

# Digitalisation Strategy and Action Plan

Progress update

31 December 2020



We've published this addendum to our Digitalisation Strategy and Action Plan (DSAP) in response to Ofgem's Open Letter of 10 June 2020 and to provide an update on progress across the following key areas:

- Ownership and accountability for delivery of the DSAP
- How our planned activity is driven by stakeholders' needs
- Collaboration with other organisations
- Workforce plan for effective business transformation
- Project update and roadmap

We have further plans in place to create an interactive, digital version of our DSAP which will be published on our website in alignment with our ED2 plans.

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# Foreword



The world is changing faster than ever before and the urgency to deliver the UK's ambitious Net Zero targets is only increasing. Our electricity networks are the backbone of the energy system that's at the heart of this transition, and through digitalisation and harnessing the power of data we're helping to drive a decarbonised future at the pace our customers need.

That's why I'm delighted to present this addendum to our Digitalisation Strategy and Action Plan that outlines the progress we're making on this journey and how we're transforming our network through digital innovation.

## Data and digitalisation at the heart of the transition

The Energy Data Task Force (EDTF) report commissioned by Government, Ofgem, and Innovate UK, set out key recommendations to modernise the UK energy system and drive us towards Net Zero.

The report concludes that 'data and digitalisation, while not the sole enablers of energy system transition, are essential to unlocking the decarbonisation and decentralisation dividends for the benefit of consumers'.

Put simply, decarbonising the whole energy system, including heat and transport, will play a central role in meeting the Net Zero targets for 2050.

While digitalisation will help deliver this future by enabling the safe and efficient decentralisation, we firmly believe that it also presents an incredible opportunity to improve customer experience and efficiency, while also delivering greater value for bill payers.

## Stakeholders at the heart of our plans

Operating across Scotland, England and Wales – our stakeholders have different targets, views and needs. If technology, data and digitalisation represent the how, our stakeholders, customers and network users represent the why.

Stakeholder engagement is at the heart of everything we do, and we've reinforced this throughout the development of our Digitalisation Strategy and Action Plan – making sure it's built around their insight, feedback and future needs.

## Delivering our plans

To deliver this plan, we've also created a dedicated Digital Team that includes senior colleagues from across our business - with skillsets that range from Business Change, Information Technology (IT) and our Centre of Excellence.

They all share a commitment to delivering innovative solutions that will contribute to the transformation of the energy system and drive a cleaner, greener future for us all. We're proud of the part we're playing in delivering this and we'd welcome feedback and participation from all of our stakeholders on our plans.

## Colin Taylor

Director, Processes & Technology

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**“Data and digitalisation, while not the sole enablers of energy system transition, are essential to unlocking the decarbonisation and decentralisation dividends for the benefit of consumers”.**

# DSAP Programme Governance and Structure

We have a strong focus on digitalisation and data which is driven from within the senior management and executive levels right through our organisation. We're currently investing significant effort around our Data and DSAP as a core part of our RIIO-2 plans.

To deliver our ambitious digitalisation programme from our RIIO-T2 and RIIO-ED2 business plans, we've created a dedicated Digital Team comprising senior level colleagues from across the organisation, with specialist skills from Business Change, Information Technology (IT) and our Centre of Excellence.

In October 2020 we carried out a Digital Maturity Assessment across our directorates to understand our current and desired position in terms of digitalisation. The output of this

assessment demonstrates a high desire to drive digitalisation through our organisation and to develop and empower our people to deliver, through the next price control.

The Digital Team will focus on the preparation of our RIIO-2 price control submissions, facilitating the embedding of digitalisation within the organisation to meet customers and stakeholders needs. Ultimately this is to ensure deliverability of the transition required to contribute towards meeting the Net Zero carbon emissions targets while formalising the management and governance of data.

We believe our strategy and subsequent refreshes will show our ambition in this area, whilst demonstrating a strong position, ready for implementation.

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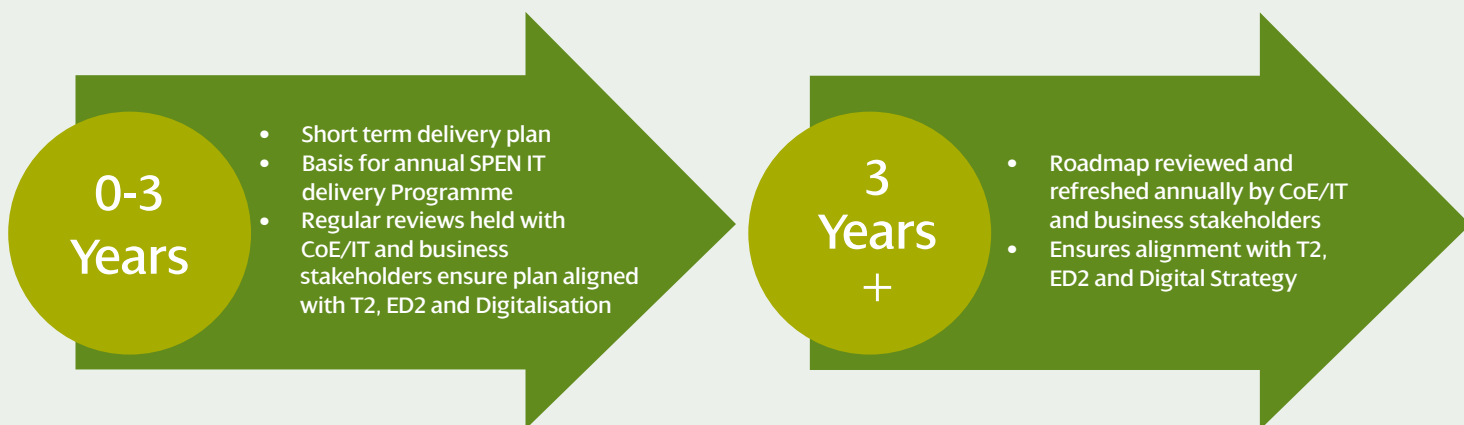


