

Transmission Update

Digitalisation Action Plan

December 2024



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This Digitalisation Action Plan update reflects the progress we have made on our digital and data initiatives for our transmission business since June 2024 and shares our plans for the next six months as we progress the delivery of our RIIO-T2 business plan.

Our Transmission Digitalisation Strategy focuses on enabling the efficient management and operation of the transmission 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 digital transformation journey, we are now beginning to treat data as a critical asset. This shift in perspective recognises the value that data holds in driving strategic decisions, optimising operations, and enhancing customer experiences.

Reflecting on the progress made throughout the RIIO-T2 period so far, we have invested wisely in our data & digital tooling across our four digitalisation pillars, setting the foundations for evolving our transmission business into a digital age with improved systems to support the critical business processes being carried out. We also continue to comply with the Data Best Practice (DBP) guidance introduced by Ofgem at the start of RIIO-T2, evolving our maturity level across the defined 11 principles.

Some highlights over the past 6 months include:

CRM Platform Implementation

- Consolidation of multiple customer service solutions into one single system to manage all customer interactions and provide a 360-degree view of the customer. This provides greater customer insight to enhance our customer connection processes resulting in improvements to customer experience.

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.

Building Information Modelling (BIM)

- BIM is the digital integration of asset and network design, construction, management and operation of any project. This initiative transforms the way we manage projects, facilitating collaboration and delivering efficiencies across all aspects of the project lifecycle. We have successfully demonstrated the benefits implementing the BIM methodology on a number of live projects, enabling us to deliver network changes quicker and reduce cost for customers.

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. 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 users.

We have been working to create our RIIO-T3 business plan developing a bespoke digitalisation strategy for transmission. The scale of what we need to achieve, the pace at which we need to deliver, and the digital services and products which our stakeholders and customers need is evolving, and this is reflected in our ambitious plan.

Our T3 digitalisation strategy has been aligned to four pillars, each representing a suite of initiatives which work together to create the digital platforms, facilitate the

management of data required to become a data driven organisation, and support new ways of working:

1. Delivering tools and insights for our customers and stakeholders
2. Facilitating network growth through data & digital solutions
3. Developing smart network and asset management capabilities
4. Becoming a data driven organisation

We 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 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](#).



6 Month Highlights

We continue to make good progress delivering our ambitious RII0-T2 programme of work and have seen successes outlined below in the last six months.

£1.4m

Q3/Q4 2024 Investment

Since January 2024 we have invested £3m in our digital initiatives to align with our data and digitalisation strategies within our Transmission Business Plan.

65%

Projects in 2025 Ready for Delivery

We will invest £1m on digital solutions in 2025. We have already planned and authorised 65% 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.

6 BIM Pilots

Piloting the BIM framework across six projects

Successful learnings from these pilots are now being adopted into our operational business processes. BIM will be the primary working methodology across our portfolio of strategic projects and forms a key component of our RII0-T3 business plan.

30+

Digital Initiatives Defined as part of our RII0-T3 Business Plan

In preparation for our T3 submission, we have identified more than 30 digital initiatives that will form our digitalisation strategy as part of the forthcoming T3 submission to Ofgem in December 2024.

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.

228,000

Open Data API Calls

Open Data Portal users are engaging with our datasets, with over 228,000 portal interactions through the API function on our Portal in the last 6 months.

Stakeholder Engagement

At SP Transmission, 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-T2 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-T2 Plans

Stakeholder engagement is a key component of our RIIO-T2 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 of 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 available for transmission

Our response

We have initiated a project to carry out a digital modernisation of the entire SPEN website, including the transmission pages to enhance the ease of navigation and user experience. We have expanded our Web & Application team to increase our capacity and create digital-first web delivery capabilities. Looking ahead, we have scoped out a number of customer facing solutions as part of our RIIO-T3 digitalisation strategy which will introduce greater transmission customer self-service tools. For example, we will provide the ability for customers to generate a indicative connection cost without having to submit a formal application

