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We power communities to thrive today and create a net zero tomorrow.

Our aim is to support the communities we serve, beyond keeping the lights on, and work collaboratively with those communities to reach their net zero carbon goals. Our Digital Action Plan shares our progress on delivering the products and services to achieve this.



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**GLOSSARY** 





### **FOREWORD**

We work to create the capacity our customers need to transition to net zero, enabling a just and inclusive transition.

Our communities are connecting more and more low carbon technology. In response we are accelerating our DSO (Distribution System Operator) services so we can enable faster connections, utilise flexibility and responding to immediate and emerging network needs quickly and innovatively.

These services require increased digital capabilities, such as transparent and accessible real-time data to enable whole system coordination, and granular and community led insight necessary to plan our networks for the long-term. Our Local energy Net Zero Accelerator (LENZA) tool, offered to all the local authorities we serve, supports Local Area Energy Planning and our leading use of smart metering data and our Near Real Time Data Access (NeRDA) platform illustrate the pace of change we are driving in digital capabilities.

Our action plan for the next six months continues to accelerate our digital capabilities.

Please continue to help guide and shape our digital strategy and action plan so we can maximise the benefits for all our customers and stakeholders.

### **Andrew Roper**

**Distribution System Operations Director** SSEN Distribution

### **CIO INTRODUCTION**

The Digital Action Plan sets out a wide range of challenging commitments driven by our customer and stakeholder needs for increased levels of service and information.

Intrinsic to our plan is recognition of customer and stakeholder need to have access to new capabilities quickly. To meet this challenge we have adopted and are now maturing, a new approach to delivery. This new approach embeds greater agility in our delivery model enabling us to deliver capability incrementally, putting value in the hands of our customers and stakeholders as quickly as possible and then providing updates to these services to increase the value over time.

Coupled with this we are accelerating our programme of investment with a focus on improving experience and services for our customers and our users delivering capability where it is needed in line with customer expectations.

**Nicola Gribbin**CIO of Technology, Digital and Data
SSEN Distribution







### **OUR DIGITAL STRATEGY**

Our digital vision is to be a progressive network owner, using digital to enhance social and economic value, deliver a leading experience for our customers and to enable the energy system to support net zero carbon emissions.

Our <u>Digital Strategy</u> is refreshed every 2 years and describes the digital products and services we will provide to the people we deliver services to and the people we work with, and how these benefit each individual. It also describes how we want to work with you to make them as valuable as possible.

Through our RIIO-ED2 stakeholder engagement, digitalisation has been a core theme that has cut across all our activities and impacted the wide range of customer and partner groups we highlighted in our Digital Strategy. We will continue to <a href="mailto:engage with you">engage with you</a> to shape our digital vision moving forward, so we can meet your most important needs.



### **OUR DIGITAL ACTION PLAN**

Our Digital Action Plan sits alongside our Digital strategy, which we update every 6 months.

The Action Plan gives you the detail on when we will deliver our products and services.

Each Action Plan shares the progress we have made in delivering the products and services we have committed to in the previous 6 months and our vision for the coming 6 months, adding new products and services as informed by stakeholder engagement.







### **OUR EXISTING SERVICES BY THEME**

Underpinning our strategy at SSEN Distribution are a set of key priorities supporting our purpose of powering communities to thrive today and create a net zero tomorrow.

We are on an accelerated growth roadmap, launching new services, products and improving our data faster than ever before, before. We will continue to improve our existing products and see development of these services as a core element of our digital action plan. Products and services which deliver value for our customers continue to receive ongoing investment to improve them in direct response to your feedback.

Below are some of our existing services we commit to continuously improving as part of our core digital portfolio.



