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SP ENERGY NETWORKS

Digitalisation Strategy and Action Plan update

30 June 2022

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Foreword

In December 2021 we published our ambitious RIIO-ED2 submission, setting out our vision for Data and Digitalisation which will play a key role in the transition to a net zero emissions future. Technology is everywhere and digitalisation is a fundamental transformation that is already critical across so many sectors and the energy industry is no different.

Digitalisation will not only be an enabler to the climate change target set by the UK governments but will also benefit our customers by providing the ability to choose from a range of smart technologies and services to maximise the use of low carbon energy whilst reducing costs.

In order to deliver the proposals in our strategy and meet the commitments we've made to our customers, we will require significant changes to our business structures, our processes, our culture, and our skillsets. That's why we've already kicked off our RIIO-ED2 enablement programme, focusing on areas which we see as delivering most value to our customers, and preparing us for the road to net zero.

To summarise our position since our December 2021 publication:

Of the seven key projects which were due to be delivered within the last 6 months, six have been delivered successfully and one has been delayed following a change in the solution selected.

Details of this change can be found in the last section of our document.

RIIO-ED2 Digitalisation Enablement Programme

The first half of 2022 has seen us launch our new Ways of Working programme, moving towards a more agile methodology. We have set up new agile tribes and squads covering our assets and customer services initiatives.

In 2022 we have delivered phase 2 of our ongoing GIS improvement programme. This RIIO-ED2 readiness programme has been established to ensure the current business processes and use of systems will cater for the expected increase in volumes of customer requests. New infrastructure has been built, a new method of desktop access been introduced, 6 web applications have been migrated, over 20 interfaces migrated, 15+ new reports introduced, an FME server implemented, ArcMap software upgraded to the latest version and a new reporting database has been built. We have also created our future GIS roadmap.

We continue to enhance our Energy Net Zero platform and have also kicked off our LV readiness programme demonstrating our commitment to providing access to a safe and reliable electricity network able to support our customer needs. We will manage the load increase of our network using a combination of traditional and new digital solutions to reduce costs for customers, and to drive towards a Net Zero future.

Customer Connections plays a key part in our strategy due to the expected increase of customer requests resulting from low carbon technologies (LCTs). Our connections agile squad has selected 8 specific areas of focus to align with our commitments, with the first 3 projects underway; enhanced self-service connections quotation tool, SAP process efficiencies for our internal teams, and we are also introducing a new graphical design tool to automate and streamline our current design processes.

From a customer services perspective, we have reviewed our systems estate with a view to rationalising our applications in line with our RIIO-ED2 submission. Work is underway on a new Customer Relationship Management (CRM) application, which seeks to provide a single, shared view of our customer enabling end-to-end journey management. This project also includes self-serve functionality for customers to check on their project status and receive more regular updates, to map, manage and improve critical stakeholder relationships and enable automation / trigger-based actions reducing the amount of manual and repetitive tasks

The introduction of new digital solutions will enable us to respond to the anticipated increase in customer contact to support their decarbonisation journey.

Data Strategy

We have achieved mobilisation of our Big Data and Analytics projects.

The agile data tribe has been established with 4 squads looking at technology, data sets, reporting and open data requests. An established internal governance forum has been established, a data blueprint created, and the review of new technologies is now in the discovery phase.

Our Data Strategy establishes the framework to ensure that we carefully collect, manage, share, and extract maximum value from data. 2022 Q2 and Q3 will see us further develop and implement elements of this strategy, introducing new technologies, and providing increased access to data we'll make publicly available such as environmental data to build partnerships with other participants in the ecosystem such as academia, third party organisations and innovators

Summary

We know how important it is to keep our customers and stakeholders at the heart of everything we do, and therefore really value your feedback on our DSAP and on our overall RIIO-ED2 Business Plan to allow us to shape our future plans in line with your expectations.

Business Transformation

Since our last update, our newly appointed Business Transformation Director (Lynda Ward) has successfully established the new Business Transformation Directorate to support RIIO-ED2 Readiness and delivery of Strategic Transformation initiatives.

In the last update we detailed a new iterative approach to planning called Big Room Planning, with a key output being the construction of our project masterplan. We have continued building on this approach with the project masterplan forming the cornerstone of our Transformation Roadmap. We have also continued to embed an Agile methodology within our business, with Squads and Tribes set up to drive effective delivery of our strategic programmes of work, such as Big Data & Analytics, Customer Service and Asset Data initiatives. This provides us with flexibility in our delivery plans and a clear focus on delivering value and outcomes at pace, enabling us to meet the needs of the business whilst ensuring alignment to our digitalisation strategy.