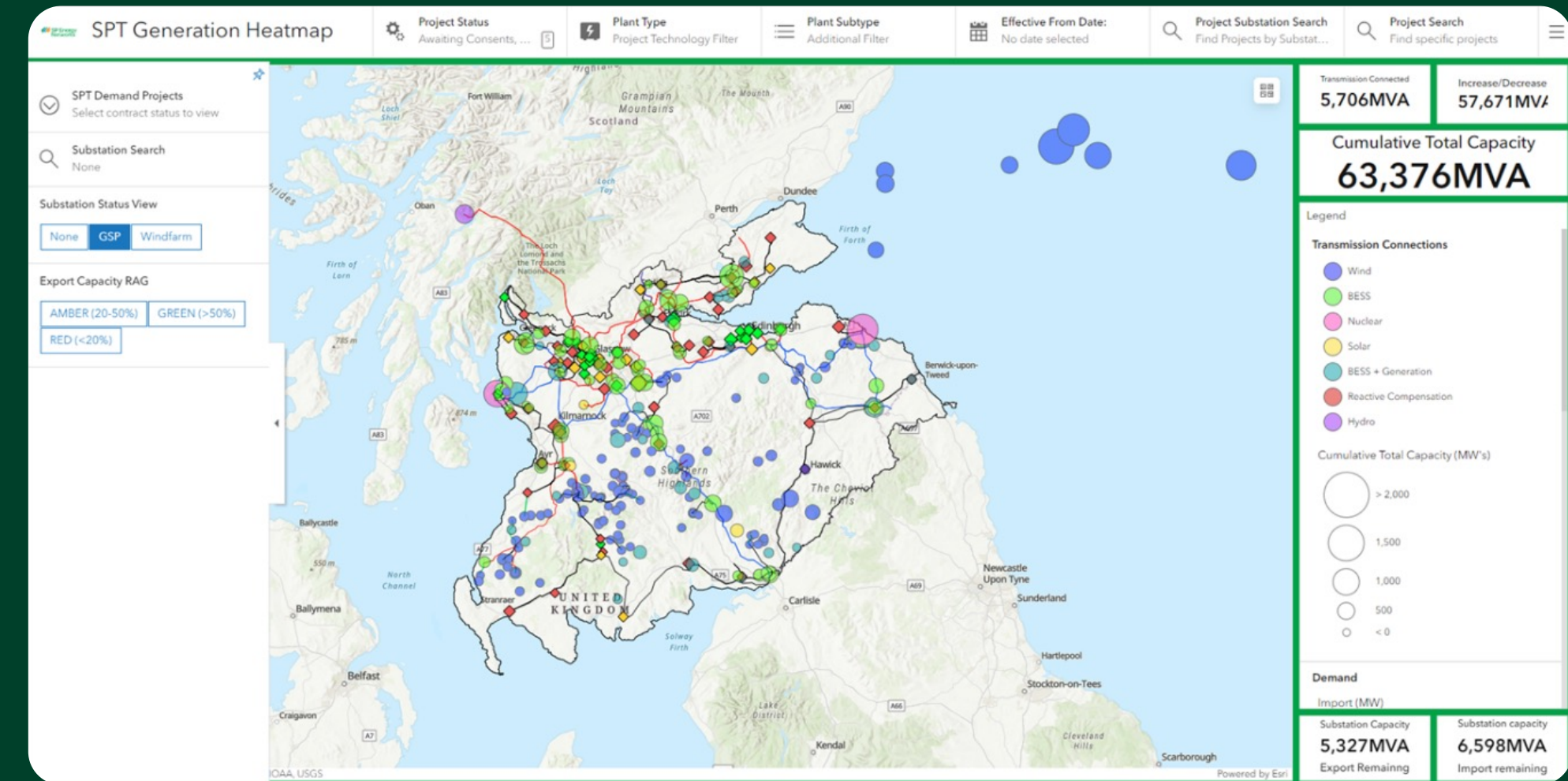
Stakeholder Engagement in action

In SPT we engage with a range of customers and stakeholders to understand what they require now and in the future. Their feedback and priorities are used to build our strategic goals and provide a consistent focus for our business, enabling us to deliver our agenda.

SPT Connections Summit

We hold our Connections Summit to address customer challenges. Most recently held in Dec 2024, we invite along customers who are looking to connect, have connected to our Transmission network or who have contracted with us.

During the event, we provided stakeholders with a detailed overview of our network, planned reinforcement works, and sought feedback. The purpose of the event is to inform and support customers on connection processes and provide them with a unique opportunity to interact directly with our teams, as well as the NESO, Ofgem and DESNZ who were also in attendance. At the event, we outlined our views on the impact policy changes will have on our customers, and we took the opportunity to present our new, updated SPT heat map, developed in direct response to feedback from stakeholders at last years event.



SPT Heat Map

In 2023, following stakeholder feedback, we recognised that we need to improve access to SPT data and make it accessible through system visualisations. To achieve this we developed our SPT Heatmaps, the first phase was completed last year. Building on this success, the team have completed the latest phase which provides supplementary information including substation thermal rating, interactive filters, and more.

The latest update to the SPT Heatmap expands beyond transmission connected generators to include transmission demand project details; GSP capacity information and embedded generator locations; and, details of embedded generation connected to SPD's network. The result of combining these multiple datasets into a single map allows you to view the network's current state, and understand what it may look like over time based on our existing connection queue.

With a renewed focus on interoperable data, the datasets have been reworked to allow interactivity with each other. This has enabled the capability to filter for a specific grid supply point (GSP) to highlight the transmission, distribution and demand projects related to it. Alternatively, if you are only interested in a specific area, you can now highlight it and enable the relevant filters to show the data you want in the highlighted area.

The latest version is available from our Open Data portal and website.

