benefits, addresses demand growth, decarbonisation and improves resilience.

Our Digital delivery is organised into five distinct Value Streams covering SSEN Transmission's entire business, aligned with our strategic themes and our RIIO-T2 Plan. The impact of delivering Net Zero will be substantial, and significant, on our network and our business. We are already seeing unprecedented growth in the number of connection requests. The number and size of capital projects that we will deliver on an annual basis between now and 2030 will more than double in scale in comparison to the RIIO-T1 period. Now separated from SSEN Distribution, our business is growing in capacity and capability to meet these demands.

Technology investment, through our Digital Programme, is key to our success. This is both in terms of building the platforms and capabilities to enable our business to operate more effectively, and in new digitally enabled ways. Through the liberation of data and exploitation of information in day-to-day business decision making, we aim to drive efficiencies through our work that directly correlate to benefits for the end consumer.

Our Digital Strategy sets out our vision to be a more digitalised business and builds on the foundation of our Strategic Pillars to help us to identify where digital innovation and investments add value to internal and external stakeholders, enhances customer experience and acts as an accelerator for the value we create for our end customers. End-to-end transformation of our efficiency, and the ability to focus on high value add work, will also drive employee satisfaction and help us embed a culture of collaboration, data best practice and analytical problem solving.

Our 5 clear goals for RIIO-T2.



Transport the renewable electricity that powers 10 million homes

100% network reliability for homes and businesses

Every connection delivered on time



One third reduction in our greenhouse gas emissions







Introduction

In our Digital Strategy in March 2022, which you can access <u>on our website here</u>, we outlined our Digital Vision and how our Vision aligns with our business plan strategic themes and our 5 Clear Goals for RIIO-T2.

Two years on, we can see our Digital Vision delivering innovation, insight and value to our internal and external stakeholders. We are also adapting to drive even greater change and value to our customers, stakeholders and communities through our 'Pathway to 2030' commitments and our alignment to Ofgem's Future Systems and Network Regulation (FSNR).

Our March 2024 Digital Strategy update will provide an overview of the capabilities being delivered via our Digital Value Streams:





Customers and Stakeholders

Projects & Capital Delivery



Network Planning and Commercial



Asset Management and Operations



Enabling IT and Business Functions

For each Value Stream we will set out the key strategic objectives that we continue to pursue. We will also outline the principles that we are taking to digitally transform our business capabilities.

This Digital Strategy update has been prepared in accordance with the requirements of **SpC 9.5 of SSEN Transmission's Electricity Transmission Licence**, and delivery of its vision will assist SSEN Transmission in discharging its responsibilities as it exercises its rights and obligations under this licence.



What's new?

The 5 clear Transmission goals we articulated in our March 2022 Strategy, remain consistent and inform this Digital Strategy update. Our initiatives included within our Digital Strategy continue to focus on making it easier for our colleagues, customers and stakeholders to access, request, analyse and gather insights from our data.

Since we published our Digital Strategy in March 2022, we have delivered new Digital capabilities to our business. These are captured in Value Stream roadmaps which cover the horizon of RIIO-T2, ending in March 2026.

We see making our network data more accessible to our stakeholders as a fundamental enabler to achieve UK Net Zero targets. Aligned with SSEN Transmission's 5 Key Goals outlined in our overarching RIIO-T2 plan, our strategy is clear on how Digital enhances their achievement.

Operational Technology (OT) and Cyber Security are now being addressed separately through our Cyber Resilience IT and OT Programmes.

Our 5 Clear Goals for RIIO-T2



Transport the renewable electricity that powers 10 million homes

Our RIIO-T2 Certain View will deliver an electricity network with the capacity and flexibility to accommodate 10 GW renewable generation in the north of Scotland by 2026



Aim for 100% transmission network reliability for homes and businesses

By investing in new technology and ways of working, when cost effective for customers to do so, we will strive for 100% transmission network reliability for homes and businesses by 2026



Every connection delivered on time

By 2026 we will provide every network connection, tailored to meet our cutomers' needs, on time, on budget and to our customers' satisfaction



One third reduction in our greenhouse gas emissions

Reduce the controllable greenhouse gas emissions from our own operations by 33% by 2026, consistent with a net zero emissions pathway



£100 million in efficiency savings from innovation

Our RIIO-T2 Certain View includes £100 million of cost savings through productivity and increased innovation, and we aim to go further to save more

We have also developed new strategic projects, building on our Digital Strategy, to address adoption of innovations and opportunities, such as Cloud computing and exploring AI solutions to enhance customer and stakeholder communication and engagement.

We are investigating the implementation of the Common Information Model (CIM) to enhance data interoperability. In addition, we are also engaged with Ofgem to explore more efficient data sharing opportunities as part of proposals to create an industry wide Virtual Energy System.



Additional initiatives since the start of RIIO-T2

Since our March 2022 Strategy publication, we have added additional enhancements to our delivery plan to further underpin the realisation of our strategy. These additional projects have been endorsed by Ofgem and will be delivered prior to the end of our RIIO-T2 period to meet our Net Zero Pathway to 2030 and support the anticipated growth projections.





We are introducing additional capabilities to enhance our network modelling tools which creates the opportunity for increased insight, scenarios planning, and simulations. The enhanced models will allow us to investigate more scenarios and sensitivities in optioneering, so we can identify the best investment strategies and opportunities. As we improve the efficiency of project delivery and transmission system reliability, we aim to respond to an increased volume of connection requests with a reduced response time due to data automation. This also delivers operational efficiencies and improved network resilience across our transmission infrastructure.

Enhanced network planning increases compliance with regulatory standards, whilst enabling strategic allocation of investments, leading to optimal capital expenditure and promoting financial efficiency.

We have also mobilised a project that transforms the way we manage our Large Capital Project (LCP) portfolio. The enhanced Integrated Project Management capability will result in our ability to manage our large capital projects more efficiently and reduce costs. In addition, we'll see construction timescales reduce and our ability to respond at pace to the anticipated growth across our network as we transition to Net Zero.

We are also progressing plans in building and extending our services which will result in us delivering even greater network performance. We will introduce greater resilience through the implementation of additional Disaster Recovery capability, including the creation of an additional independent Control Room.



Alignment with our Strategic Themes

Digital is aligned with the philosophy and intent of a Stakeholder-Led Strategy which is a key enabler for achieving our Five Clear Goals. First and foremost, it supports the delivery of our broad principle of making the Right Data, available to the Right People, at the Right Time, to enable the Right Decisions.

We are also continuing to enhance our Data Best Practice Guidance, embed any changing data-related legislation, regulation, and codes, resulting in our transition towards a coherent data sharing ecosystem aligned to Ofgem's FSNR.

THE PILLARS OF OUR STRATEGY

Digital will build upon a strong IT foundation and create capabilities that will deliver:

- Best network performance
- Safe, reliable, and resilient operations
- Affordable, timely network connections for our customers
- Trusted stakeholder and community engagement
- Smart investment in our network and assets to meet our Pathway to 2030 growth targets.



In this section we show the extent to which our business themes are enabled through digital capabilities and the impact that digital will have within them.