### DELIVER A SAFE, RESILIENT AND RESPONSIVE NETWORK

- O Ability to estimate capacity on the network (eg Load Model)
- Realtime and operational data (e.g. NeRDA)
- O Planning and connectivity data (e.g. LTDS and NDP)



## ACCELERATE PROGRESS TOWARDS A NET ZERO WORLD

- O Electric Vehicle and Heat Pump Connect and Notify
- O Future Scenario Mapping
- O Flexibility Market Platform



### DELIVER VALUE AND IMPROVE SERVICE FOR CONSUMERS

- O Power Track
- O SMART ETR (Estimated Time to Restore)
- O Connections Applications and Tracking Services



### MAKE A POSITIVE IMPACT ON SOCIETY

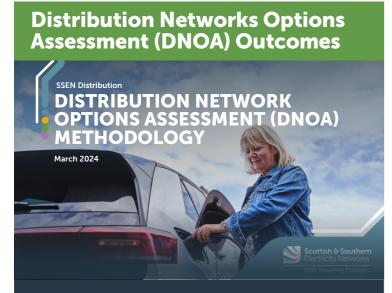
- O Local Energy Net Zero Accelerator (LENZA)
- O Resilience Portal
- O Vulnerability Data Mapping



### WHAT HAVE WE ACHIEVED IN THE PAST SIX MONTHS



Some key highlights...



Our DNOA reports demonstrate transparency, but also meaningfully empowers local decision making and the delivery of net zero.

Access to this data helps strategic planning and new site development at optimal points on the network, providing relevant information for customers and local communities.

### Flexibility Market Platform Implementation



Our three-year partnership to use ElectronConnect will commence later this year to streamline the entry into the market for Flexibility Service Providers (FSPs).

This will open up new opportunities for both long-term and short-term flexibility from a single platform, in line with the ambitions set out our Flexibility Roadmap.

## **Local Energy Oxfordshire** (LEO)- Neighbourhoods



LEO-Neighbourhoods is building on learning from Local Energy Oxfordshire to explore how a new role of a "Grid-Edge Coordinator".

Enabled by a digital local area energy planning platform, can accelerate community decarbonisation by:

- Creating Community Action Plans.
- Developing local decarbonisation projects
- Enabling local balancing through Smart Community Energy Schemes, and
- Joining up neighbourhood level action with strategic planning.

It aims to enable fair, participative, and efficient decarbonisation at the grid edge, where energy is used by households and businesses



### WHAT'S TO COME IN THE SIX MONTHS AHEAD?



#### **Operational Data Sharing**



We're actively involved in creating Industry wide engagement rules between the National Electricity System Operator (NESO) and DSO/DNO for the mitigation of technical conflict between NESO and DSO actions.

We are implementing these rules through new practices such as Risk of Conflict reporting.

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We will continue to explore opportunities to develop advanced data sharing to improve outage visibility with NESO

#### **Inter-Control Centre Protocols (ICCP)**



This year we've commissioned our ICCP link and brought on the first 477 MW of Distributed Energy Resource (DER).

This same technology is also being employed to support our Technical Limits work to further increase connections in coordination with NESO.

Build on our ICCP from our South West Active Networks (SWANS) and regional development plans to enable broader data exchange on our DER assets.

#### **DSO Action Plan Refresh**



We're actively engaging with stakeholders and customers to make sure our DSO activities deliver for our communities.

These important insights will inform our Year 2 action plan. We will publish a draft and consult on this plan in the next 6 months.



We will publish Year 2 DSO Action plan after engagement with customers and stakeholders.



# NETWORK VISIBILITY SPOTLIGHT WHAT HAVE WE ACHIEVED IN THE PAST SIX MONTHS



Some key highlights...



Published our Network Visibility Strategy to explain how we are increasing visibility of power flows across our entire network

Greater network visibility, particularly at street level, is important to help achieve our net zero commitments by creating opportunities through a range of data sources such as physical monitoring devices, smart meter data, data analysis and modelling. This gives us 100% visibility of our network and enables us to share this data publicly.