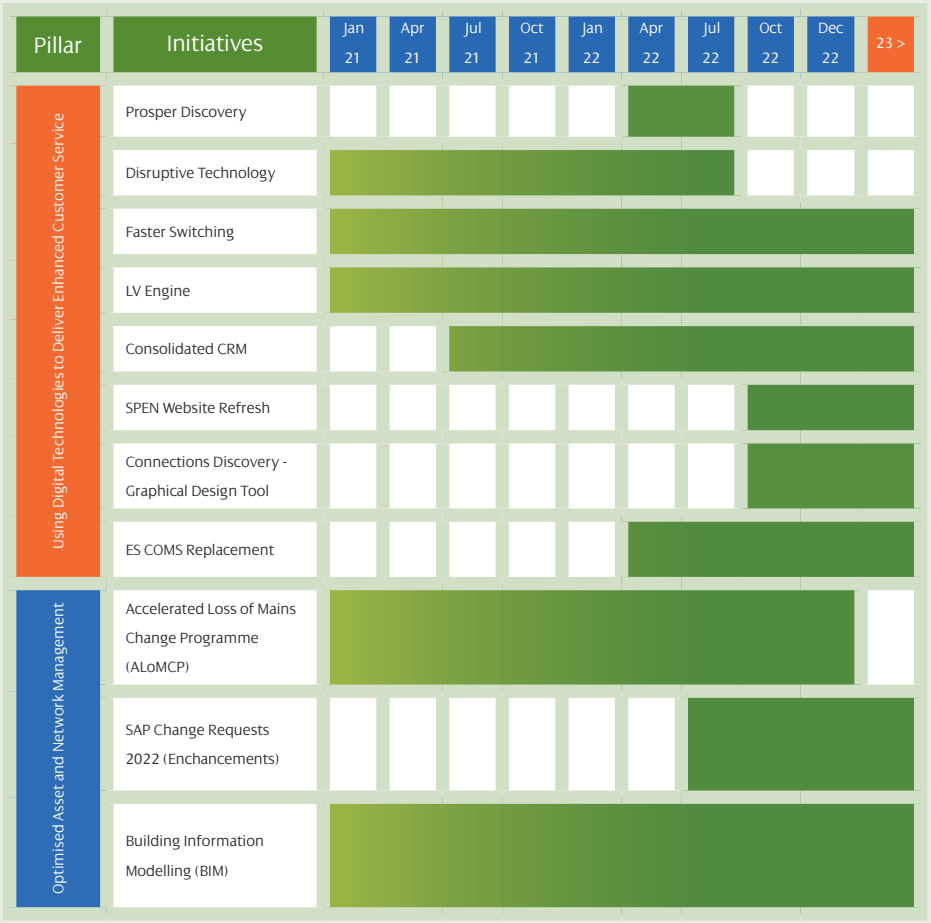
We are becoming more mature in our approach to planning and delivery and have started to develop a framework and methodology to plan, prioritise and resource our programme of digital initiatives. This provides a future picture of the programme requirements and allows us to be more considered with our allocation of resources, identify gaps, and prioritise our recruitment efforts to make sure we can deliver on our programme of digital initiatives.