# Governance

## Our approach to programme governance is built around the following areas:

- System strategy and project approval
- Programme reporting
- Project delivery

Our IT projects are contained within an overall annual IT programme approved by the SPEN Holding Board and aligned to our business strategy (including our Digitalisation and Data Strategies). Our roadmap is governed and maintained by the Centre of Excellence (CoE) and covers two rolling horizons:



Our Digitalisation Strategy will be refreshed annually and our delivery tracked regularly to enable us to respond in an agile manner to a fast changing internal and external environment. Our approach includes engagement with internal and external stakeholders to ensure our Digitalisation Strategy remains aligned with stakeholder expectations and capitalises on the opportunities for collaboration where they exist.

## We make sure our DSAP is an active, accurate and agile plan by:

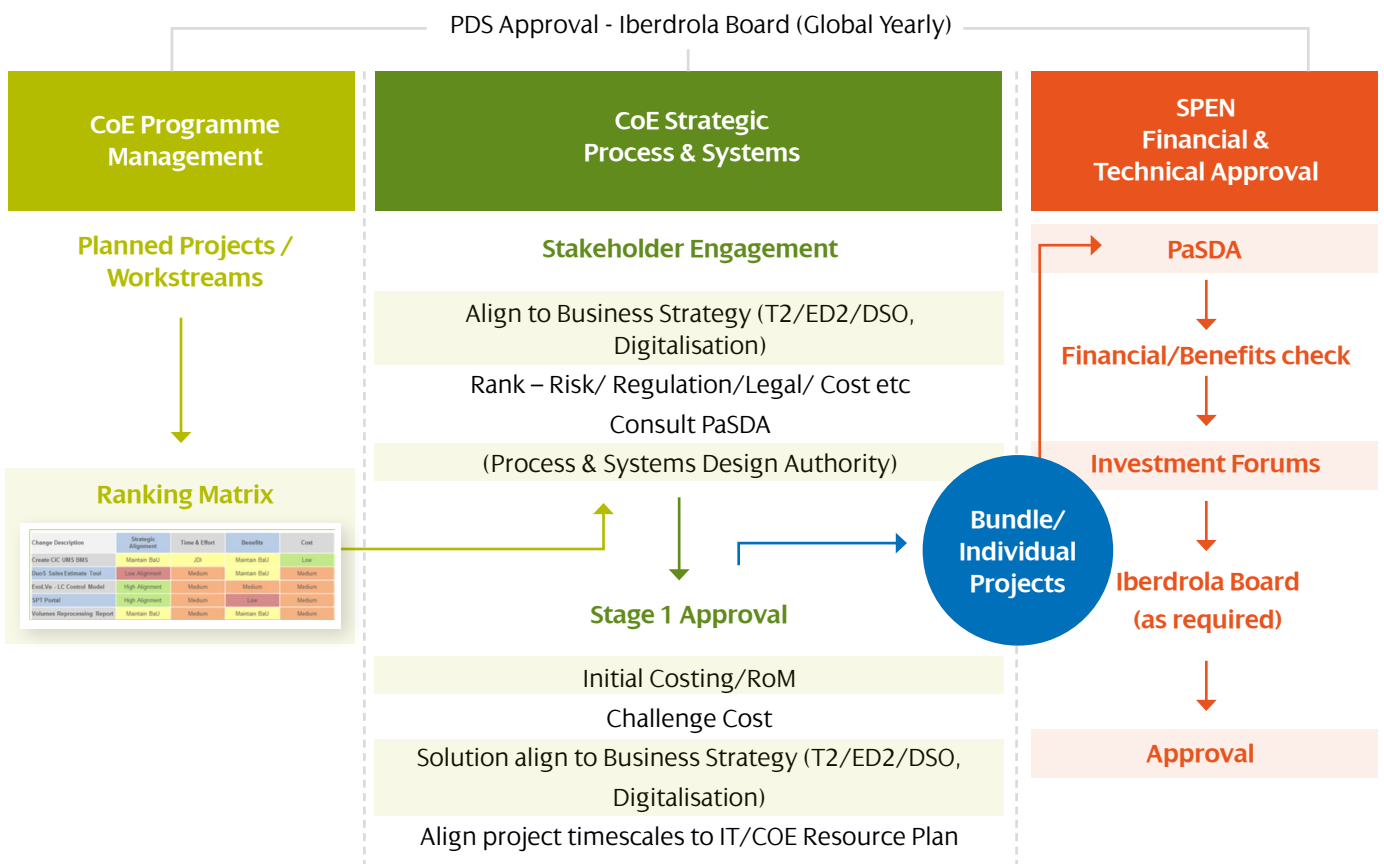
- Timetabling formal sessions to review the DSAP in alignment with our annual budgetary processes.
- Ensuring the plan is realistic and achievable in terms of budget, resource and return / efficiency.
- Keeping up to date with advances in digitalisation by connecting with external experts at universities, technology companies and consultancies, and through attendance and presentations at various forums including the annual Global Iberdrola Digital Summit.
- Ownership at a SPEN director level.
- Undertaking monthly reviews and responding in an agile manner to carry forward successful projects and close out non-performing and delivered initiatives. Actively refining the delivery plan on a quarterly basis. Allocating resources to ensure the delivery of strategic objectives and resolve resourcing conflicts.
- Adapting the DSAP in response to the introduction of new technologies, regulatory requirements or stakeholder input.