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STAKEHOLDER LED STRATEGY



We recognise that we have a broad set of stakeholders. The engagement we had with our stakeholders throughout our RIIO-T2 planning process and our continued engagement thereafter ensures we understand their needs and our digital innovation delivers upon these. Our approach is to digitalise as an enabler to grow quickly, accelerate delivery and meet growth demand for our Pathway to 2030 commitments.





SAFE AND SECURE NETWORK OPERATIONS & SECTOR LEADING EFFICIENCY



Digital has a key role to play in our ambitions to operate a safe and secure network and do so efficiently. Our Digital goals are predicated on exploiting data from multiple source systems to speed insight and decision-making that directly affects our operational efficiencies. We also recognise that as we bring about Digital enhancements and change in capabilities within our business, given their impact on a wide range of stakeholders, Digital literacy is a key enabler.





LEADERSHIP IN SUSTAINBILITY



Achieving leadership in sustainability can be enabled with Digital approaches, especially utilising Open Data to better engage with stakeholders as they provide perspectives and views on the future of our network. We want to attract and nurture talent. especially those who are passionate about delivering Net Zero and the leading role electricity transmission will take in its delivery. Maintaining and nurturing such talent requires the provision of enhanced employee propositions.

Digital capabilities will enable us to achieve this by better analysing and engaging with the talent market, whilst providing our employees with more effective ways to expand their skills.

Improved use of data, provision of analytics and modelling capabilities will allow us to assess future scenarios, in a more complex way and more frequently, so that we are better prepared and informed about our investment decisions.

As part of SSEN Transmission's ambitious 'Pathway to 2030' programme, Accelerated Strategic Transmission Investment (ASTI) projects are our priority. Our Digital Strategy will enable faster delivery of our accelerated investment projects, especially those that are required for the expansion of green and low carbon generation.





Our Digital Vision

We continue to deliver our Vision, improving our Products and Services to achieve our growth objectives. Our actions prioritise providing value to our customers and stakeholders, by digitally enhancing our data capability, analysis and insight.

Delivering Value	Guided by a specific vision				
Customer & Stakeholder and Commercials	Provide a high quality and transparent multi-channel service to stakeholders, with increased assisted and self-serve capabilities underpinned by an integrated group of fit-for-purpose platforms for entering and accessing information and insight	Customer Self cervice		0	
Projects & Capital Delivery	A modern, slick and interactive business moving away from the paper and excel driven processes and embracing the modern technology and practices to deliver at scale and in line with growth of demand in projects.		Pre-connection Info for Customers	Website	Access to archived information
Network Planning	Maximise the value and the opportunities presented by having easy access to a wide range of data from across the organisation to increase system performance, and support future network modelling & forecasting, RRP, system planning, connections and innovation.	Optimised Planning and Total Work Management	Stage 2 BIM Accreditation		Stakeholder Engagement
Asset and Operations	Enhance existing and deliver new capabilities across Asset & Work Management that will drive business and asset performance, resulting in decreased network risk and setting the foundation for further enhancements in T3	Digital Engineering	Field Force Mobility	Network Modelling	Sustainable Growth for Net Zero
Enabling IT	Creating IT capabilities that provide a fit for purpose suite of applications, supporting the end-to-end business processes and enable the business to deliver the outcomes as efficiently as possible. Digitalisation, interoperability and data sharing across the energy industry via open data portals can enable savings of £30-70bn (from the Ofgem FSNR Decision) between now and 2050 through data- led strategic planning and can enable transformational system-wide benefits such as cost savings and resilience (via optimal system maintenance, asset health monitoring, planning and operation)	And Project Management Smarter Asset Management	Inventory Management	Customer Case Management	Trusted Insight
Enterprise and Corporate	Creating and delivering cross functional solutions that facilitates better information sharing, enhanced control, improved safety and improved financial insight	Application Integration Platform	Automation		processes

The Pillars of Our Strategy

Our Digital Strategy has stayed consistent over the last 2 years since our March 2022 Strategy was published. It continues to build upon the foundation of the following four main pillars: -



Based on these pillars, published in our Digital Strategy March 2022, we can identify where Digital adds value and drives end-to-end transformation. We have developed our five Value Streams using benchmarks, industry trends and direct engagement with External and Internal Stakeholders to deliver our strategic objectives and add value to our business and end customers.



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Digital Literacy and Digital Transformation

The realisation of the benefits from Digital are dependent on the level of leadership and commitment that is applied. We are committed in ensuring that we not only develop the appropriate digital technologies and capabilities, but that we use them in their fullest for transformation. We have focused on this organisationally over the last 2 years and have underpinned the delivery of our Digital Strategy with a business change programme to ensure we fully capitalise on the benefits it will deliver.



Our framework for Digital Transformation is based on following five principles. These are discussed in the table below.



Customer Centric Development



Removing Silos

Customer Centric Development means we will be treating our internal and external stakeholders as customers of our Digital developments. We will invest in our processes, tools and ways of working to ensure that we listen to them, work alongside them and involve them in the life cycle of our developments. This way we will ensure the strategic outputs we seek are aligned with their evolving needs.

We are going to take an end-to-end approach to creating our solutions. We recognise that a single outcome is the result of contributions from multiple functions and teams and therefore, will ensure we understand the end-to-end ways of working, improve them and then digitise. We will focus on a culture of collaboration and create multifunctional teams as we embark on our roadmap.





Iterative and Agile



Training and Development



Embracing the Change We are investing in Agile delivery to ensure we produce value for our customers in an iterative way. We recognise there is a balance to achieve and indeed a journey to travel. However, our focus is on accelerating our output, and in a manner that change does not happen at once.

Increasing the digital literacy of our own staff and our external customers is important. We will ensure we assess the impact of each digital delivery on our broad stakeholders, and where required, roll out appropriate training. This training will be a mixture of increasing technical skills, focus on implementing new ways of working and at times introducing our stakeholders to technologies that they have not used before and require ongoing support on.

Digital means change. Sometimes the change can have a significant impact on those who are affected. We will face this with a culture of embrace. We will be open, honest and transparent to our stakeholders about the change, and ensure we put in place relevant and effective enablement, and engagement practices. We are investing in a Change Centre of Excellence to support us in this endeavour.



Delivering our Digital Strategy

Our Digital Delivery

We have aligned our Digital Strategy across five Value Streams. These Value Streams will deliver our digital vision (<u>See previous diagram</u>) and underneath this have defined outcomes and initiatives that will deliver the change and the value that our stakeholders expect of us.

Value Streams & Key Objectives



Customers and Stakeholders

- Re-platform web presence for iterative enhancement
- Implementation Stakeholder management system
- Streamline connection management

Projects & Capital Delivery

- Enhanced and digitise Building Information Modelling (BIM) processes
- Delivering an Integrated Project Management platform

Network Planning and Commercial

- Enhance data insight into Network Performance and Whole System
- Provide relevant information to engage and connect with our network

Asset Management and Operations

- Enhance and deliver new capabilities across Asset & Work Management
- Decrease network risk and set foundation for RIIO-T3

Enabling IT and Business Functions

Create cross-cutting capabilities supporting end-to-end business processes

In our <u>2022 Digital Strategy</u> we provided an overview of our Digital Roadmap. In this section we provide a summary of the progress we've made in delivering this roadmap and an overview of what's planned for the final two years as part of our RIIO-T2 commitments.