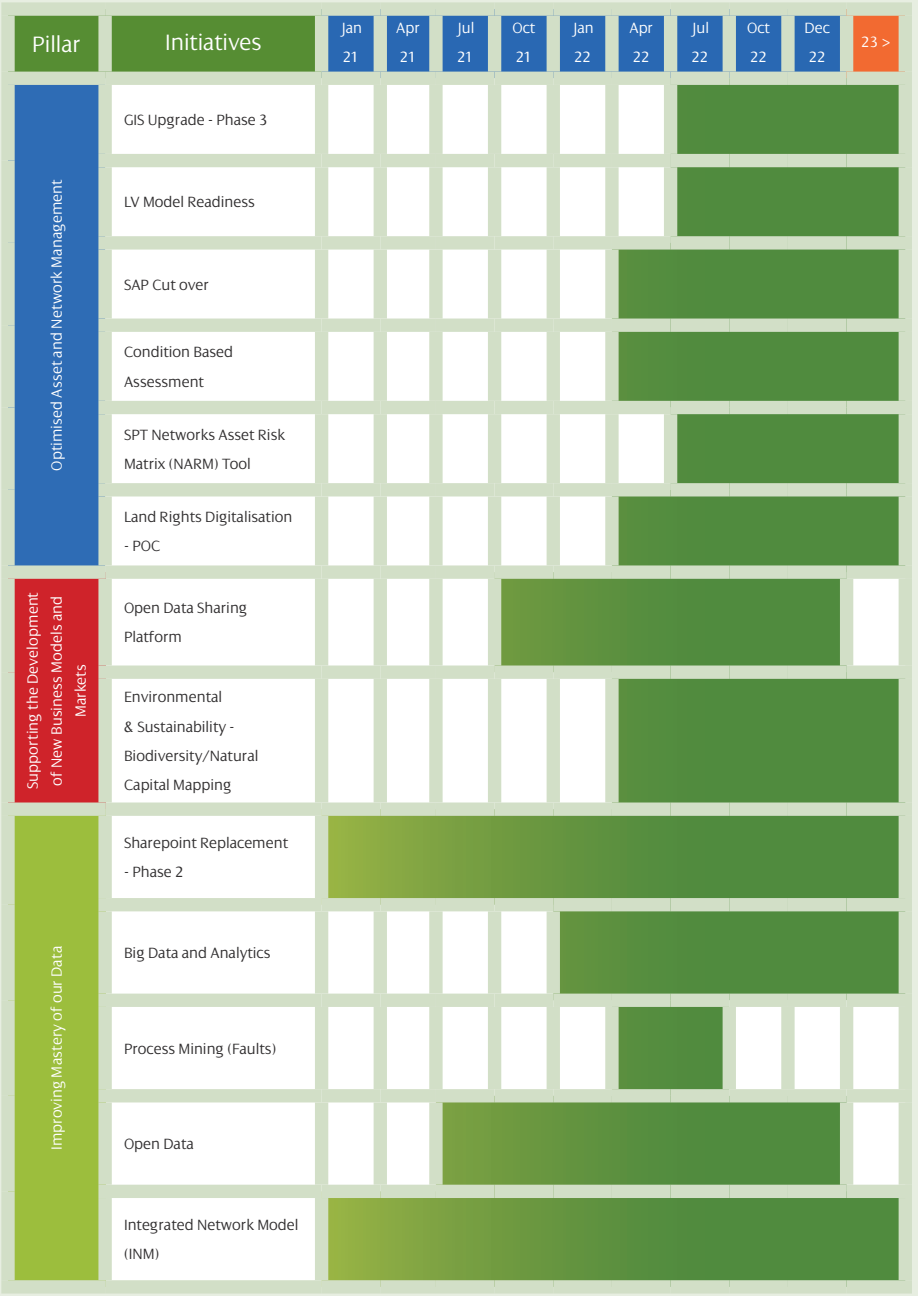
Digitalisation Action Plan overview

This section provides a summary of our plan.

These are the projects we plan to focus on through the following 6-month period. Some of the projects, due to size and complexity, will continue beyond this period and into 2023.

Progress on these projects will be provided in future Digitalisation Action Plan updates.





Digitalisation Action Plan in detail...

Delivered in the last six months

As part of our transformation we are moving to a more agile approach where we are delivering incrementally to release value early. Some of the projects listed below demonstrate this new strategy, highlighting what has been delivered so far and where further deliveries are required to fully complete the project.

	Initiative	Descripton
Using Digital Technologies to Deliver Enhanced Customer Service	Charge/ Connect More	The primary objective of the CHARGE Project has been to share information about the Electric Vehicle (EV) infrastructure. This has been done via the use of an interactive online application called the ConnectMore Interactive Map. The ConnectMore Online EV Connection Cost Estimator has been delivered, which is a user-friendly web application that will enable users to: • View where the SPEN electricity network could support EV chargepoints needed to serve the community • Identify the costs associated with connecting the EV chargepoints onto the SPEN electrical network, therefore, allowing users to make an informed decision prior to proceeding with a formal connection quotation • Charge/ConnectMore now live in SPM. Enhancements were delivered June '22 to include cost estimator. **Details can be found on the following link: www.spenergynetworks.co.uk/pages/charge.aspx**
	Customer Services Enhancements – Phase 2	This phase of our self-service strategy specifically related to the New Connection process, to increase the use of self service via our website, create improved customer golden records resulting from online updates and leading to improved Customer Satisfaction by making New Connections data more accessible. The following scope was delivered: direct online updates of customer information, presentation of outage data, presentation of an interactive map, new online application forms, presentation of additional information relating to applications previously submitted and the introduction of land and planning data. This work was completed in Q1 2022.
	Customer Connections - Self Service	Following the initial discovery phase, the output was used to begin our Connections programme of work. Stage one is the enhancement of our Online self-service budget estimation capability. The analysis has been completed, the user stories created, and a solution selected. Next stage is to develop and deliver the new solution.