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)

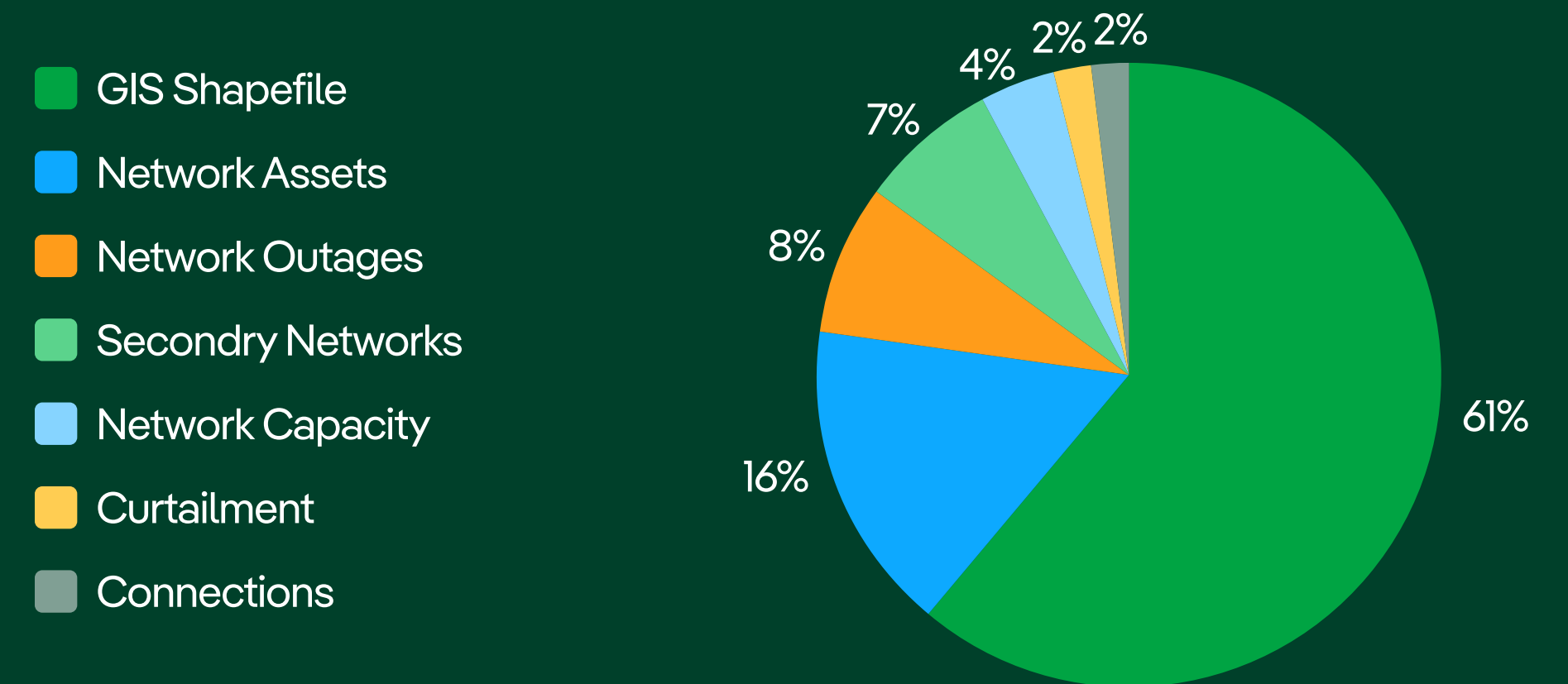
Our aim is to ensure that we can make data openly available for our stakeholders and will identify steps we can take to make all of our data available in line with stakeholder needs, such as redacting or anonymising data – whilst transparently outlining any steps we have taken on our Portal.

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

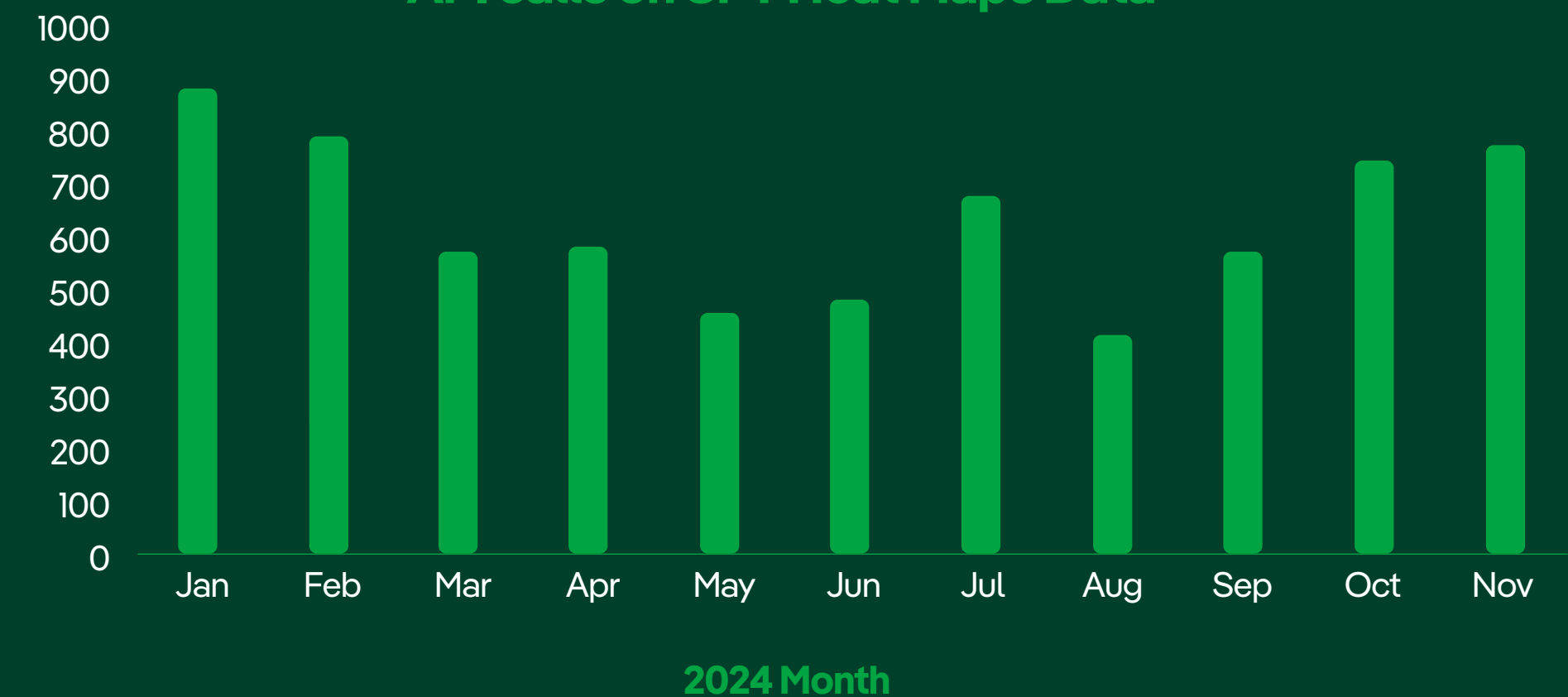
of visualisation capabilities and consume data via an API. All our data is aligned with the Dublin Core metadata standard and published under the industry standard Open Data Licence - Creative Commons (CC BY 4.0). Our shared data is hosted under privileged access rights and published under our Shared 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 hard 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 will launch our next Open Data Survey, seeking insights from our stakeholder to inform our 2025 plans.