OUR DIGITAL PROGRAMME ACHIEVEMENTS: YEAR 1 – 2021/2022



Our core Enterprise Asset Management (EAM) Systems are made up of Maximo, ESRI GIS and EA CBRM systems. Collectively these systems allows us to visualise the location of our assets, understanding their risk-based conditions and then plan and execute work for their proactive maintenance. Maximo was a shared system with our Distribution company. In the last six months we have fully separated it and now have a cloud-based solution. We have also completed our use cases on GIS and CBRM at foundational level.

Independent Transmission Systems giving us the ability to scale as we grow, as a result of cloud first strategy, develop capabilities based on our priorities, and assure our separation obligations.	Up to date functionality to meet regulatory requirements by having implemented the latest requirements of Network Asset Risk Measures (NARM).
Integrated EAM systems, have been scheduled to improve interoperability across our systems and platforms, resulting in the right data being available to the right people at the right time, to enable the right decisions.	System Separation ARC GIS - geographical information system providing single source of Transmission asset / geographic information - available on laptops and mobiles, and both online and offline.
Centralisation of data and the foundation to become predictive. Easy transfer of data between systems and centralisation of it, will allow us to build the foundation for predictive analytics.	The right operational backbone, enabling digitisation which will result in work being carried out more efficiently, removing Swivel chair, freeing up key resource time for additional added value work.



OUR DIGITAL PROGRAMME ACHIEVEMENTS: YEAR 2 – 2022/2023



Business Separation

Maximo - a single, integrated cloud-based platform, used to manage and maintain our high-value assets with AI and analytics to optimize performance, extend asset lifecycles and reduce downtime and costs.

Site Login - delivery of a reliable and self-governed system, embedding a critical safety function within the Transmission business. It delivered improved stakeholder experience and safety through the adoption of an app that removes the need for field users to wait for call backs from the Control Centre.



Customers and Stakeholders

Implementation of our **new and improved website** improving our customer journeys and ensuring that information is more accessible, we are continuing to integrate fit for purpose platforms managing our customer and stakeholder engagement through increased use of self service.



Safety

EcoOnline - our new incident reporting software that lets us capture, manage and investigate incidents and accidents while minimising delay.



Asset Management and Operations

Timesheet Management - this is a Single Sign-On (SSO) mobile application which is used by field based colleagues to record the hours they have worked.

Roll out of our **Protection and Control Field Laptop** for Field Engineers, enhancing security, control and process in the field management of operational devices through a hybrid technical solution.

We deployed a successful **Phasor Data Concentrator** solution, allowing us to analyse data streaming from Phasor Measurement Units, providing Network event data outputs.



OUR DIGITAL PROGRAMME ACHIEVEMENTS: YEAR 3 - 2023/2024



Business Separation

Tractivity - a powerful software system that enables us to manage every aspect of our consultation and stakeholder engagement activities.

PI - system of record and historian for operational data, primarily used for Supervisory Control Data Acquisition (SCADA) and will also be used for Integrated Condition and Performance Monitoring (ICPM) data and reporting/ analytics, available on laptops and mobiles.

CBRM - system that enables current asset information, engineering knowledge and practical experience to predict future asset condition, performance and risk for assets.



Large Capital Projects

Building Information Modelling - application of asset creation and management standards. Now BIM level 2 enabled through organisation and digitisation of information about buildings and civil engineering works. This included the launch of our new large capital project common data environment (CDE).

Integrated Project Management (Release 1) - our new single view of all our large capital projects (LCP), which when complete will deliver an integrated real-time view of all our LCP data and our overall LCP portfolio for the first time.

Customers and Stakeholders

Open Data Portal (ODP) - offers customers and stakeholders information via a variety of published datasets, some of which they may not have known are available to them. All datasets have been through a rigorous process to classify them as open.

Website enhancement - site design improvements to increase the profile, visibility and access to our ASTI project pages and support resource.

Sentiment Analysis – pilot to assess the effectiveness of Al in helping to determine stakeholder and community feedback as part of our Asti project consultation process and supporting media campaign.

Asset Management and Operations

Maximo to MAS8 – fast tracked upgrade which delivered powerful Al-driven asset and analytics solutions and system performance enhancement

Alarms Visualisation – improved visualisation and display of alarms and event information, allowing our Transmission Control Centre to monitor, assess and operate our systems safely and efficiently as we continue to grow our network.

PI-Smart Monitors – the inclusion of new PI Vision capability integrated into our T-PI solution allowing Operations colleagues to access the new data delivered following the roll-out of the ICPM Smart Monitoring

Continuous Improvement

Ideas App - digital solution for the capture and assessment of colleagues' business improvements ideas and suggestions.

CUSTOMERS AND STAKEHOLDERS

Our vision in this Value Stream is to provide a high quality and transparent multi-channel service to stakeholders. This is enabled with increased assisted and self-serve capabilities underpinned by an integrated group of fit-for-purpose platforms for entering and accessing information and insight. We foresee nine outcomes in this Value Stream. These are:

Transparency Stakeholders can easily understand the services offered by SSENT, finding relevant information, processes, costs ________ and timelines Assisted Self-Serve Customers are provided with a range of self-serve tools to support their connections journey – assisted point of connection finder, heat maps and portal to view status and interact with SSENT Tailored Service for Customers Personal and personalized experience, for different stakeholder segments, through their channel of choice to access the information and assisted services. Supported by increased proactive followup and recommendations

Core Systems to support E2E processes Cohesive and joined up customer and user journeys – no more bridging the gap with Excel

Fit for purpose capabilities Integrated capabilities deployed to meet the business needs. Business are made ready to receive and exploit the capabilities.

Consistency and quality of information

Simple and easy to enter validated and high-quality information – do it once, do it right and consistently across the business. Simple to report on and analyse the data. Single View of the Stakeholder/ Customer All internal teams are able to easily access stakeholder info and insight, as well as record interactions that they have

Assisted Processes & Workflow

Increased automation of repeatable and high-volume processes e.g. surveys and invites and orchestration and governance of complex processes e.g. Approvals or Project Changes

Improving digital literacy of internal teams and stakeholders

Enhanced digital skills and awareness of "the art of the possible" – using and exploiting current and new tools. Give stakeholders a voice on the development and enhancement of the services that they can access

To achieve these outcomes, we are investing in these initiatives:

Stablish the Value Stream	Create customer strategy			
2021 - 2022				
Single Source of Stakeholder View - Stakeholder Management	Re-platform and Re-design the Transmission Website			
2022 - 2023				
 Development of Customer Relationship Management System begins Open Data Portal 	Oeploy ASTI Website enhancements			
2023 - 2024				
Customer Portal Customer Portal Live Capacity Map	Develop AI Feedback Sentiment and Analysis Tool			
2024 - 2025				
Final Improvements and Re	adiness for T3			
2025 - 2026				

Our Digital Strategy is driven by creating transparency for customers, allowing them to make earlier decisions about their potential investments with us. It will provide our customers and stakeholders with self-service capabilities giving them a digital experience and allows both our customers and our internal teams to achieve efficiencies through ease and speed of work.