**Prior to commencing work, individual project dossiers are created containing:**

- Details of alignment to SPEN systems strategy drivers: Efficiency, Strategy and External
- The identification and approval of key stakeholders
- The scope, project timescales, deliverables and benefits for the projects
- The costs at an individual work package level and budgetary provision
- All dossiers are reviewed and approved by business stakeholders, SPEN IT Director, Head of SPEN CoE and SPEN Finance Director prior to submission to the formal approval process through the SPEN and IT Executive Teams.

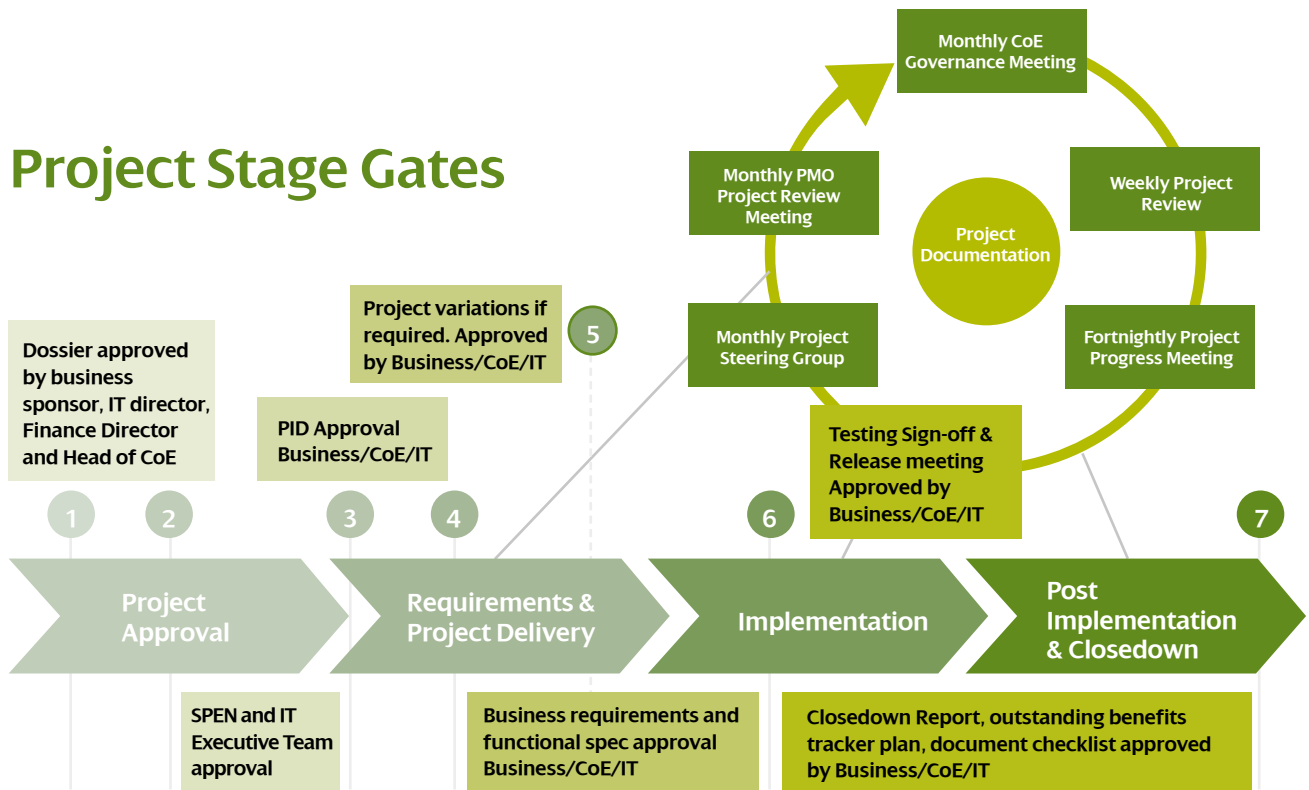
**The following diagram describes our project approval process:**

**Process & Systems Approval Route**



The combination of project approval, documentation approval and the defined project meeting and reporting cycle provide a set of gates that ensure governance is enforced throughout the lifecycle of the project and mitigates risk to the overall project delivery. The diagram below details the key project gates:

## Project Stage Gates



# Our Evolving Data Strategy

## Our Data Mission Statement

Our mission is to unlock the full value of data. This will ensure the continued safe, reliable, and efficient operation of the transmission and distribution networks and wider energy system for all customers. Additionally, this will:

- Enable us to contribute towards the UK Net Zero targets
- Bring new value to the evolving needs of consumers and customers
- Enable us to implement the principles of 'presumed open'

### **Our data landing page, the 'Energy Data Hub'**

is now live and was created to house all data that SP Energy Networks currently shares openly in the public domain.