Open Data mailbox requests 2024



API calls on SPT Heat Maps Data



Our Digital Pillars

Our RIIO-T2 digitalisation strategy is built upon four pillars, each designed to drive our data & digital transformation and support our strategic goals.



Data and Analytics:

Enable us to maximise the value of data and comply with Data Best Practice guidance.

Data is at the heart of our digitalisation programme. Without well governed data, our technology solutions will fail. We have a suite of initiatives that enable us to manage and extract the maximum value from data.

Technology Enablers:

Enable the ongoing operation at our technology estate.

We continue to invest in our platforms to support the operation of the business and the initiatives shown here bring new technical capabilities which will enable future development of solutions.

Customer and Stakeholder Solutions:

Enable us to engage with our customers and stakeholders.

Implementing and upgrading our existing customer service applications, including the Customer Relationship Management (CRM) platform.





Works and Asset Management:


















Enable us to manage our network and deliver load programmes.

Our business manages and maintains a large and complex set of assets. Our Building Information Model (BIM), mobile field workforce solution, and environmental systems are designed to support the management of these assets.



How our strategy aligns with business goals

-  A sustainable Net Zero future
Increase efficiency through
-  Increase efficiency through
constant innovation
-  Adapt our world-class,
resilient network
-  Keeping network users & consumers
at the heart of our decisions

Digital Strategy	Strategic Goals
Development of analytical solutions to enable automated processing of larger data volumes to provide insights into SPT's operation at a level currently not possible.	 
The implementation of a data exchange layer using enterprise service bus technologies will facilitate the further adoption of process automation through different aspects of SPT's operation.	
Improved condition assessment of assets based on broader and deeper data sets to enable better decisions on the operation, maintenance and replacement/upgrading of assets.	   
The integration with additional monitoring points on the network to enable system monitoring and dynamic rating calculations to be performed. Solutions will be developed that will facilitate the capture of the real-time information for use in determining optimal network operation.	 
Consideration of the impact of the transition to Net Zero on the data modelling or asset operation of management data.	   
Introduction of machine learning and artificial intelligence solutions to provide new insights and decision making.	   

Digital Strategy	Strategic Goals
Development of digital platforms to facilitate improved interactions with users (internal and external), enabling improved capture, recording, analysis, and reporting of data.	
Consolidation of IT solutions around key asset management platforms together with increased and enhanced data capture across a wider base of business operations enabling more information to be used in business decisions.	 
Extension of IT platforms to capture more data (e.g. geospatial, time series, additional measurement points, video) on SPT assets using IoT devices, edge computing and social media to enable more informed decision making.	 
Introduction of robotic process automation to facilitate the rapid processing of larger data volumes.	
Exposing more information closer to the point of consumption through the widespread adoption of mobile platforms, the development of focused applications, deployment of edge computing solutions and technologies such as virtual and augmented reality.	 
Adoption of cloud-based solutions where these provide the greatest opportunity for business and technology effectiveness and efficiency.	
Implementation of BIM Level 2 compliant solutions including full 3D modelling of assets and the establishment of the Common Data Environment for collaboration.	   

Data Best Practice

At the start of RIIO-T2, 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-T3, please refer to our RIIO-T3 Digitalisation Strategy.