To achieve these, we are going to invest in technologies that provide our customers with visual maps of our connection points and provide them with relevant information on those connection points so that they make early and appropriate decisions. We are also going to invest in customer portals which allow our customers to make enquiries, see the progress of their application life cycle, have access to relevant information and documentation, but also explain the process through which they engage with us and the ESO as it relates to connections.

We wish to get closer to our customers. As such, we are investing in a Customer Relationship Management (CRM) system that gives us a single view of the customer. This will allow us to effectively segment and manage our interactions with each of them enabling more tailored services. It will introduce the possibility to increase automation so that our customers and our own staff work through their interactions easier, faster and with access to relevant information at any given time throughout the customer journey.

Achievements to date:

Significant strides have been made in enhancing our digital capabilities and efficiency, ultimately driving value for our customers and stakeholders. Our revamped website, designed with a user-centric approach and fortified security measures, now offers streamlined web journeys for customer and stakeholder queries. We've introduced enhanced features including an <u>online Pre-application call request form</u> and <u>co-location form</u>, simplifying joint collaborations between customers. The implementation of our <u>Open Data Portal</u> provides access to a wealth of valuable datasets. Migration of <u>innovation projects</u> and content overhaul signify our commitment to staying at the forefront of innovation. Stakeholder engagement has been bolstered through the introduction of <u>online registration forms</u> and dedicated <u>event spaces</u> on our website. Accessibility is prioritised with the integration of the <u>Recite Me tool</u>. Furthermore, we've facilitated <u>telecommunications businesses</u> with streamlined access requests and developed a new web journey for <u>third-party safety</u> near our network. Our digital maturity is evidenced by a significant increase in website editors and dedicated officers, enabling daily updates and enhancements.

Since the launch of our website, we've been continuously improving its functionality and user experience. We've meticulously curated a comprehensive product backlog, ensuring that our development efforts align with our strategic objectives. As of early March, we are in the process of implementing over 40 technical changes aimed at enhancing accessibility, removing barriers to engagement, and fostering stronger relationships with ASTI stakeholders through improved information. These efforts target our project web pages and reflect our commitment to providing an inclusive, user-friendly platform that meets the evolving needs of our stakeholders while facilitating seamless interaction and collaboration.

We have developed new AI capability to support our engagement with communities in the north of Scotland, who will be engaged as part the introduction of critical national infrastructure, developed as part of our ASTI programme. This enabling us to better categorise stakeholder feedback and take prompt action where appropriate. We have also worked to update web pages, written materials, and legal notices to communicate our use of AI to adequately inform stakeholders.

Our new CRM system has undergone a comprehensive evolution, with the first phase of functionality going live in March 2024. This first release supports our preapplication request processes. This will be followed by the introduction of case management capabilities, connection application processing, and the seamless integration with collaboration tools and other Transmission channels. These continuous enhancements underpin our commitment to leveraging technology to optimise customer interactions, streamline processes, and ultimately enhance customer satisfaction.

Following our separation from SSEN Distribution we deployed a customised stakeholder engagement solution. This included the migration of stakeholder data, and colleague upskilling. This has enabled us to efficiently record stakeholder engagement history and preferences resulting in better targeted interactions. This also enhances our compliance with GDPR.

PROJECTS & CAPITAL DELIVERY

In alignment with our strategic themes and our five goals, our vision in this Value Stream is to create a modern, efficient and interactive business moving away from manual processes to modern digitised solutions. To support the ongoing growth of our Network and existing commitments, we need to be able to operate at scale, efficiently and in collaboration with our construction partners and our customers.

To achieve this, we recognise that we must digitise our engineering and capital delivery data and use Digital technologies to enable our Large Capital Project processes.

The outcomes we have foreseen in this Value Stream area are as follows -

Achieve BIM Level 2 Deliver the BIM Strategy through T2 period with people, process and tooling changes that will obtain the required BIM level

Remove "swivel chair" entry Time spent efficiently and

effectively, with minimal wastage, entering data once increased value from teams Common Data Environment Consolidation of document and drawing management onto a single platform – to enhance standardization and unify ways of working to enable project delivery partners to seamlessly share data.

Ready access to information

Information and data easily accessible to support the project development and delivery process, including enhanced exploitation of GIS and data and reporting suite including a consolidated view of all compensation Achieve integration across applications and processes, remove data entry duplication

Enabling smooth transition to Ops Frictionless handover from projects to operations through the digital collection and continuous enrichment of asset and project information and documentation to enable smooth transition Getting fit for T3 Improve readiness for T3 and subsequent increased competition, easily access and compare cost data and provide additional value to customers

Enhanced quality of information Data quality standards are defined and put in place with suppliers through procurement and continuously enhanced

Operational Effectiveness

A simple, integrated and easy to use set of tools and processes that digitises the project delivery method, increase efficiency, minimise the use of spreadsheets and enhance collaboration internally and externally

To achieve these outcomes, we are investing in these initiatives:

Our investments will enhance our existing engineering data, in particular Building Information Modelling, and introduce Digital technologies that increase standardised engineering designs and specifications. This includes fully digitising our Large-Scale Capital Projects' processes to support the growth in our infrastructure and drive efficiencies as we deliver our ASTI projects.

We are exploring best in class technologies that meet our industry context, are fit for purpose, and can be mobilised effectively and be scaled appropriately.

Building Information Modelling (BIM) will create an information model of our assets that can be leveraged by our engineering teams and partners. This allows us to comply with the UK's requirements to have 3D models of building within the UK, but most importantly enable us to work collaboratively, and reduce rework through standardised design methods. It also will set up the foundation for future 3D models and Digital Twins of our assets.

Integrated Project Management will integrate with our BIM technologies and will digitise our process of capital delivery. The technology will provide us with the means to better capture requirements, manage documentation, schedule works, control costs and manage risks. It will also include workflows and automation, so that we can more

effectively execute our governance, meet Service Level Agreements in our hand offs and ensure we capture the right data as we pass on asset information to our operations teams.

Through progression of our current T2 BIM and IPM deliveries, we have standardised our processes and centralised our systems to unify our way of working, facilitating better collaboration and the sharing of data both internally and with our external partners, creating efficiencies by providing one easily accessible LCP platform and removing the need to access multi systems, with the subsequent result being an improvement to the quality and accessibility of our of data, allowing us to gain better insights into our LCP portfolio.

Consents and Environmental Management has increasing importance on our drive to Net Zero. Our goal is digitising our data, replacing manual processes with automated workflow, and providing reporting and analytics capabilities to provide data insight for better decision making.