	Initiative	Descripton
Using Digital Technologies to Deliver Enhanced Customer Service	Evolve	This pilot project was established in SPM to improve the business performance managing the LV network, especially in regard to faults. It focussed on the deployment of technology to the LV network such as Low Voltage Monitors (LVMs), LV reclosers and fault-finding equipment. It also looked into the hygiene of our LV network records, driving the removal of overdue temporary running arrangements. The EVOLVE pilot has now been completed and has successfully demonstrated the value of adopting LV Control / Support and the CI/CML improvements that can be delivered from LVMs. We are now building on the success of this delivery with 2 new projects; **(i) LV Support** This new initiative is establishing LV Support / Control as BaU in SPM. This continues the work undertaken by EVOLVE in establishing performance improvements enabled by having a central team coordinating LV fault activities and utilising the latest technology. SPD have a similar initiative underway and both areas are in regular contact to establish best practice. **(ii) LVM Programme** Both SPM and SPD are now accelerating the deployment of LVMs ahead of RIIO-ED2. This new programme is leading on the procurement and integration of LVMs. Aiming to get 1,300 LVMs installed in the final year of RIIO-ED1. Effectively EVOLVE ended in 2022 as it transitioned into the above programmes.
	Faster switching	Licenses Codes and Regulations are continually evolving and SPEN must comply with these regulatory requirements to maintain its' license to operate as a DNO/DSO. Faster Switching is a Regulatory Programme with the objective to improve customers' experience of changing supplier by implementing a new switching process that is reliable, fast, and cost-effective. In Q1 and Q2 of 2022 the programme has completed the build of the pre -production system environments and undertaken the required testing phases for the Faster Switching solution. This has included Go-Live transition testing which has allowed the programme Go-Live Transition Stage 1 to be completed. We are now moving into the next stage of this project which is detailed in the following section.
Optimised Asset and Network Management	GIS Upgrade Phase 2	This was a RIIO-ED2 readiness project to ensure the current business processes and use of systems will cater for the expected increase in volumes of New Connection requests. New infrastructure has been built, a new method of desktop access been introduced, migrated 6 web applications, migrated 20+ interfaces, 15+ reports, implemented an FME server, upgraded ArcMap software to the latest version and built a new reporting database.

	Initiative	Descripton
Optimised Asset and Network Management	Barcoding (ph. 1C)	In Q4 2021 Phase 1 and 1b of the Barcoding project delivered improvements to the Barcoding UI. In Q1 of 2022 Phase 1c has implemented further enhancements to the application. This has included improvements to the system log-in process, incorporating functionality in the mobile application that allows users to mirror key stock processes that they would undertake directly in the core SAP system.
	VPB Resource & Productivity Project	This project delivered enhancements to allow for easier use of the Visual Planning Board (VPB) for staff to plan tasks as well as increase accuracy on the productivity report. Additional changes in SAP PM, will assist Project Managers design and deliver their projects with greater efficiency. Project implemented in two phases, Phase 1 VPB changes delivered Q1 2022, and Phase 2 SAP changes delivered in Q2 2022.
	SAP Change Requests	In Q1 and Q2 this year the following changes have been delivered as part of our SAP improvement programme; • Reporting improvements for master data visibility • UNTECO is a previous year enabled to allow volumes to be processed on jobs that were previously TECO too early • Release commitment report built to allow projects to be designed down with one transaction instead of going into each work order manually • Auto confirmation of volumes to reduce the tasks required from project managers • General volume enhancements to improve reporting accuracy
	BIM	The BIM initiative is an ongoing programme of work, implementing a transformative enabling process for the design and delivery of large projects. The project is delivering incrementally in order to deliver value early. The first half of 2022 has delivered the following: • Appointment of a BIM Implementation Partner • Creation of an Object Library Specification • Procurement of a Bill of Quantities tool • Packaging of 12 Autodesk APPs through Corporate Application Installer • Set up of a Common Data environment and Workflow Development • Start of Project Pilot 1 and appointment of Design Partner • Training on BIM tools
	Phoenix	Ofgem Network Innovation Competition funded project collaborating with NG ESO, ABB, Strathclyde University and Denmark Technical University to deliver a hybrid synchronous compensator for fast declining grid services. Phoenix is the world's first H-SC system and will provide essential grid services such as inertia, short circuit level and reactive power largely depleted due to the closure of thermal generation plants on our network. This project technology helps maintain system stability and security with increasing levels of renewable generation connected and will enhance capacity for power flow on our network. The trial has been completed in Q2 2022 and the system is now waiting for deployment to business as usual - scheduled in Q4 2022.