DBP Principle	How we comply
1 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 SPT business, and build a centralised catalogue of all data assets, alongside a quality framework.
2 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 for our core systems.
3 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.
4 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.
5 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
6 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 launches in December 2024 to support the development of our 2025 plans.
7 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.
8 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.
9 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.
10 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.
11 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.

Project Updates

Initiatives	Summary	Progress in the last six months	Activities planned for the next six months	Measures of Success / Customer Benefit
Asset Condition Based Decision Support	The deployment of a tool to capture and record asset condition information through sensor technologies to reflect the live SPT asset risk profile and enable improved management decisions throughout the life cycle of the asset. Previously SPT largely followed a reactive approach to the maintenance of its assets with intervention undertaken in response to indications of asset health or performance degradation during regular inspections and condition monitoring activities. We will create a proof of concept to allow us to demonstrate the viability and measure the value gained from a condition-based asset decisioning platform.	<ul style="list-style-type: none"> The implementation of the transmission Network Asset Risk Metric (NARM) solution has been completed, providing the platform to perform asset health and criticality calculations. The data transfer mechanism to feed this with asset condition data is currently being upgraded to deploy a flexible solution that will support new data exchanges as required for the proof of concept. Data integration between our SAP platform and Azure is underway with data currently being analysed before the next stage of development is carried out. 	<ul style="list-style-type: none"> SPEN Analysis of the data is ongoing to understand any changes to inspection or maintenance plans that are required. 	<ul style="list-style-type: none"> Facilitation of improved data analytics and assessment of datasets across an integrated system. Analysis of data trends to allow for asset deterioration rates to be reviewed for asset intervention decision making. Improve network resilience resulting in a reduction of customers off supply due to unexpected faults or extreme weather events.
Big Data Platform	Our Big Data Initiative will bring together SPT's main asset systems into one platform. This includes using a new framework to create detailed 3D models of the network and integrating with another system to capture important asset information and video data. Currently, SPT has three separate systems for managing assets and business information, which are updated every night. Additionally, there is a reporting system that is also updated nightly. With this initiative, we aim to improve the integration with real-time data, which is currently limited.	<ul style="list-style-type: none"> Our Azure Synapse platform has been adopted and asset data is being synchronised to the platform for regulatory reporting (RRP and NARMS). 	<ul style="list-style-type: none"> Focus will be on further developing the data model required for sustained benefits, these will be realised through developing a data model which will promote the re-use of asset data for use-cases wider than NARM. Integration of the associated master data into a common data model to underpin future requirements. 	<ul style="list-style-type: none"> Development of the conceptual SPT data model.

Initiatives	Summary	Progress in the last six months	Activities planned for the next six months	Measures of Success / Customer Benefit
Data Sharing Infrastructure (DSI)	Early work has commenced to understand the requirements for the DSI, this includes participation in the DSI pilot project and reviewing the proposed use-cases with the Ofgem DSI Governance consultation.	<ul style="list-style-type: none"> SP Energy Networks are participating in the DSI pilot project and have been collecting requirements. 	<ul style="list-style-type: none"> Development of a sandbox environment to test the software stack. 	<ul style="list-style-type: none"> Improved readiness of systems and governance required for DSI MVP.
Data Governance Platform	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"> Significant progress has been made with deployment of our Minimum Viable Product in our Production environment. Initial suite of prioritised Data Governance policies has been drafted. 	<ul style="list-style-type: none"> Completion of our Minimum Viable Product. Deployment of Informatica into SPEN on an incremental basis, prioritised by our Data Governance Forum. Finalisation of our initial suite of prioritised Data Governance policies. 	<ul style="list-style-type: none"> Establishment of data accountabilities in SPEN. Development of a SPEN data catalogue – providing a detailed inventory of all data assets and their associated metadata. Data quality metrics in place.
Open Data Portal	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.	<ul style="list-style-type: none"> Publication of 13 new data tables, including data on historical outages and flexibility. Publication of the outputs of our Data Triage Risk Assessments. We have enhanced the feedback forms available on our Portal. We have launched the first in a series of videos, supporting our customers and stakeholders in using our Portal. 	<ul style="list-style-type: none"> Continued engagement with our customers and stakeholders, including our second Open Data survey Publish additional videos to continue to support our customers and stakeholders in using our Portal and making the most of our available data. Expanding our Portal to include additional datasets to meet the needs of our customers and stakeholders New visualisations to enhance the data on our Portal. 	<ul style="list-style-type: none"> Stakeholder feedback through Open Data Surveys and use of feedback forms. Trend analysis of user interactions with our Portal. Incremental improvements in Data Quality across our available data.
Building Information Modelling (BIM)	The digital integration of asset design, construction, management and operation of any project. The integration to our portfolio and project management system for construction units, data integration for sustainability, 3D models of SPT assets, digital twin workflows, and supplying digital data to field workers.	<ul style="list-style-type: none"> Engagement with 3rd party Autodesk to introduce suite of applications including a pilot of their document management system. Technical architecture documents drafted for integration with SAP. Development of training packages for Building Information Modelling (BIM) platform. Change management plan drafted to introduce BIM applications into SPT strategic and pilot projects. 	<ul style="list-style-type: none"> Proof of concepts to be delivered for Autodesk's Construction Cloud applications across SPT. Data migration from legacy data repository to strategic Autodesk solution. Introduction of AI and augmented reality to improve efficiency of construction projects. Continue to develop the Common Data Environment to collect, manage and share all project data. Develop integration with SAP. 	<ul style="list-style-type: none"> Improved quality across all aspects of the project planning lifecycle from design to delivery. Reduction in time, effort and cost of changes throughout project life cycle resulting in cost efficiency for customers and reduced variation from original designs. Improve project implementation by seamless data sharing with design engineers coordinating and making changes within one environment, improving customer satisfaction.