Achievements to date:

- The first agile iteration of Integrated Project Management showing high level project data and the project schedule is now live, removing the need to login to multiple systems.
- As part of the IPM project we have built an integration platform to be utilised across the digital programme, to facilitate our integrated IT estate, ensuring our systems and data are fully aligned.
- We have enabled BIM level 2, setting up our Common Data Environment, creating 3D models, with our 4D pilot also kicking off to facilitate easier collaboration both internally and externally. We have standardised our processes and documents to align with the BIM Level 2.

NETWORK PLANNING

investment decisions.

Network planning plays a significant role in defining the expansion of our infrastructure and informs our investments. Our internal and external stakeholders tell us that they need more frequent and more complex analysis and modelling completed on the network so as to inform optioneering and ultimately choose the best route to make the network resilient, secured, reliable and fit for the future.

Our strategy is predicated on better use of data. For this Value Stream, better use of data is aimed at creating more informed and complex models about the network, allowing us to dive deeper into different energy scenarios and define our actions. It will lead to better analysis of the network's resilience and future capability to understand where potential weaknesses are and how we should address these.

We recognise that we need to consider non-network solutions as well as physical investment when it comes to addressing the network requirements and the better use of data allows us to assess better feasibility of overall options.

Our vision in this Value Stream is to provide enhanced network modelling capabilities and visualisation of power quality to provide a safe and reliable supply of electricity to communities. This is underpinned by having access to consistent and reliable data to inform the right investment decisions.

As we develop our strategy in this Value Stream, we will focus on the following key strategic themes, which we believe will give our internal and external stakeholders value.

Network Reliability Increased Network Reliability by enhancing power quality monitoring systems.	Net Zero SSEN Transmission can make more effective decisions, produce more accurate plans and designs through increased network modelling capabilities to meet Net Zero.	Compliance Increase visibility of our compliance with network standards strengthens our ability to expand our network in line with industry standards.	Network Modelling Capabilities Enhancing SSEN Transmissions network modelling capabilities to represent the complex behaviour of demand on the network to allow for informed investment decisions.
Data Transforming the way in which SSEN Transmission capture and manage our data. Having access to reliable, available and trusted data allows for greater efficiency and better	Enhanced Processes and Workflow Increased automation of repeatable and high-volume processes.	Core Systems to support E2E processes Introduce strategic platforms that consider the end-to-end asset, project and customer journey by introducing	Employee Satisfaction Digitalisation will enable employees to focus on value added tasks and personal growth. These efficiencies will continue to make SSEN Transmission a great place to

Infrastructure

integration and automation.

work.

Enhance current IT and Digital infrastructure to support the continued business growth through innovative and scalable solutions. This will increase our ability to unlock complex modelling and plan for the network of the future.

To achieve these outcomes, we are investing in these initiatives:

Stream Strategy	
2021 - 2022	
Other SectorOther SectorOwer QualityReport DeliveredData Automation	
2022 - 2023	
 Network Modelling Enhancements Enhanced Network Modelling Capabilities - Phase 1 Power Quality System Live 	
2023 - 2024	
Enhanced Network Modelling Capabilities - Phase 2	
2024 - 2025	
Final improvements and Readiness for T3	
2025 - 2026	

RIIO-T2 will deliver an electricity network with the capacity and flexibility to accommodate circa 9GW of renewable generation in the north of Scotland by 2027. Digitalisation will allow us to be able to respond to complex design decisions faster, with more accuracy, and enable us to find a variety of different solutions that accelerate our network transformation. It will enhance business and technology capabilities to enable more complex analysis, investigate more options, and use better data sets, in turn leading to better insight that results in plans and design with reduced risk and more robust assumptions.

Our digital investments will create improved network models that cover a wider range of scenarios and execute power system analysis faster and more often. This will enhance our capability to share results of the different analysis wider (internally and externally), introduce better reporting mechanisms, and implement more automation for standard reporting. We are visualising our power quality data to enhance our view of the network's compliance with power quality standards. This also allows our teams to identify trends, and baseline the system's performance throughout the network, as well as supporting the customer connection journey.

Enhancing our whole system view in planning and investments will ensure our data is accurate, quality and accessible in alignment with Ofgem's FSNR, producing more innovative ideas and support other industry bodies in their efforts to produce more effective outcomes for Net Zero

Achievements to date:

The scope and remit of this value stream has increased significantly following Ofgem's approval in Summer 2023 of additional investments to support this key capability.

As part of the Early value has been delivered for Power Quality Monitoring, we have reduced the effort involved in network capacity planning to support network connection requests. This was achieved through the introduction of automation and efficiencies. We have also modernised our network modelling platform, integrating this with Geospatial information which now allows us to assess increased scenarios for network capacity planning at pace as a result of increased automation.

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ASSETS AND OPERATIONS

Our assets have long life and make up part of the Critical National Infrastructure of Great Britain. We need to ensure we maintain our assets in a manner that is cost-effective and provides a resilient, secure, and reliable network of electricity transmission. This means we need to know the location of all our assets, how they relate to their immediate environment, what risks such environment puts on our assets and how we mitigate them. We also need to understand the health of our assets, what risks this creates for our network and how we address risks.

At the same time, there are unplanned events that impact our network. Storms, accidents, or other factors mean we need to work in a reactive capacity and resolve faults and issues on the network. As such we operate a highly skilled field force that not only maintains our network but addresses any immediate concerns. Our digital strategy in this Value Stream therefore, covers three areas of Asset Management, Control Operations and Field Force and will aim to achieve the following strategic outcomes.

Our Asset and Operations scope covers three areas that make our more resilient, reliable and ready for the future.

Collect and analyse new and existing asset performance data to support exploitation of predictive and risk based maintenance regimes in RIIO-T3.

An integrated asset portfolio with visibility of allplanned investment and maintenance work in place to support RIIO-T3 business planning to optimise network risk and investment. Impact of outage changes can be rapidly assessed and action taken. Creation and update of digital asset records through the lifecycle of project delivery, with records replicated automatically across relevant systems - leading to increased quality, accuracy and completeness of information handed over to operations. Asset performance and capability management through increased access to a richer asset data set including operational performance from SCADA and alarms.

All field workers able to receive and execute their work and associated documents and information electronically, safet documentation digitised. Field workers support the resolution of data defects in the field, all data captured at source and subject to enhanced data quality validation to drive accuracy and completeness of information.

Increased resilience and security of supply, leading to a reduction in interruptions for homes and businesses. Real-time data used to monitor and improve asset performance.

Planners and field engineers are able to access inventory and stock levels. Enhanced insight on spares inventory, reduced risk on key spare items - targeting overall reduction in spares holdings.

Work performance management in place with feedback loops established to enable benchmarks to be updated. Data and insight to support post-fault / event investigations; operational restrictions that are required are captured and noted on asset, GIS and operational systems.