	Initiative	Descripton
Improving Mastery of our Data	New VoWD and Forecasting System (Pexis) Phase 1	The key objective of this project was to deliver a new Forecast and Value of Work Done (VoWD) system to allow project managers to track project costs and create accruals for SPT Major Projects and SPM 132kv and 33kv projects. This project seeks to help SPEN licence areas improve how they manage their Major Network Investment & New Connection projects enabling enhanced financial and regulatory reporting. Phase 1 has delivered the base VoWD System.
	Sharepoint upgrade	The objective of this project is to migrate SPEN SharePoint 2010 estate onto supportable Document Management System platforms. This project is delivering incrementally, to deliver value quicker. 18 sites have been migrated so far, with a further 33 sites to be completed by 2023 Q1
	Big Data and Analytics	Mobilisation of Big Data and Analytics projects; tribe and squad established, internal governance forum for data established, Data blueprint created and new technologies in the discovery phase.
	Reg reporting incl. Conn GS & Op Reporting Q1	In alignment with the SPEN digital strategy, a series of Change Requests were identified to finalise remnant requirements from the Network Asset Management System programme of work implemented in January 2018 . The project also facilitated the realisation of marginal effort/time efficiencies, through reduction of manual transactions, rework, data entry/management effort and opportunity for human error as a result of digital and automated solution implementation. The following changes have been delivered in 2022 to allow SPEN teams to focus on operational delivery and the specific skills required by their role rather than on the completion, rectification, and management of administration that SPEN systems are currently unable to accommodate. • Over Head Line (OHL) Database (DB) Replacement: Replacement of DB that managed the data to drive the RIIO-ED1 plans for Overhead Lines work and changes to one of tables the OHL dashboard report to display different CV units with their associated costs • Consequential Assets reporting: Delivery of a report that shows the consequential assets movement against Reg units and changes to the consequential report to include overhead costs and change of reporting format • Broader Measures of Customer Service (BMCS) Reporting: Creation of 2 reports

To be delivered in the next six months Jul'22 - Dec'22

	Initiative	Descripton	Status	Measure of success
Using Digital Technologies to Deliver Enhanced Customer Service	Faster Switching	The programme objective is to improve consumers' experience of changing supplier by implementing a new switching process that is reliable, fast, and cost-effective. The programme is a mandatory regulatory change to meet Faster Switching requirements. and is schedule to complete by the end ofQ4 2022 based on Ofgem 's implementation plan. The key deliverables for Q3 and Q4 2022 are: • Go-Live Transition Stage 2 • Go-Live Transition Stage 3 • Programme Go-live • Early Live support • System database platform technical upgrade • Successful System Disaster Recovery test	In progress	• Percentage reduction in duration of switching process

	Initiative	Descripton	Status	Measure of success
Using Digital Technologies to Deliver Enhanced Customer Service	Accelerated Loss of Mains Change Programme (ALoMCP)	The ALoMCP is a national programme, led by NGESO, in conjunction with the ENA to facilitate G59 connected Generation customers to upgrade their Protection equipment to become compliant with changes to the Distribution Code introduced in response to the 9th of August 2019 outage event that affected over 1million customers predominantly in the South East of England. In SPEN geographies, we aim to facilitate ~3.4GW of compliance. **Further details can be found on our website: www.spenergynetworks.co.uk/pages/loss_of_mains_change_programme.aspx**	In progress	• SPEN Compliant Generation Capacity - expect to achieve close to 3.6GW of compliance at project close • Financial Plan – Achievement of projected Costs, Income and Profit Margin • Enforcement Process - Implementation of enforcement process as defined by DCRP & Ofgem and initiation of more than sites greater than 1MW through the process • Data capture in Corp Systems – Make Generator & Protection data collected available in Corp systems
Improving Mastery of our Data	Open Data Sharing Platform	Launch an Open Data SAAS tool to host SPEN's Open data in line with Ofgem's Data Best Practice Guidelines. This tool will provide a SPEN specific platform to publish data for external consumption and allow users to combine datasets for analytics. The tool will make data easily searchable, understandable, and usable and allow greater stakeholder engagement.	Procurement	• Users able to navigate and search datasets easily, and be able to compare like-for-like data from other DNOs utilising the CIM definitions. • Feedback form will allow iterative improvements and act as a request mechanism where required. • The sum of data requests will reduce dramatically due to taking a pre-emptive approach and publishing (and effectively labelling) all datasets that have been triaged as 'open'. • Successfully utilising APIs to automate extraction process and reduce the frequency of manual data refreshes.

	Initiative	Descripton	Status	Measure of success
Improving Mastery of our Data	Big Data and Analytics	Our Data Strategy establishes the framework to ensure that we carefully collect, manage, share, and extract maximum value from data. 2022 Q2 and Q3 will see us further develop and implement elements of this strategy, introducing new technologies.	In progress	• Responsibilities clearly defined • Technologies in place • Mobilisation of Data Blueprint
	Process Mining (Faults)	The Celonis 'Execution Management System' product will perform process mining to turn event data into insights and actions. This will be linked into our portfolio of SAP modules with a primary focus on Identifying poor execution, waste, and data issues across the Faults process.	In progress	• Link processes to performance indicators • Explore and benchmark process variation • Identify poor execution, waste, and data issues • Prioritise actions based on impact to KPI • Build solutions that resolve execution gaps • Monitor executions and act in real time • Align people and actions on common goals • Send alerts, assign tasks, and automate tasks
	Open Data	Ongoing development and implementation of our open data strategy in response to the needs of our customers and stakeholders. Publishing Open Data Sets in line with Ofgem's Data Best Practice Guidelines. Top 5 use cases: Boundary Flow Data, Outage Data, Operational Forecasting Data, Curtailment Data, Capacity Data.	In progress	• Published datasets • Coordinated approach with other DNOs