## Our Data Strategy

We have a mature approach to the management of data which we will evolve alongside of our Digitalisation Strategy. We will implement an evolving data strategy that enables us to:

- Handle the increasing volume of data arising from widespread adoption of additional data capture approaches (e.g. IoT, field devices, social media) and the anticipated increase in requests for connection of low carbon technologies
- Support the management and operation of a more active low voltage network
- Provide the mechanisms to facilitate the creation and operation of new models and markets
- Drive maximum value from the data we capture
- Comply with the Data Best Practice guidance, adopting collaborative approaches where relevant through our active membership of the ENA Data Working Group

## Our Data Principles

1. Guide our governance and ownership framework for data – including the identification of a senior leader with responsibility for the development and delivery of the data strategy
2. Keep our data safe and secure within the different regulatory and legislative frameworks in which we operate. This includes maintaining the security of our network and responding proactively to future threats
3. Consider the needs of stakeholders, both internal and external, in the development of our data products and ensure we deliver these in an efficient and effective way
4. Implement the principle of 'presumed open' across appropriate data sets, after risk assessment, recognising our responsibility as the data custodian. Before making data available, we will ensure that the costs of the data provision is proportionate to the benefits to customers
5. Ensure a 'whole system' approach is inherent in everything we do
6. Put data at the heart of our activities, ensuring we have an evidence base for our decisions
7. Establish a framework for continual improvement

More details of our data strategy can be found on page 32 of our [December 2019 Digitalisation Strategy](#).

"Our mission is to unlock the full value of data. This will ensure the continued safe, reliable, and efficient operation of the transmission and distribution networks and wider energy system for all customers"



# Stakeholder Engagement

## Our Mission Statement

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“Our engagement places our stakeholders and customers at the centre of what we do. With a tailored and locally focused approach, we will prioritise their wants and needs in a consistent manner across our business. We will deliver safe, reliable services, sustainable value and a better future, quicker.”

Depending on the purpose of the engagement, we identify the key stakeholders and customers who are best placed to provide the insight required and help us achieve our objective. To do this, we develop an understanding of the knowledge levels of our stakeholders on the topics we’re engaging with them on.

As we move to a more digital world, our stakeholders and customers will also evolve, and we will be ready to interact with them and serve them in the method that they expect. The services we offer will be more interactive and more personalised and the way in which we will deliver this is by understanding our stakeholder and customer types better than ever before.

## Customer and Stakeholder Segments

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We recognise the need to consider all the different types of stakeholder and customer that we have, and that they are not all equal in terms of needs and requirements. To do this we split our stakeholders and customers into different groups, or segments. Segmentation will be used to organise and manage our relationships with our stakeholders and customers. This process allows us to understand who our most valuable stakeholders and customers are and why, allows us to learn about our stakeholders and customers on a deeper level so we can tailor services to their unique needs and challenges to facilitate improvements to our customer service and customer support efforts by understanding and preparing for the challenges these different groups are likely to experience.

## Personas

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We intend to use stakeholder and customer personas based on data collected from our customer and stakeholder engagement to inform the development of our DSAP. Personas will define the needs and motivations of stakeholders and customers and enable us to focus our efforts on delivering benefits to our customers and stakeholders. We will develop a suite of personas that covers the broad range of customer and stakeholder types that we engage with, enabling us to test the justifications for our DSAP deliverables.

Personas can also be used as an effective communication tool. Through simulating interactions with our digital platforms and energy data we will illustrate how our approaches will deliver benefits to our customers and stakeholders in a way that brings the solutions to life. We will use our personas to encourage engagement and to capture feedback on our DSAP plans.

We anticipate developing personas to cover all aspects of internal and external stakeholders, customers, suppliers, partners and collaborators and extending this to new stakeholder types (e.g. prosumers, flexibility market participants, data scientists, academia...etc). Even those who regulate and govern us will be personas within our model.

## Customer Engagement History

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Through digitalisation and seeking value from data we are looking to better understand and consider the whole customer journey. Our new Customer Relationship Management (CRM) system will be able to provide us with, and allow our customers access to, their full history including relevant information such as connection status, fault rate, flexible and disruptive equipment they might have and vulnerability status to ensure we consider all of their needs and respond appropriately.

## External Collaboration and Interaction

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We work closely with, and have representation on, the Energy Networks Association's (ENA) Data Working Group and associated sub-groups. Our Head of DSO, Graham Campbell chairs this group. Further information can be found [on the ENA's website](#).

We have hosted several stakeholder workshops to gain feedback and have issued a comprehensive stakeholder survey. This engagement will continue throughout current and future price controls and our plans will be refined based on the various customers' and stakeholders' input to ensure we best serve consumers, network users and wider stakeholders.

Evidence gathered from our engagement activities will initially inform our Digitalisation plans which will subsequently form our ED2 business plans. Consumer and stakeholder feedback will help shape the customer service, engineering, telecom, IT and organisational change proposals that we submit to Ofgem.

The United Nations Climate Change Conference, also known as COP26, is scheduled to take place in Glasgow from 1 to 12 November 2021. ScottishPower is one of the first Principal Partners who will support the delivery of a successful and ambitious COP. This further demonstrates our commitment to decarbonise the UK's energy sector. Being a COP partner also underlines the UK Government's confidence and ScottishPower's commitment to tackling climate change and helping the country get to Net Zero by 2050.

We're also in discussions regarding a collaboration with Glasgow University Urban Big Data Centre, in bringing together existing energy data sets and new civic and smart city data allowing detailed analysis and new insights which may better inform a non-engineering series of solutions. As a minimum output, we will be able to demonstrate the effectiveness in combining civic data (this can include planning, transport data etc) with network data for more complete forecasting models.

Every year we create several opportunities to engage with our stakeholders. Our past and future events can be found [on our website](#).