To achieve these outcomes, we are investing in these initiatives:

The implementation of our core Enterprise Asset Management, Risk & Investment Management, and Graphical Information Systems delivers a powerful combination of capabilities and improved efficiencies to the Transmission Asset and Operations Teams. Our comprehensive asset management solution, offers robust functions for managing, maintaining, and optimising Transmission assets throughout their lifecycle. The EAM system together with our world class mobility solution will enable us to efficiently plan and schedule maintenance activities, track asset performance, manage work orders, and analyse asset data to make more informed decisions. Further enhancing our capabilities, the GIS solution provides powerful geographic information, allowing teams to visualise, analyse, and understand spatial data related to Transmission assets and operations. These solutions will be further enhanced through their integration to provide a holistic view of Transmission infrastructure, leveraging spatial intelligence to enhance asset management strategies, optimise resource allocation, and improve overall operational efficiency.

We will build on this foundation by adding Total Work Management, Inventory Management and Mobility Solutions. These will allow us to optimally plan our work and execute it safely and reliably with improved system and data security. Total Work Management will enhance our asset risk management, including asset condition, regulatory requirements, and future demand forecasts to assess investment risks. The enhancements allow us to further

identify and mitigate potential risks enabling the business to make better informed decisions to safeguard assets and future investments.

A key feature of our Digital capability will be to capture effective data and help our staff with provision of timely information as they execute work. As the same time, we will incorporate automation into our process and lifecycle management, for example inclusion of workflow automation to manage and improve SLAs. The integration of mobility and work management with our control rooms will mean we will be prompt on reactive work.

Given the effective data gathering and management and integration of core systems, we will need to increase our analytics capability. We will leverage our data lakes (<u>see next section</u>) as well as our other analytical capabilities to better inform our decision making and become predictive in our asset management work. At the same time, we will use the data to be more precise and optimised in our investment decisions.

Our operational technology is undergoing transformative projects to increase operating resilience with secure field engineering laptops, a new disaster recovery centre, and a fleet of new front-end processors. We are also undertaking a series of projects to improve access to data, including alarms prioritisation and rationalisation, smart monitoring enhancements, integrated condition and performance monitoring and real-time system performance monitoring capability. Having this comprehensive view of our system performance assists with problem identification and resolution and strategic planning.

The availability of greater insights from network monitoring and our ability to manage our resources more effectively will help us to realise our Vision of Net Zero by 2030 and reach our goal of 100% transmission network reliability. We will continue to deliver digital innovations to expand situational awareness within the control room and in the field and support the business with enhanced control and data analytics.

Achievements to date:

Operational Technology

We've delivered enhanced monitoring and maintenance through secure hybrid devices and peripherals for field engineers. Our separation from Distribution resulted in us taking the first step in establishing a Network Performance Intelligence (PI) system to meet the specific needs of Transmission and the delivery of one of our Ofgem commitments. It involved transferring over 23 years' worth of historical data, whilst ensuring no reduction in the quality of information or insight held in the new Transmission PI solution.

Our new PI interface not only improves the way we access, search, and analyse asset information, we can build upon this infrastructure to present an even greater visual representation of the data. This will enable real-time visualisation and more detailed analysis to help forecast maintenance requirements and identify future trends.

Meeting the requirement for sharing synchronised data with NGESO, we have installed Phasor Data Concentrators which will provide a comprehensive view of our system performance and assist with problem identification and resolution, and strategic planning. We have continued to enhance our user experience, accessibility, detailed analysis, and security, enabling time logs and incident reporting to be done swiftly and effectively in real-time.

Preparing for Total Work Management

Separation of the condition-based risk assessment support us in meeting our business separation obligations. At the same time we upgraded our capability to the new EATL Invest platform, further enhancing our asset risk management capabilities, including asset condition, regulatory requirements, and future demand forecasts to assess investment risks. The enhancements allow us to further identify and mitigate potential risks enabling the business to make better informed decisions to safeguard assets and future investments.

We are also fast tracking the upgrade of Maximo to version MAS8, this was originally planned for T3. This has resulted in a reduction in risks, the delivery of improved system and data security, and enhanced system functionality. This was done whilst also minimising the upgrade costs and the impact on end users.

ENABLING IT & BUSINESS FUNCTIONS

Enabling IT

We recognise that as a growing business, we need to have both flexibility and scale and therefore this cross-cutting Value Stream is built on an architecture that is Cloud first. The architecture will also put in place technologies that enable analytics and automation.

Business Functions

Aside from Enabling IT, we will also invest in Digital Technologies that we will be implementing in our business functions, such as Finance. These technologies are enablers and key dependencies to the architecture and solutions that make up the technology landscape of the Value Streams above.

Another capability we are rolling out is an improved safety management application. The entire business will use this tool to make sure every task and daily activity we take has safety at its core. This is about reminding us about our safety obligations, how we remind ourselves on best practice, but also giving us a reporting capability that measures our performance.

To achieve these objectives, we are pursuing the following objectives.

Establish a Cloud-first strategy. Cloud technologies exploited to enable rapid deployment of digital capabilities.

Achieve foundational data integration across existing and new source systems, creating a single data storage. Increase control of SSENT data and information, stored in the correct place, improve quality and provide opportunity for exploitation.

Business-wide access to a central view of SSENT data including Asset, Customer, Projects, Finance and HR

Develop automated reporting, analytics and Data Science capabilities. Deliver value through identified use-cases, utilise cloud capabilities to productionise usecases for operational processes where required.

Open Data Portal – ability to share data required by Open Data Standards via selfservice portal.

To achieve these outcomes, we are investing in these initiatives:

Our Enabling IT roadmap started with defining our Cloud Strategy and putting in place our architectural foundations. We will be prioritising the development of a cloud based Integrated Data Platform - Data Fabric. This will allow us to accelerate our analytics capabilities and set the foundation of providing relevant and required information through our new <u>Open Data Portal</u>.

We have also invested in data enrichment and quality improvement initiatives to ensure our insights are accurate, varied and rich. Work in this area will be on going and will be a collaboration between our IT and business functions.

We will be looking to leverage our existing platforms to accelerate and build automation, especially as they relate to workflows. Once our automation, reporting and data analytics platforms are in place, work to leverage and develop use cases through them will continue throughout T2 and into T3.

Achievements to date:

Our Integrated Data Platform is currently being developed and data from our core asset systems is now starting to being ingested. Access and ingestion from more systems is gathering momentum. To provide early value a data quality dashboard is being developed to showcase data for Substations and Towers. This will enable discussions with the business to help visualise data and data quality gaps within the systems. Master Data Management tooling will maximise the integration and efficiencies between these tools and our Integrated Data Platform.

In 2023 we integrated an Open Data Portal (ODP) with our customer channels providing our customers and stakeholders with easy access to our data, supplemented by a range of additional data sets and features. Making our data available to our customers and stakeholders aligns us to Ofgem Data Best Practice Principles. Our new Open Data Portal improves the visibility and transparency of our data and ensures that there is a clear process to follow to request new datasets. Academics and innovators can now readily access our data via the Portal making it even easier for them to incorporate our data when they are designing, developing and testing new sustainable solutions.

The ultimate result is the creation of flexible and optimised innovations to solve the complex challenges for decarbonising energy, demonstrating our commitment to our Net Zero goals and to our customers and stakeholders.

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This table summarises the products and services provided by each Value Stream, the outcomes our stakenoiders should expect and the performance criteria we have assigned to measure such outcomes.