Starting / In progress in the next six months

	Initiative	Descripton	Status	Measure of success
Using Digital Technologies to Deliver Enhanced Customer Service	LV Engine	We are changing the way we generate, distribute, and use electricity. SP Energy Networks recognises the need to facilitate the uptake of Low Carbon Technologies (LCTs) such as, electric vehicles, heat pumps and photovoltaics. LV Engine is a flagship innovation project funded via Ofgem's Network Innovation Competition (NIC). The project will carry out a globally innovative network trial of Smart Transformers to facilitate the connection of LCTs whilst representing value for money for our customers. This innovation is in line with the UK Government's CO_2 reduction targets which are driving the increase in electrification of both heat and transport. The key LV Engine progress during the last 12 months includes building a number of full-size smart transformer prototypes providing AC and DC supplies. The units have passed number of key factory tests and they soon will go under high power, short circuit tests which is due to be completed by mid Q3 2022. All the key equipment have now been ordered and substation electrical designs have been completed. We aim to commission the first LV Engine substation by the end of 2022 providing completion of all factory tests to our satisfaction. Expected completion for Q2 2024. **Further details can be found on our website: www.spenergynetworks.co.uk/pages/lv_engine.aspx**	In progress	• Delivery of the project as per Project Direction approved by Ofgem • Successful demonstration of power electronic devices at secondary substations to improve network operation flexibilities • Preparation for BaU integration of the LV Engine solution following the successful field demonstration • Manufactured and commissioned smart transformers for demonstration of different AC and DC schemes • Published key learnings captured from the works carried out on design, manufacturing, commissioning and system integration of the smart transformer

	Initiative	Descripton	Status	Measure of success
Using Digital Technologies to Deliver Enhanced Customer Service	Consolidated CRM	The CRM consolidation project delivery will initiate in Q3/Q4, 2022, to build on our key processes.	In progress	• Identification and implementation of SPEN consolidated CRM • Fulfilment of RIIO-ED2 commitments relating to Customer Service and Engagement
	SPEN Website Refresh	Updates and improvements to the SPEN website that will enhance the experience of SPEN customers and provided them with improved access to SPEN services and information.	October '22	• Improve the service by improving access ability to SPEN services via our website
	Connections Discovery - Graphical Design Tool	The Customer Connections teams require a design tool which integrates with our GIS and work management system (SAP) to allow designers to design projects on a graphical interface. The tool will pull information from compatible units (CUs) in SAP to align with the selected design (e.g. trench, cable, joints, poles, overhead lines, substations, traffic management etc.). The design will also pull information at different voltage levels (EHV, HV & LV) to provide network capacity (load and generation). Although the initial roll-out will be the customer connections teams, the tool will be used within the capital investments teams also. Discovery phase and MVP complete. Optioneering paper complete, and supplier demos completed. Current stage is to go to full market tender (ITT).	In progress	• Provision of graphical design tool for connection designers which integrates with SAP and our GIS • Provision of design data into a design layer in our GIS • Pull CU information from SAP to create a full CU design • Push design information back into SAP to create PM Order structure • System to auto validate ELI, VD, Thermal Capacity, Fault Clearance, 1ph Step Voltage Change, instead of a having to build this in an external modelling tool.

	Initiative	Descripton	Status	Measure of success
Using Digital Technologies to Deliver Enhanced Customer Service	ESCOMS Replacement	The current Land and Planning system, known as ESCOMS, tracks land rights and consents, and manages Land and Planning workflows. The system needs replacement in order to ready ourselves for RIIO-ED2 and anticipated increase in demand for customer connections. SPEN requires to have digital key information easily and readily available for informed decision making, real time tracking of site activities. Multi – function use (controlled operational and non-operational use) and also multi-site use (system accessible from all networks locations, both on site and remote)	In progress	• Provide a single spatial version of Land & Planning agreements data • Simple accessing & processing of data • Manage the land and planning processes through workflows (particularly hand-off) • Record progress and land rights status with individual landowners (date stamped) • Aligns land ownership and project contacts with Land GIS data • Facilitate standard template letters / instructions • Monitor / report progress of Jobs against key milestones (including the legal process) • Provide RAG based alerts on critical progress milestones (individual users/management) • Provide repository for 'Job file' time line narrative and associated documents • Relevant links to related business systems