We actively participated in the Icebreaker One Modernising Energy Data Access Phase 2 Advisory Groups which ran for 3 months from September 2020, consulting with over 200 industry, academic and public sector stakeholders with over 60 experts directly engaged. The output of the Advisory Groups was a proposal centred around a prototype Open Energy Governance Platform built on an Energy Data Search capability.

With ScottishPower being part of the Iberdrola group, a global energy company and world leader in wind energy, we engage regularly with each of the counties in the group through monthly Global Practice Groups. This facilitates sharing and gives leverage in the procurement and implementation of solutions.

On an annual basis, Iberdrola host a global Digital Summit where external companies present on the latest digital trends, technologies and solutions. This year (2020) the event was held virtually and expert speakers from the public sector and leading industry included Linked-In, Gartner, Google, Microsoft, Tik-Tok, Ericsson, Twitter, Bloomberg NEF, Micro Focus and Evo (Smart Banking). These innovations provide opportunities for better efficiencies, better decision making based on data and for new business model implementation across our organisation. Subjects covered include Augmented Reality/Virtual Reality, Internet of Things, Artificial Intelligence, Cognitive Solutions, Machine Learning and Robotics.

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# Workforce Plan

## Future skills and capabilities

To deliver our digitalisation strategy we require a digital ready workforce with the right number of people, with the right skills, in the right location and at the right cost.

### We anticipate an increasing demand for the following technical expertise and data and digital skills:

- Data science and analytics
- Systems and applications architecture
- Telecommunications network design
- Software development
- Cyber security
- Internet of things (IoT)
- Artificial intelligence (AI)
- Geographic information systems (GIS)

There will be a need for specialists with these technical skills and individuals who are multiskilled for example; Power Systems Engineers who are also comfortable developing software or working on complex data modelling.

To compliment these technical capabilities, we need to continue to evolve more agile and innovative ways of working to take advantage of digital opportunities.

This will include greater use of agile teams, scrums and sprints to enable business and IT collaboration on digital solutions.

We will continue to use principles outlined by PROSCI, a global leader in change management, to ensure sustainable management of change.

## What are we already doing?

### We've already started this journey to build and sustain an inclusive digital ready workforce:

- We continue to attract and recruit experienced engineers and technical/IT specialists.
- We have started to recruit trainees to develop and grow our own talent with Cyber security graduate apprentices and Data science graduates and plan to build on these trainee programmes.
- In 2020 we introduced a digital mentoring programme across Iberdrola and ScottishPower
- We have employee-led networks that represent the voices of people with diverse backgrounds and aspirations from gender to ethnicity, caring responsibilities to LGBTQ. Our employee networks are now an integral part of our business running awareness events whilst supporting initiatives to improve Diversity & Inclusion data gathering, reporting and policy insights.

## How are we going to get there?

We will complete a strategic workforce planning exercise early in 2021 as part of our RIIO-ED2 Business Plan submission in 2021. This will complement our approach within our RIIO-T2 Business Plan.

This analysis will identify, in detail, the future skills required to manage and operate the increasingly digital network and deliver our digital projects now and in the future. We will define critical capabilities and talent gaps and create an action plan and mitigations to close these gaps.

This plan will include the strategic resourcing, talent, leadership and development strategies and critical activities that will ensure we build the digital ready workforce required to deliver our digitalisation strategy.

## PROSCI Change Practitioner Training

As part of an Iberdrola Global Networks Initiative, we aim to train all managers in the PROSCI change management methodology. This year the first 16 representatives from SPEN became Certified PROSCI Change Practitioners. This has led to the methodology being recognised as the practised Change Methodology within IBE Global Networks.

## Digital Hub

In addition, we have already created a Digital HUB within I.T. to focus on digitalisation and have specialist skills in Web & Mobile App development, Big Data & Analytics, IOT development, Robotic process automation and Artificial Intelligence.

The Digital Hub and IT organisation will constantly evolve to meet the anticipated demand for digital services to allow us to deliver 'Enterprise Wide' capabilities whilst leveraging Global Iberdrola capabilities. These services are designed to be performed, operate and comply with all necessary business separation obligations.

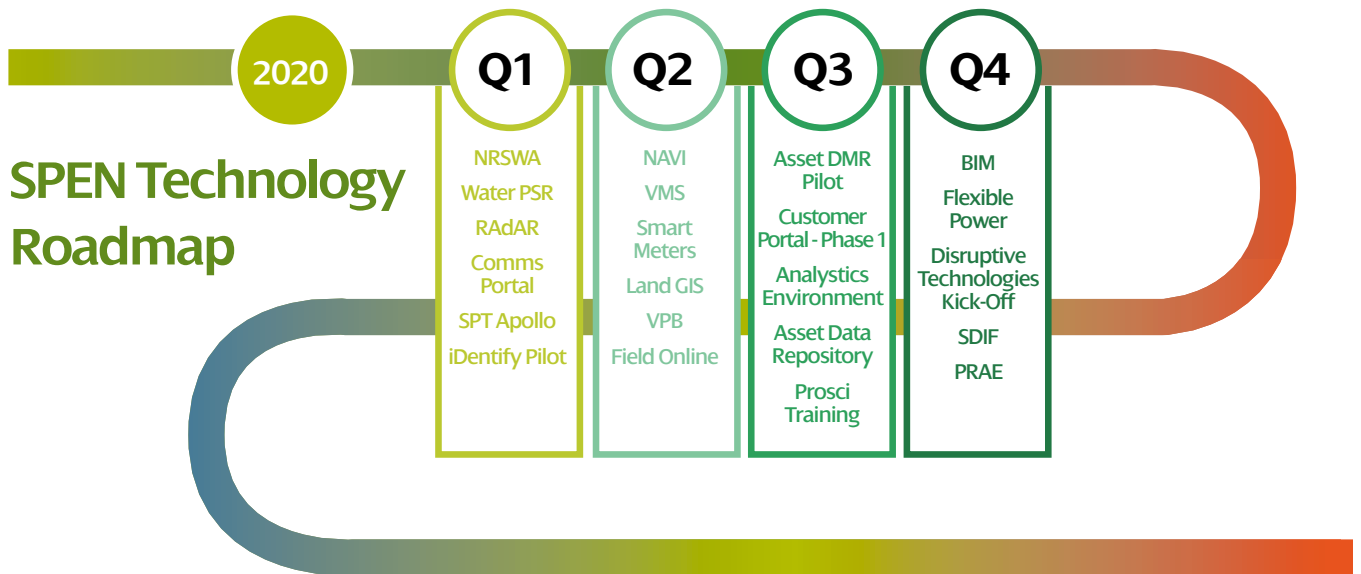
We will continuously assess the skills requirements and build talent and capabilities internally whilst adopting an agile, cross functional squad delivery approach with empowered teams at the heart. We will embrace a fail fast culture, with knowledge and learning driving purpose and execution.