Value Stream	Products and Services	Outcomes for Stakeholders	Performance Measures
Customers & Stakeholders	 The products and services offered through this Value Stream are – A renewed and refreshed website Heat Map showing connection points on our network, together with indication of connection capacity Customer / Stakeholder Portal, giving our customers digital channels to engage with us Back-end Customer / Stakeholder Relationships Management Systems, giving our internal teams ability to better manage end to end processes and share customer / stakeholder information with the customer 	 The outcomes provided through these products and services: A better performing website, with easier search capability and richer content Customer and Stakeholder Self Services, allowing digital engagement and passing of information Speeder, more accurate execution of processes across the customer / stakeholder journeys, that removes effort, has more accurate outcomes 	 The performance measures that will help us assess these outcomes: Customer Satisfaction of our Website Internal Team's satisfaction of our Website Customer Satisfaction Scores for our Connection process
Projects and Capital Delivery	 The products and services offered through this Value Stream are – Building Information Modelling (BIM) System and associated document repository systems, together with a common data platform for collaboration Integrated Project Management Tool, giving Capital Delivery Controls and Planning Capabilities as well as collaboration with suppliers and other stakeholders 	 The outcomes provided through these products and services: Better visualisation of engineering design (3D) Easier collaboration during engineering activities More planning and control capabilities for Capital Delivery with ability to share more information with key stakeholders 	 The performance measures that will help us assess these outcomes: Survey reviews on increased collaboration during engineering Drivers impacting performance of Capital Delivery, e.g. cost, speed

Value Stream	Products and Services	Outcomes for Stakeholders	Performance Measures
Network Planning	 The products and services offered through this Value Stream are – Data Architecture and Design Integrated Modelling Data Platforms Network Modelling Systems and Tools Power Quality Monitoring Systems RRP Optimisation Strategy 	 The outcomes provided through these products and services: A clear view of how data will flow to and from related systems Organising and centralising the data, so that it is verified, manipulated, and better prepared for consumption in modelling To increase our ability to unlock more complex modelling Analysing generation, transmission, distribution, and industrial systems Compliance with relevant Power Quality standards, identify trends, and baseline the systems performance throughout the network, as well as supporting the customer connection journey. Digitising the creation and verification of these reports 	The performance measures that will help us assess these outcomes: • Quality of modelling output

Value Stream	Products and Services	Outcomes for Stakeholders	Performance Measures
Asset Management and Operations	 The products and services offered through this Value Stream are – Provision of new field mobility systems to field force to support work execution Integrated back-end Asset Management systems, for optimised planning, work execution and risk analysis of network Tactical Inventory Management System to support planning and work execution Provision of more Operational data for improved analysis 	 The outcomes provided through these products and services: Optimised asset and work management planning Easier, safer execution of work by field force Higher analytical capability, especially for asset risk or predictive planning 	 The performance measures that will help us assess these outcomes: Internal surveys of Field Force Drivers on Improved Planning and Work Execution
Enabling IT and Business Functions	 The products and services offered through this Value Stream are – Creation of an Integrated Data Platform, connecting to variety of data sources to enable analytics Provision of Integration and Automation Platforms to create process and execution efficiencies Provision of a Safety Reporting tool to enforce better safety practices 	 The outcomes provided through these products and services: More analytical capability across the organisation with ability to provide data into the Open Data Platform Work efficiencies and removal of Swivel Chair process effect Improved Safety Reporting 	 The performance measures that will help us assess these outcomes: Increased output on Analytics Reduced Safety Incidents Efficiency measures for work execution

Alignment with Energy Data Task Force

We understand Ofgem's Data Best Practice Guidance and are working towards incorporating these principles in our data management practices and our Digital Initiatives. We also acknowledge the recommendations set by the Energy Digitalisation Taskforce (EDiT) and have been working closely with industry peers, ENA and internally to ensure our data strategy, architecture and design are in alignment.

Unlock Value of Customer actions & assets

We are planning stakeholder management sessions to understand the needs of our customers on data. Equally, we want to understand what data might be available to us from them to create a richer flow of information and apply these to different use cases. As seen within our Customer & Stakeholder and Commercial section, as well as our Enabling IT, we are developing an open data platform which is key to sharing data with our customer.

Deliver interoperability

Inter-Control Centre Protocol with ESO and Scottish Power is currently on our plans. Aside from this, Data sharing, definition of data standards, use and application of Common Information Models, creation of data catalogues are activities that we are executing as part of our plans, which align with this principle. We continue to actively work with industry peers and through the Energy Networks Association Data and Digitalisation Steering Group on common initiatives, e.g. National Energy System Map development, Data Request/ Triage Service, Interoperability via Common Information Model application and understand how our digital initiatives need to align with them, for example. Pre Connection Information, and Data Cataloguing.

Implement new digital governance and approach & entities

We have a data strategy and data governance programme in execution. A core part of this is implementing a Centre of Excellence that defines policies, processes, roles and responsibilities and metrics. It also addresses cultural and communication needs so that we adhere to the defined principles. In rolling out our strategy and governance, we are

working with internal stakeholders and implementing roles such as data stewards. We are also implementing Axon Data Governance which is a knowledge repository tool that is used to document the data items that require governance.

Adopt digital security measures

Our focus here will be on definition of standards, processes and testing capabilities as well as cyber resilience. The latter is managed through our CRIT (Cyber Resilience IT) and CROT (Cyber Resilience OT) programmes. We have also, developed a Data Triage process in line with the ENA Data and Digitalisation process to Protect Data Assets and systems in accordance with Security, Privacy and Resilience best practice. Throughout development, we will be assigning security architects and assessments to ensure our designs meet the standards that we have set. Our development lifecycles include rigours testing to ensure such standards work in practice.

Enable carbon monitoring & accounting

The main capability that enables this recommendation is the implementation of our Integrated Data Platform, as it allows us to build a variety of different insights, analytical and reporting tools. The IDP can connect to difference data sources. Given that we plan to have rich and high-quality data in our systems and implement a strategy that maintains that standard, the IDP can be used to develop sustainability, carbon counting, greenhouse gas products and reports.

Data, Digitalisation and FSNR

Ofgem's consultation on frameworks for future systems and network regulation (FSNR) identified the requirement for increased digitalisation to deliver new infrastructure at pace and develop optimised whole system planning. SSEN Transmission's Digital Strategy is identifying system benefits that will help us to address demand growth and improve resilience.

Our Digital Strategy addresses network digitalisation, efficiencies in optimal system maintenance, asset health, resilience, planning and operation. It will deliver new information-gathering and processing capabilities, and the deployment of smart devices and appliances to enhance visualisation, monitoring and control.

We recognise the paramount importance of managing and sharing our data to benefit our customers, stakeholders, and the wider industry. Our commitment to this principle is unwavering, as we continually track and manage technological advancements to ensure our strategy is fortified with the best possible solutions.

SSEN Transmission actively works with industry peers and through the Energy Networks Association (ENA) Data and Digitalisation Steering Group on common initiatives to develop and enable interoperability.