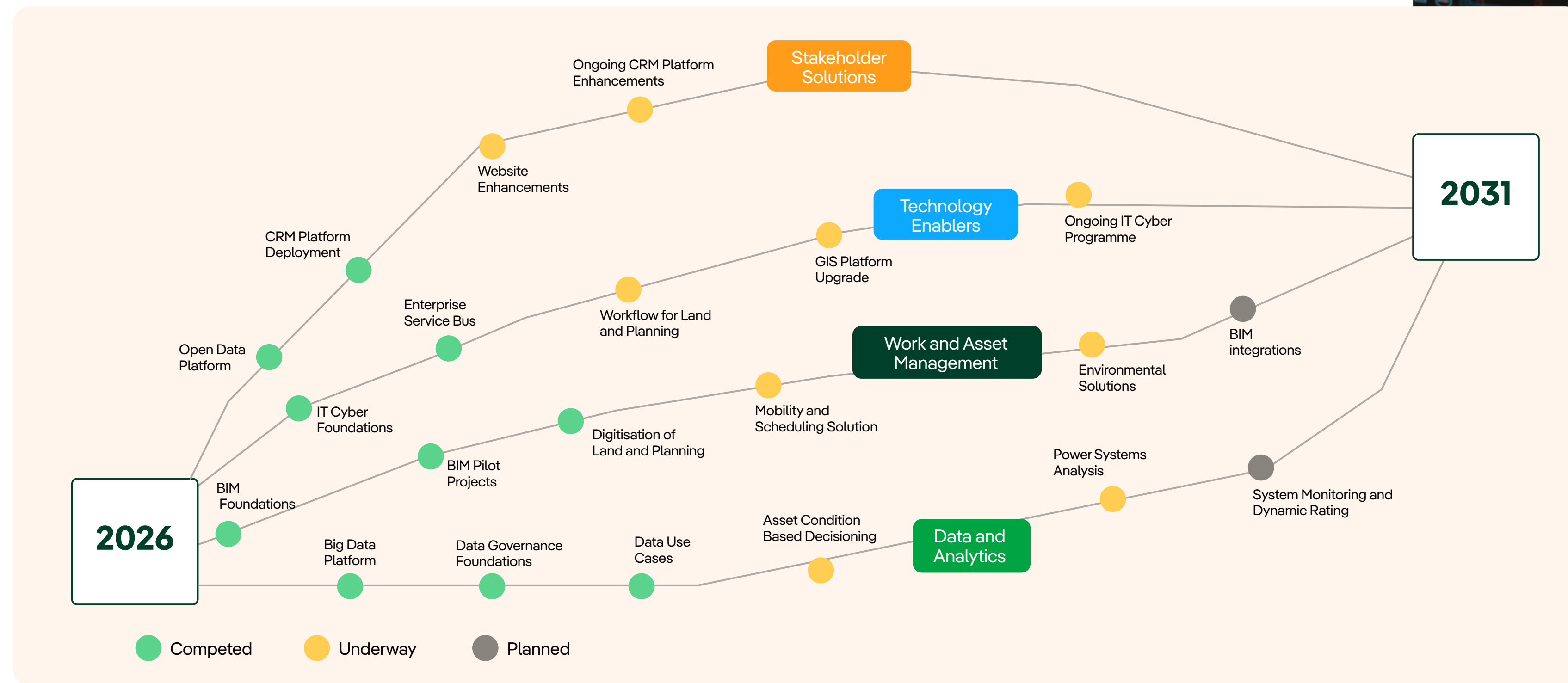
Initiatives	Summary	Progress in the last six months	Activities planned for the next six months	Measures of Success / Customer Benefit
<p>System Monitoring & Dynamic Rating</p>	<p>System monitoring and dynamic rating involves the capture and analysis of near real-time operational information on SPT field assets to enable more informed operational decisions about the network. Additionally, the capability to further analyse our asset and system data will aid design of efficient and strategic risk mitigation. Current system analysis is undertaken retrospectively using fixed data recorders collected for fault investigations and network planning.</p>	<ul style="list-style-type: none"> • This project is not started yet and has a planned delivery for the period 2025/26. Budget plan for 2025 created. 	<ul style="list-style-type: none"> • Finalise functional and non-functional requirements. • Create low level technical design. • Determine costs and gain internal funding approval. • Create plan for delivery. 	<ul style="list-style-type: none"> • Allows analysis of assets to optimise their usage and to reduce the volume of potential risks. • Improved network asset lifespan, reducing replacement and repair costs.
<p>ESCOMS Replacement</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"> • On-going enhancements following Go-Live to improve workflows and reporting. • Successful adoption and onboarding into twice weekly maintenance and enhancement releases. • Discovery phase complete for integration with GIS which will deliver further efficiencies for our Land & Planning department. 	<ul style="list-style-type: none"> • Further improvements to reporting. • Complete testing and development for mobile solution. • Complete full design and a delivery plan for GIS integration, commence build. • Agree requirements for archiving solution. • Decommission of legacy system. 	<ul style="list-style-type: none"> • Improved ways of working, with significant levels of automation increasing efficiency and ability to prioritise jobs and manage teams and workflows with measured effectiveness. • Centralised, secure and fully supported solution that allows for GDPR transparency, improved data management and enhanced reporting capabilities.
<p>GIS Platform Upgrade</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 (due to become obsolete from 2025) to ArcGIS Pro on the Utility Network data model, the upgraded software with enhanced functionality.</p>	<ul style="list-style-type: none"> • Completed initial version of strategic data model upgrade (Utility Network model). • 2 of 29 interfaces developed and currently being tested to be compatible with data model upgrade. • 75% of redevelopment work completed on current web applications to make them compliant with the new data model. • Integration with What3Words geolocation tool build complete. • Test strategy drafted and signed off. 	<ul style="list-style-type: none"> • Complete data readiness activities to enable testing of new data model. • Complete remaining development of interfaces. • Migration plan to new data model to be finalised and signed off. • Testing activities to be carried out in line with signed off testing strategy. • Stakeholder engagement with end users to be carried out across SPT licence area. 	<ul style="list-style-type: none"> • Migration to UN (Utility Network) data model in ArcGIS Pro will enable new capabilities for analysis and manipulation of information as well as for representation (3D and 4D). • Improved functionality out of the box in new ArcGIS Pro environment allows for more configuration over customisation of tools – reducing future obsolescence and therefore expenditure. • Increased accuracy of the real world location of our assets within our corporate systems improves our ability to effectively manage them.