## Invitation to Tender for the Provision of Technical Expertise

We recognise that we do not have all of the in-house digital skills and expertise to allow us to move to the next level, so we are currently at the end of the tendering process to bring in external specialist support to assist in the facilitation of the next stages of our RIIO-ED2 submission, our next update of the DSAP and business plan assurance. This tender includes expertise services in data strategy and management.

# Delivery Plan

What have we delivered in 2020?



We have detailed some of the key digital projects below:

Area	Project Title	Status
Monitoring and Controlling the Network	<p><b>NAVI</b></p>	<p>NAVI is a new platform which automatically creates a connected network model from our GIS data. (This was previously known as NCEWS, in our previous Digitalisation Strategy)</p> <p>This creates an “analytics” ready model which can be used as the basis for most types of network analysis. It was driven by the need to annotate measurement data (smart meters but also EV, building data, load) to allow network scenario analysis. The project was initially innovation funded as a proof of concept and has now been implemented into our digital ecosystem.</p> <p>Working with our Digital Hub we are proposing toolsets to run analytics around, for example:</p> <ul style="list-style-type: none"> <li>• Backfill missing cables</li> <li>• Network constraint prediction</li> <li>• Voltage prediction</li> <li>• Phase ID</li> </ul>
	<p><b>PRedictive Analytics for Energy – Release 1 (PRAE)</b></p>	<p>The OCC / NMC Control Rooms have successfully collaborated with Sia Partners to provide accurate 4 day-ahead demand and generation forecasts on the SPD &amp; SPM network. Forecasting was achieved by utilising historical network analogue data, predictive modelling techniques and weather predictions to display 1/2hrly forecasts on a dedicated platform called PRAE. This project is a first for any UK DNO to provide demand and generation forecasting at Licence, District, GSP, Primary and 11kV feeder levels and is a key building block as we transition to the DSO environment. The project is a successful collaboration between experienced network operators and data scientists to solve the real-life problems we are likely to experience as we transition to a zero-carbon economy.</p> <ul style="list-style-type: none"> <li>• Release 1 of the demand and generation forecasting successfully delivered by the OCC/NMC and Sia Partners</li> </ul>
Developing Options to Manage Peak Loads	<p><b>Flexible Power</b></p>	<p>Went live on the 2nd November in line with the winter service window. Customer Service Outage Planners are now managing the weekly declarations. Control Engineers can dispatch service via the portal if required.</p> <p>Settlement process confirmed with the first invoice auto generated by Flex Power. Review meeting held with the customer to review and approve invoice.</p>