We are engaged on the:

- ENA Data and Digitalisation Steering Group Standards and Interoperability Subgroup
- Interoperability and Standards Sub-Group
- The Common Information Model (CIM) Grid Code modification GC0139 Working Group to support the Common Information Model data exchange for the Grid Code modification GC0139
- The Open Data Working Group
- The Distribution Network Operator (DNO) Data Self Help Group

We acknowledge interoperability of the energy system is heavily predicated on the application of standardised data related services and practices across sector participants to enable timely, efficient and effective data exchange, integration and utilisation between both humans and machines.

Our Digital Strategy addresses aspects of standardisation including data semantics (terminology and meaning), ontologies (structures and relationships), metadata and exchange mechanisms. We are working together with our Data and Analytics team and industry peers in a co-ordinated manner to reduce obstacles relating to the discovery, interpretation and use of energy system data.

We are digitally enabling a data driven business by:

- clarifying terminology, ensuring interoperability, determining standards and developing distributed data infrastructure
- enhancing availability, access to and sharing of energy-related data
- delivering digital services that enable colleagues, customers, stakeholders and society-at-large to gather, sort and analyse data

Stakeholders and Removing Barriers

Human and digital interactions

Our approach to engaging with and serving our stakeholders and customers is both human and digital. We are deliberately choosing to offer both human or digital touchpoints, based on customer/stakeholder preferences, accessibility and context of the engagement or service delivery. We are also exploring automation in targeted areas to analyse stakeholder feedback and support customer connections. This allows us to provide enhanced service and engagement during our interactions, both in-person and online.

Stakeholder Engagement

We engage with stakeholders and solicit feedback to continually inform, shape and improve our approach. We have recently implemented capabilities that allow us to securely record, process, store and access GDPR-compliant stakeholder information. The new system provides enhancements that support our leading stakeholder engagement practices. We've provided specific training to our teams to support them in utilising and navigating the new system and our roll-out activities continue as our employee base and engagement activities grow. We recognise that different teams will often engage with the same stakeholders, so our new digital solution helps us coordinate our engagement and prevent stakeholder fatigue.

Data and Digitalisation is critically important to our business and our Digital team will continue to support business functions to understand and capture stakeholder requirements where digitalisation can be a significant part of the solution.

Insight-driven Improvements

Our <u>Infrastructure Stakeholder Engagement Survey</u> results are published annually, and we will use these to inform improvements and validate measures and definitions of success with relevant stakeholders. The Quality of Connection Survey is another important mechanism that allows our connections customers to define what excellent customer service looks like, so we can successfully deliver and measure successful incremental improvements.

Website Enhancements

In response to feedback from our direct stakeholders and colleagues, and in particular local communities, we've developed an improvement plan to deliver more than 40 technical enhancements to our website. This will allow us to engage and listen to our stakeholders via reimagined project webpages, hosted on our main website which offers the Recite Me assistive toolbar and ensures cyber security. With easier access, navigation, enhanced visual design, including mapping improvements, and simple feedback forms, we are now making it even easier to engage with and listen to stakeholders.

We have improved and streamlined multiple customer and stakeholder journeys on our website. We're now making it easier for telecommunications businesses to <u>request shared access</u> to our transmission infrastructure, supporting the deployment of telecoms networks across the country.

Acting on customer feedback, we've improved our <u>online pre-application journey</u>, digitising our processes which allows us to respond quicker and provide greater visibility of information. This is delivering an enhanced customer experience of joint working on projects and collaboration with other customers.

Digital Inclusion and Accessibility

Digital enhancements to our website also <u>make it easier to register</u> and communicate with us without having to attend an event or take part in a consultation, and we are now showcasing <u>all of our events</u> in one place. We are working with our Communities Team to enhance access to information on our website about our <u>Accelerated</u> <u>Strategic Transmission Investment projects</u>.

We are addressing digital inclusion and accessibility with the integration of the <u>Recite Me</u> assistive toolbar which offers customisable styling features, multiple reading aids, and a translation tool with over 100 languages including 65 text-to-speech. We have an accessibility specialist assisting us with the continued development of new web functionality that improves accessible for all users.

Accessing this document and other information

As a stakeholder-led organisation that works to AccountAbility's <u>AA1000 Stakeholder Engagement</u> <u>Standard</u>, SSEN Transmission is committed to continuously improving its stakeholder engagement practice and processes. This includes, from December 2023, our Digital Strategy Action Plan being available in html machine readable format via a hub page about our Digitalisation and Action Plan. It is also available under <u>"What We Do"</u>, two clicks from our homepage.

SSEN TRANSMISSION ANUDOD STAKEHOLDER ENGAGEMENT PERFORMANCE

Recite[®]

If you would like a printed copy of the Digital Strategy document or require it in an adapted format, such as large print, please get in touch so that we can accommodate your preferences.

If you are unable to access our website or reach us via email and require information about our Products and Services, please call our External Relations Team on 0345 0760 530 or write to:

SSEN Transmission, Inveralmond House, 200 Dunkeld Road, Perth, PH1 3AQ

Conclusion

Our Digital Strategy follows SSEN Transmission's stakeholder-led strategy to deliver value to our internal and external stakeholders. Aligned to our strategic themes, the Digital Strategy will enable transformation across our business and will help us deliver our 5 Clear Goals as committed to in our RIIO-T2 business plan and 'Pathway to 2030' investment. Building on the Digital Vision we set out in our Digital Strategy March 2022, we are investing in our Digital Strategy Outcomes with a strong

focus on data and digitalisation as enablers for accelerated growth of a safe, secure network for 2030 and beyond.

In line with Ofgem's FSNR, we are also focusing on making it easier for our colleagues, customers and stakeholders to access, request, analyse and gather insights from our data. Digitalisation to improve access, accuracy and trust in our data will enable more informed, quicker and reliable decisions to be made. Our digital innovations will also enhance our customer's experience with us, by providing them with better tools and faster processes to plan and make investment decisions. We are exploring the benefits of AI computing and analytic solutions to increase the effectiveness of our communications and engagement. IT innovations such as automation, Cloud and AI will be drivers to meet the needs of future customers.

We continue to invest in making project delivery faster, and more effective so that we can realise our "Pathway to 2030" goals, with ASTI (Accelerated Strategic Transmission Investment) projects being a priority. Through collaboration, improved data processes, enhanced network modelling capabilities and integrated project management, our digital engineering will deliver more effective engineering solutions and the hand over experience from large capital delivery initiatives, onshore and offshore, to operations will be enhanced.

Our Digital Strategy is also aimed at making more efficient, safe and effective operations and increasing the success of network planning. Digitalisation will improve visualisation of our growing network and assets, helping to assess asset condition, improve resilience, increase control and reduce risk over an asset's lifecycle. Greater data efficiency will drive insights and analysis to improve our whole data ecosystem and network planning scenario. This creates a foundation for optimising the performance and capabilities of our digital products, services and innovations.

Our Digital Strategy outcomes will help us embed a culture of data and digitalisation, unlock value for our customers and end consumers, deliver interoperability, and ultimately maximise growth of our network to achieve Net Zero.