Initiatives	Summary	Progress in the last six months	Activities planned for the next six months	Measures of Success / Customer Benefit
<p>Mobility & Scheduling</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"> Majority of SAP integrations for field service solution completed. Salesforce Field Service roll out completed for Substation Inspections across the SPT license area. 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. All SPEN sites visited and over 1,500 users now active in Field Service. Significant progress made with Substation maintenance planning with development commenced in October. 	<ul style="list-style-type: none"> Begin delivery of new mapping solution enabling the delivery of our roadmap of further use cases. Roll out of Substation Maintenance across all three licences. Continued focus on User Experience (UX) for users across all work delivered. Increased engagement with Stakeholders across central functions to ensure delivering value as efficiently as possible. Plan for closing out all other Inspections and Maintenance alongside mapping solution delivery. 	<ul style="list-style-type: none"> Improved Health & Safety through better visibility of data and information in the field. Improved Customer Service through quicker response times. Improved operational efficiency through optimised scheduling and better visibility of resources and field work.
<p>CRM Platform Implementation</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"> Closure of CRM Programme as a delivery vehicle. Future Salesforce enhancements will be carried out through ongoing enhancement and support mechanisms. 	<ul style="list-style-type: none"> Continuous improvement programme of incremental enhancements. 	<ul style="list-style-type: none"> A single view of all customer interaction across SPEN provides insight and quicker resolution paths for live chats or telephony interactions. Increased volume of customer enquiries resolved first time. Reduced volume of enquiries that need more than one person to resolve.
<p>Biodiversity and Natural Capital</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"> Reduced sites needing digitised for input to tool. Obtain digitalised SPEN land ownership file for running in tool. Commenced sandbox sessions on AECOM natural capital tool. Eco Uplift Tool, procurement, and build of Natural Capital Baseline of the Network. 	<ul style="list-style-type: none"> Delivery of SPT Natural Capital and Biodiversity Baseline Project Procurement and Cyber compliance testing of tool for use in SPEN. Obtain license for Eco-Uplift and roll out training for use across all three licenses. 	<ul style="list-style-type: none"> Natural Capital tool and Optioneering tool successfully embedded in routing/siting decision making processes. Minimisation of impacts on biodiversity from development of network. Enhancement of natural capital across the network where possible.

Initiatives	Summary	Progress in the last six months	Activities planned for the next six months	Measures of Success / Customer Benefit
<p>Carbon Accounting</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"> Carbon Product Calculator Tool development is complete and the 'Launch' Event is scheduled for January 2025. 	<ul style="list-style-type: none"> Stakeholder engagement (internal and external) and change management process (internal) to ensure the tool is used. 	<ul style="list-style-type: none"> Digital Carbon Product Calculator Tool successfully embedded in tender contracts. Minimise the greenhouse gas (carbon) emissions from the development of infrastructure."
<p>Power System Analysis Software</p>	<p>This initiative covers the adoption of new Power Analysis tool capabilities to enhance functionality and facilitate analysis of new network challenges. At the start of the T2 period DlgSILENT PowerFactory was used to undertake network analysis of the transmission network. Further investment in modelling tools is expected to meet the needs of the changing transmission network.</p>	<ul style="list-style-type: none"> The high level design for the implementation of the harmonic impedance loci application has been approved. Detailed design for implementation is underway. 	<ul style="list-style-type: none"> Finalise functional and non-functional requirements. Create low level technical design. Determine costs and gain internal funding approval. Create plan for delivery. 	<ul style="list-style-type: none"> Increase understanding of potential impacts on the network due to changes in connected generation and load. Upgraded Power System Analysis Software will improve overall Whole System Design.