	Initiative	Descripton	Status	Measure of success
Optimised Asset and Network Management	SAP Change Requests 2022 (Enhancements)	This is an ongoing project to implement enhancements to our core SAP works management system. These will include: • SAP Enhancements to enable the removal of obsolete system ENSAPMIG • Corporate integration improvements to reduce the number of errors, incidents and increase efficiency for SPEN staff. SAP PM/MM, PM/CO, PM/SD • Design screen – a front end view for all projects assigned to a project manager to show metrics/ RAGS on project progress to enable them to easily identify the next actions required • New/Amended reports to increase data quality and visibility	In progress	• Enhanced reporting outputs • Process efficiencies • Improved end user experience

	Initiative	Descripton	Status	Measure of success
Optimised Asset and Network Management	Building Information Modelling (BIM)	Continuing with the BIM initiative the deployment of BIM at Level 2 within SPT will deliver: • Continue 3D design of the First Pilot project North Kyle commenced Q3 2021 • Continue 3D design of the Second Pilot project Glenglass commenced Q2 2022 • Start 3D design of the third Pilot project planned for Q4 2022. • Plan for business-as-usual BIM design and delivery for new projects only • Complete the construction contract amendments • Amend business documents, templates, and processes to accommodate BIM delivery • Continue to support the Eastern Link HVDC project • Commence review of requirements for BIM 4D construction scheduling	In progress	• Cost savings delivered through more efficient design • Cost savings through reduction/elimination of variations during construction as design will be more accurate, and clashes will have been detected earlier • More accuracy in project costing due to more accurate data and it being available more quickly during the project life cycle • Efficiencies in data collection and management
	GIS Upgrade – Phase 3	GIS Upgrade Phase 3 is a strategic project. The Definition and Migration stages will redefine how SPEN GIS stores and manages asset data within the system. In Q2 2022 a Strategic Roadmap for SPEN GIS has been created with a high-level analysis of the products, licenses, software and changes that SPEN will need to address over the next five years to meet the current needs of the GIS system.	In progress	• Provide a roadmap and implementation route for future GIS development • Creation of strategy for storage and management of SPEN asset data

	Initiative	Descripton	Status	Measure of success
Optimised Asset and Network Management	LV Model Readiness	We will share operational and market data with customers, stakeholders, and market participants through an online data portal. This will include visibility of our short & long-term forecasts via user-friendly digital platforms. Monitors will be applied to the network to facilitate capacity forecasting. Data is to be captured, stored, and analysed and then presented.	July '22	• Online data portal live for public and shared access • Significant enhancements around the LV connectivity of our network
	SAP Cut Over	RIIO-ED2 Readiness piece to create a solution that will allow us to maintain deliverability and reporting (RRP) as we leave RIIO-ED1 and enter RIIO-ED2.	In progress	• Ensure SAP is set up ready to capture changes for RRP from RIIO-ED1 to RIIO-ED2 • Create new SAP environment for RIIO-ED2 and successfully transition
	Condition Based Assessment	Overhead Line (OHL) Statutory Inspections and Condition Based Assessments(CBA) are currently completely independent of each other even though they are similar processes capturing OHL asset data. The CBA process captures all the data required to satisfy a statutory inspection This project will enable CBA to be utilised in place of a statutory inspection. The development of a data loader solution to take the CBA data returns provided by contractors and load them into SP Energy Network's corporate systems would allow the minimum requirements of a statutory inspection to be met and facilitates the alignment of the CBA and Statutory Inspection cycles.	In progress	• Capture data and load into our key asset systems • Facilitates alignment of CBA and statutory inspections • Internal resource requirement reduction for inspections

	Initiative	Descripton	Status	Measure of success
Optimised Asset and Network Management	SPT Networks Asset Risk Matrix (NARM) Tool	To comply with RIIO–T2 requirements to provide a set of Baseline Network Risk Outputs, SPEN have initiated a project to implement a software tool for Network Asset Risk Matrix reporting. Due to the complexity of the measures within the newly developed NARM framework, the current solution utilised was assessed as being unsuitable to provide the degree of SPT reporting. The project goal is to implement a NARM tool that enables SPT to fulfil their immediate asset management requirements and enables progression towards enhanced asset management capabilities. This solution will form the basis of the combined NARM reporting capabilities of SPEN. Q1 and Q2 saw the collation of the requirements and the product selection. Q3 and Q4 will see its implementation.	July '22	• Use data from several corporate sources to calculate the asset health, consequence, and risk of each lead asset on the system • Allow asset interventions to be modelled and to calculate the LTRB of the interventions allowing cost benefit analysis to be performed • Allow SPT to track risk performance against a defined target and be capable of producing outputs to support decision making and regulatory reporting requirements • Allow for the efficient development of an intervention portfolio which maximises the performance of the business against a set of given criteria • Provide functionality to enable model versioning and data analytics to support the continuous improvement of SPT asset management functions. This includes the ability to track asset deterioration and review alignment of the modelling with actual asset behaviours.
	Land Rights Digitisation - POC	A Proof of Concept (POC) is being initiated to undertake a 'Pilot' to scan and digitise a sample of 500 land records contracts allowing SPEN.	In progress	• To test and learn from the experience • To inform future tender specification to carry out the delivery of the full scope