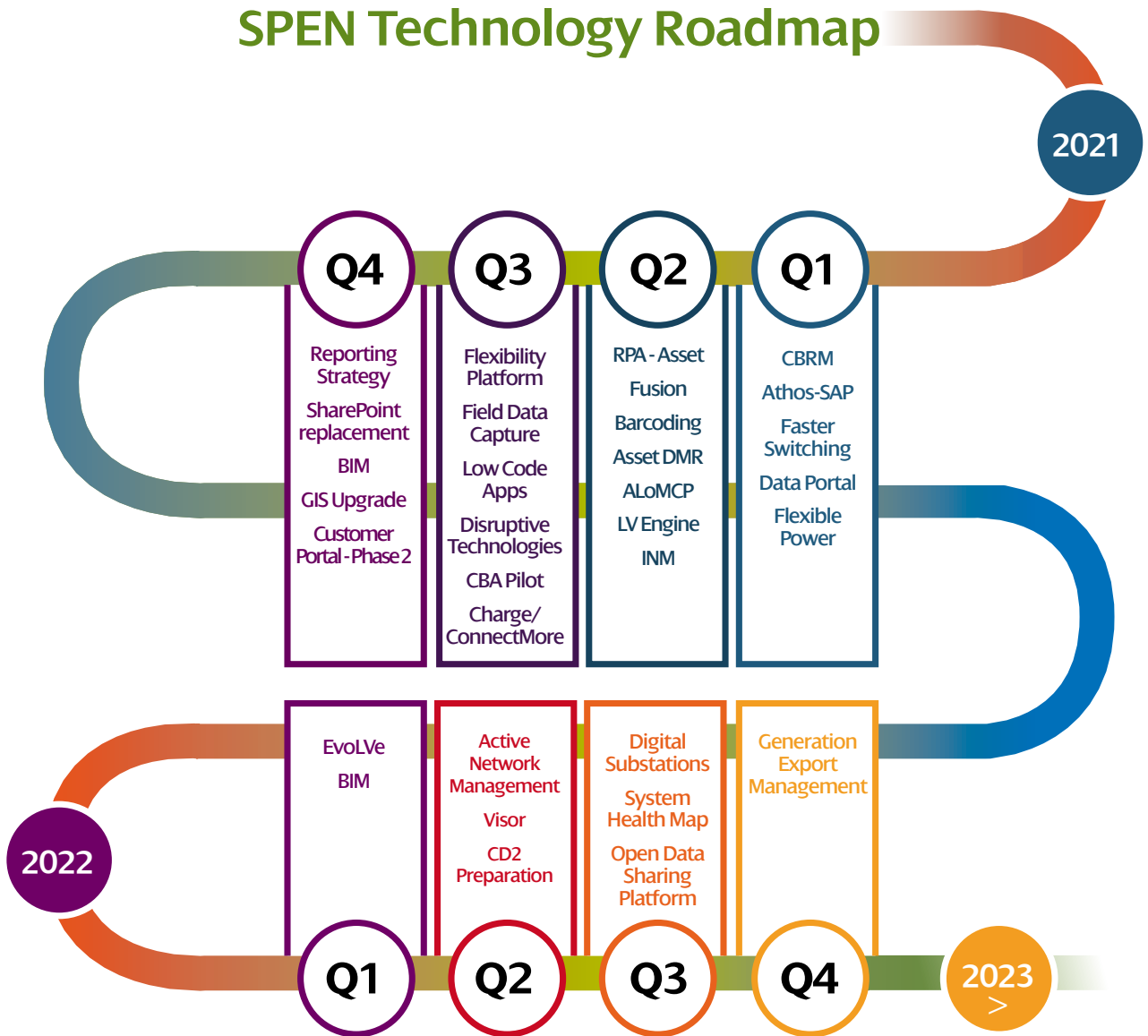
Area	Project Title	Status
<p>Improving Mastery of our Data</p>	<p><b>Smart Data Integration Fabric (SDIF)</b></p>	<p>At its highest level, SDIF is</p> <ol style="list-style-type: none"> <li>1. An enterprise service bus (inter-system plumbing)</li> <li>2. An integrated network model (a map of what data from different systems means)</li> <li>3. A workflow engine</li> </ol> <p>Our first use case locates faults at 11kV using data from multiple systems – this went live in Nov 2020. Next use case is smart meter data manipulation for outage/customer management.</p> <p>And lastly, we propose that SDIF should be considered for complicated process automation outside SAP, our Work management system</p>
	<p><b>Vegetation Management System (VMS)</b></p>	<p>Delivery of a new GeoField Vegetation Management System (VMS). This project delivers an integrated system to help our internal workforce and service partners manage overhead line cyclic vegetation surveys, consents and cuts, to ensure that our network resilience is maintained.</p>
<p>Use Digital Technologies to Improve Customer Service and Experiences</p>	<p><b>SPT Apollo</b></p>	<p>Launched a new in-house contract management and workflow tool for use in the SP Transmission business. Apollo simplifies the process of managing contractual information relating to Transmission Connections, and delivers, for the first time, a workflow-based solution to the Transmission-Level New Connections business process.</p>
	<p><b>Customer Portal – Phase 1</b></p>	<p>Customer Connections Portal. Our portal is an easy to use platform whether you need a connection to our distribution or transmission network.</p> <p>The portal is a centralised point to provide you with relevant updates and key information:</p> <ul style="list-style-type: none"> <li>• View the current status and track progress of your projects online.</li> <li>• Apply for a new distribution connection.</li> <li>• Request a pre-application meeting for your transmission connections.</li> <li>• Helps guide you through all our connection information to navigate the process from concept to connection.</li> </ul> <p>We worked closely with our customers and stakeholders to create our connections portal, and we are committed to working with you to develop this system even further. If you have any feedback, please use the portal feedback option which can be found in the top right-hand corner of the portal home page.</p> <p>You can access the Connections Portal via the following link.  <a href="#">Connections Portal</a></p>
	<p><b>Building Information Modelling (BIM) – Kick off</b></p>	<p>SPT piloted a transformational way of designing and delivering projects using BIM during late 2020.</p> <p>Going forward, this initiative will improve project team collaboration and workflow efficiency. It is envisaged that this new way of working will save time and effort, support carbon management and reduce waste and it will allow substation and circuits projects to be completed more quickly and cost effectively.</p> <p>BIM is a process that begins with the creation of an intelligent 3D model and enables document management, co-ordination and collaboration during the entire lifecycle of a project (made up from feasibility design, detailed design, build, operation and maintenance).</p>