Our Delivery Roadmap

As described in our Transmission Strategy in March this year, the diagram below provides an overview of the digital solutions that are part of our RIIO-T2 Digitalisation Strategy. A number of these have been fully delivered and the remainder are on track for delivery as per our roadmap. These are shown against our 4 digital pillars.



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 RIIO-T2 programme and will continue to do so as we move into RIIO-T3

Architecture and Strategy Team

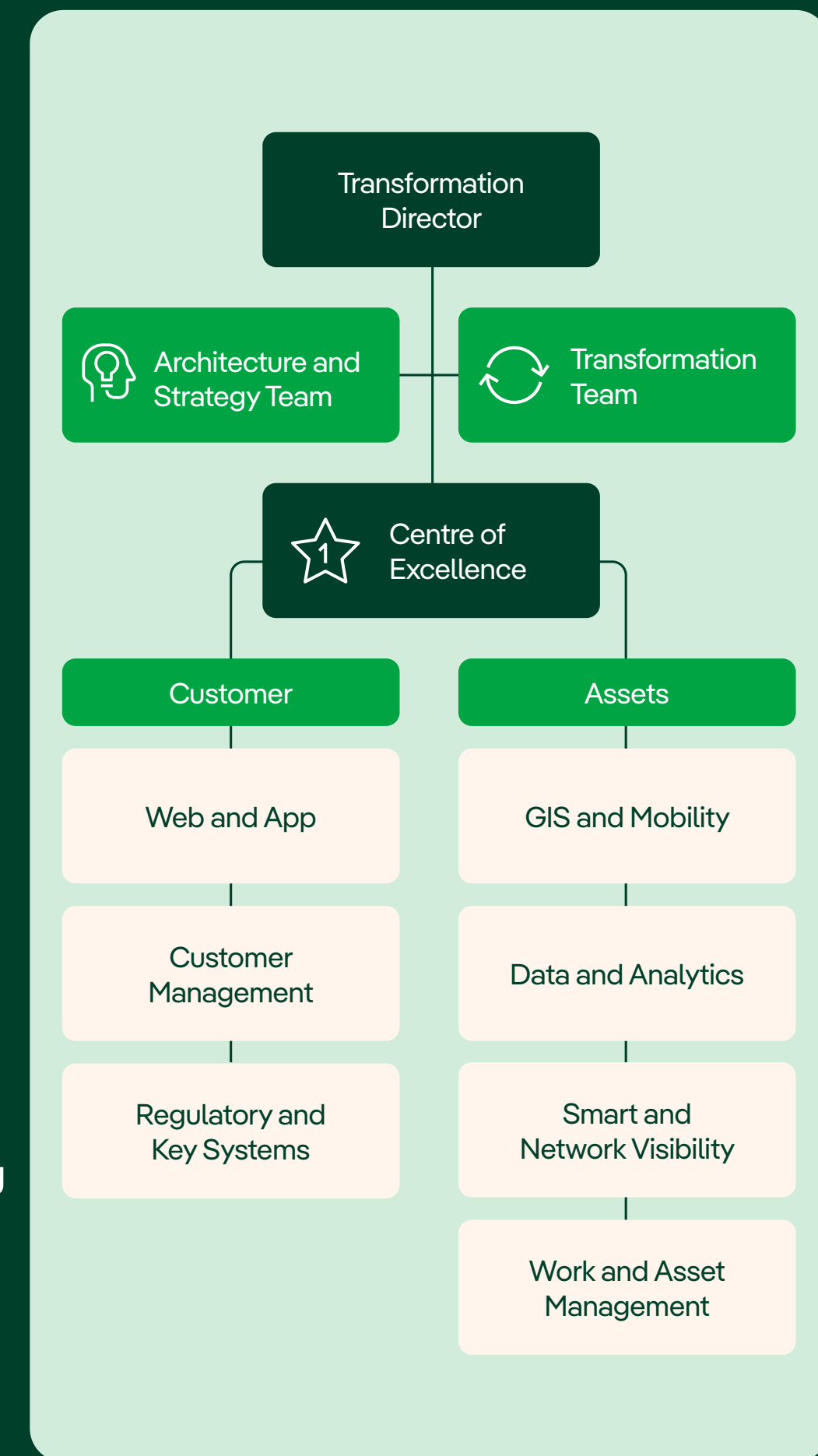
Our Architecture and Strategy Team own our Digitalisation Strategy and Roadmap and are responsible for developing and driving our digital strategy. They provide architectural oversight and test solutions for compliance with Digital and Data roadmaps. They are responsible for all our Digital submissions 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.





 SP Energy Networks