	Initiative	Descripton	Status	Measure of success
Supporting the Development of New Business Models and Markets	Environmental & Sustainability - Biodiversity/ Natural Capital Mapping	A solution is required to capture information about waste generated and its eventual disposal to initially facilitate a baseline position and then to subsequently facilitate activities to carry out natural capital/biodiversity assessment on projects. A Proof of concept is currently underway.	In progress	• Active tool to carry out natural capital/biodiversity assessment on projects
Investing in the skills of our people	Sharepoint Replacement – phase 2	Project to migrate SPEN SharePoint 2010 estate onto supportable Document Management System platforms. Current SharePoint version is no longer supported by Microsoft and is classed as technically obsolete. This will be a phased project stretching into RIIO-ED2. This project has moved into full implementation phase to move all SPEN SharePoint 2010 sites on to supportable document management system platform. We have achieved so far the migration of 18 sites to final migration and 33 sites at initial migration. Migration of all sites is schedule to be completed by end Q1 2023.	In progress	• Successful migration of data from SharePoint 2010 site to SharePoint Online with end customers enjoying similar functionality on the new platform

	Initiative	Descripton	Status	Measure of success
Improving Mastery of our Data	Integrated Network Model (INM)	The Integrated Network Model (INM) is a Master Data Management solution which creates a single, canonical, reconciled version of electricity network asset master data that is mastered across a number of existing systems. Can make the model available to other applications via data services. Tracks data anomalies, mismatches, and other discrepancies. Reports these to data stewards so the offending source data can be triaged and potentially corrected and does this in a low impact manner (so as not to disturb the source systems, in this case PowerOn, ESRI or SAP).	In progress	• Improve the service we provide to our customers by reducing constraints on connections. More Renewable Generation will be connected to the Electricity Network, bringing benefits of £40m to customers. • Facilitate the connection of more zero-carbon generation. That will contribute to a reduction in CO2 emissions of 522k tonnes by 2031 - the same amount of carbon created by the consumption of 58m gallons of petrol - and advance the transition to a low carbon economy. • Ensure the Electricity Distribution Network is ready to respond with pace to new customer requirements as we move to a low carbon economy. • Utilise our existing network assets more efficiently, reducing costs for customers.

Potential projects 2023 onwards

We submitted our proposed RIIO-ED2 plan in Dec 2021, and we await our final determination in Dec 2022. The output of this decision will form the basis of our planned work in 2023 and the subsequent years.

Amendments to our December 2021 plan

Supporting the development of new models and markets

Our Environmental & Sustainability programme was due to kick off in Q3. In order to be ready for RIIO-ED2 we have prioritised this activity and brought forward into Q2 and are embarking on a proof of concept for a Biodiversity/Natural Capital Mapping tool.

The **Open Data Platform** was due to be delivered in Q2 of this year following the decision made last year to adopt a SaaS solution. The solution selection and associated procurement and delivery activities have taken longer than expected, therefore the revised implementation date is Oct of this year.

Optimised Asset and Network Management

The **Faults End-to-End (E2E) Process Review** project has been bundled up with the process mining project, to form one single project.

We have brought forward our LV model **readiness** project into Q3 in order to prepare for RIIO-ED2.

Sprints 1- 3 of the **New 'Value of Work Done' (VoWD)** and **Forecasting System** have been completed delivering the Value of Work Done. Sprints 4-7 to deliver the forecasting, integration and reporting capabilities are currently on hold pending prioritisation.

The **EN-Twin** Strategic Innovation Fund (SIF) project is currently on hold pending approval to progress

Logistics Enhancements, the Mobile Device and Field Strategy and the System Monitoring & Dynamic Rating projects have been pushed back due to competing priorities. These will be re-scheduled.

The **RIIO-ED2 Online Representation** (ph2) updates have been put on hold whilst we await our RIIO-ED2 determination.

Using Digital Technologies to Deliver Enhanced Customer Service

The **Customer Services enhancements phase 2** deliverable for Q2 was completed. All further work has been put on hold while we focus on our CRM delivery.

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