Area	Project Title	Status
<p>Use Digital Technologies to Improve Customer Service and Experiences</p>	<p><b>RAAdAR</b> <b>(Register of Adopted Asset Requests)</b></p>	<p>RAAdAR is the IT system utilised to manage CiC (Competition in Connections) enquiries where a Lloyds accredited ICP (Independent Connection Provider) is being employed to complete contestable electrical works.</p> <p>A RAAdAR Working Group, comprising of eighteen ICPs/IDNOs was set up to evaluate stakeholder feedback and influence our IT strategy. The feedback from this Working Group was published in the Incentive on Connections Engagement (ICE) Plan (May 2019) Incentive on Connections Engagement (ICE) Plan. It was also used to identify 12 system enhancements. These were subsequently rolled out at the end of Q1, 2020.</p>
	<p><b>Disruptive Technologies Project (Kick-off)</b></p>	<p>This project enhances our corporate systems to enable users to collect better information/data from customer applications, such as Electric Vehicles, Ground Source Heat Pumps, Distributed Generation and Battery Storage, and in turn make more informed decisions when designing the underground and overhead electrical network.</p>
<p>Investing in the Digital Skills of Our People</p>	<p><b>Prosci Training</b></p>	<p>This year the first 16 representatives from SPEN became Certified PROSCI Change Practitioners. PROSCI is a change management methodology that includes process, tools and techniques to manage the people side of change to achieve required business outcome. This methodology has been recognised as the practised Change Methodology within IBE Global Networks.</p>



# What do we have planned beyond 2020?

## SPEN Technology Roadmap





We have detailed some of the key digital projects below:

Area	Project Title	Status
Monitoring and Controlling the Network	<b>Accelerated Loss of Mains Change Programme (ALoMCP)</b>	<p>Alongside other Distribution Network Operators (DNOs) and Independent Distribution Network Operators (IDNOs), we are joining forces with National Grid ESO on their 'Loss of Mains (LoM) Change Programme' - an initiative to help owners of generation assets make the necessary changes to ensure compliance with new settings introduced under the Distribution Code.</p> <p>Further details can be found on our website: <a href="#">Loss of Main Changes Programme</a></p>
Developing Options to Manage Peak Loads	<b>PRedictive Analytics for Energy – Release 2 (PRAE)</b>	<ul style="list-style-type: none"> <li>• <b>Release 2 of project will focus on further OCC / NMC priorities and NPR Asset Management initiatives</b></li> </ul> <ol style="list-style-type: none"> <li>1. Forecasting platform administration to allow accurately reflect network changes and data accuracy</li> <li>2. Asset Management Transformer Dynamic Ratings Medium term 10 year ahead forecasting (WANDA)</li> <li>3. SPD / SPM Transformer Short term (4 days-ahead) dynamic rating analysis using near real-time weather data</li> <li>4. SPD / SPM Demand and generation forecasting contingency analysis for outage planning purposes</li> </ol>
	<b>Flexible Power</b>	<p>Flexible Power is subject to governance from the collaborating partners which is overseen by SGC. There will be a quarterly SSG (Strategy Steering Group) meeting as well as a monthly PDG (Project Delivery Group) meeting to ensure that progress and support for implementing new features is closely managed and supported. A roadmap of future enhancements is currently being drafted for discussion at the steering group meeting in Feb 2021.</p> <p>Further information can be found on our website: <a href="#">Flexibility</a></p>
Improving Mastery of our Data	<b>Data Portal</b>	<p>The first stage of our data strategy journey has gone live. Our data landing page, the 'Energy Data Hub' is now live and was created to house all data that SP Energy Networks currently shares openly in the public domain.</p> <p>This can be accessed via the following link: <a href="#">Energy Data Hub</a></p> <p>As we progress through 2021, we intend to:</p> <ul style="list-style-type: none"> <li>• Publish new datasets</li> <li>• Create data catalogue descriptors for published datasets (following Common Information Model (CIM) definitions)</li> <li>• Develop APIs to enable programmatic extraction of data</li> <li>• Develop a further enhanced landing page to bring the datasets together</li> </ul>

Area	Project Title	Status
<p>Improving Mastery of our Data</p>	<p><b>INM Integrated Network Model (Dumfries &amp; Galloway)</b></p>	<p>Dumfries and Galloway has among the UK’s highest proportion of connected renewable generation relative to its demand for energy. That can present difficulties when it comes to exporting renewable energy back to the electricity grid and connecting new projects.</p> <p>Currently, 90MW of distributed generation are connected in Dumfries and Galloway, while more than 200MW of additional distributed generation are contracted to connect in the future. As a result, we are implementing a revolutionary, wide-scale integrated network management zone across the area.</p> <p>It’s the first integrated network management scheme of its kind in the UK and will span 11 grid supply points and interface with the System Operator. The project will help manage transmission network constraints by using an active network management (ANM) system to monitor and manage exports from distributed generation on our network.</p> <p>Further details can be found on our website: <a href="#">Integrated Network Management</a></p>
	<p><b>Disruptive Technologies</b></p>	<p>This project enhances our corporate systems to enable users to collect better information/data from customer applications, such as Electric Vehicles, Ground Source Heat Pumps, Distributed Generation and Battery Storage, and in turn make more informed decisions when designing the underground and overhead electrical network.</p>
<p>Use Digital Technologies to Improve Customer Service and Experiences spans LV Engine &amp; Charge</p>	<p><b>LV Engine</b></p>	<p>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, photovoltaics.</p> <p>LV Engine is a flagship £8.3m 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 CO2 reduction targets which are driving the increase in electrification of both heat and transport.</p> <p>Further details can be found on our website: <a href="#">LV Engine</a></p>
	<p><b>Charge / ConnectMore</b></p>	<p>Charge will, for the first time, merge transport and electricity network planning to create an overarching map of where EV charge points will be required and where they can be best accommodated by the electricity grid.</p> <p>Further details can be found on our website: <a href="#">Project Charge</a></p>



**SP ENERGY  
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