1st DNO to publish our full half hourly smart meter consumption data on our open data portal

#### WHAT WE'VE DELIVERED

A new cloud based, high performance, Data Communications Company (DCC) adapter to manage the anticipated increase of associated data streams.

We were the first DNO to have Ofgem approve our Data Privacy Plan to access and share smart meter half hourly consumption data, enabling us to deliver significant enhancements to network data visibility and sharing.



#### Near Real time Data Access (NeRDA) - beta



Near Real-time Data Access (NeRDA) portal, providing full access to our network data every 3 minutes.

The NeRDA platform is a tool making power-flow information visible, from the HV levels down to our LV level and feeders, with graphical and API access. It's updated dynamically every few minutes and enhanced with the addition of third party data.

We're the first DNO to publish network data to this extent with 20.3K data-points in near real-time across the whole of our distribution network. The NeRDA portal regularly see more than 3,000 visits a month with around a fifth being first time users and with around 20 API users engaged.



# NETWORK VISIBILITY SPOTLIGHT WHAT'S TO COME IN THE SIX MONTHS AHEAD?



#### **NeRDA - Your Feedback**



NeRDA beta to phase 1, incorporating stakeholder feedback for improved visuals and additional datasets.

Listening to stakeholder feedback, we are developing NeRDA to include generation power flows, all our low voltage physical monitoring data, improved visualisations and transformer capacity and headroom, to name a few.

### **Stakeholder Engagement**



Network Operators collaborating to conduct stakeholder engagement on benefits, access and utilisation of smart meter data.

To help ensure the smart meter data we publish is meaningful and accessible, we will hold webinars, focus groups, interviews and conduct surveys with our stakeholders to inform future developments that meet their needs.

## **Network Intelligence and Monitoring**



Innovative ways to monitor network integrity and improve fault location methods.

We are working to develop new methods to better monitor network integrity, from voltage quality monitoring to accurate fault detection and location data to support our operational teams responding to network issues. Incorporating an array of existing and new datasets and technologies.





### WHAT HAVE WE ACHIEVED IN THE PAST SIX MONTHS

Some key highlights...

### Local Energy Net Zero Accelerator (LENZA) Rollout



We are at the stage in this innovation project that we can offer access to local authorities across our two licence areas.

We have begun a programme of onboarding local authorities to the platform and supporting them to get the most out of it. This in turn helps us to get better at powering local net zero ambition. So far, along with our innovation project partners Advanced Infrastructure Technology Ltd, we have welcomed 49 local authorities to the platform. We have also been providing a bespoke support package including live demonstration sessions that we will continue to roll out.

We have invited all eligible local authorities across both of our licence areas to be onboarded to the platform. We have started rolling out bespoke support, as well as training and drop-in sessions to help maximise impact.



**Explore here** 

### Data Interoperability and Data Set Assurance



In addition, SSEN has collaborated with all other UK DNOs through the Energy Networks Association (ENA) to agree and implement an interoperable methodology for sharing this data in a consistent manner.

A key focus was to agree an aggregation level of five or more smart meters from an individual circuit on the low voltage network: any lower than five meters or sensitive sites, following data triage, are excluded.

SSEN is also working with Icebreaker One as the first DNO to be Organisational Assured against the Open Energy Assurance Framework, including the Assurance of Data for access. Currently 30% of our data on the portal is assured to level 1. In the next 6 months we would like to achieve over 75%.



**Explore here** 

### **Data Publishing Roadmap**



We have developed a roadmap to outline the key milestones related to data provision and management. It provides a structured path for implementing data sets and achieving data strategy goals.

This Roadmap will be continuously updated through our pro-active data publication requirements, as well as providing a transparent view on the data requests receive their progress, and decisions to publish.

We will continue to develop the roadmap to make it more interactive and visible for visitors to our data portal.



**Explore here** 



### WHAT IS OUR FOCUS IN THE **NEXT SIX MONTHS?**

## Adding more functionality to our data portal



We are developing a series of data consumer enhancements to the data portal to enable you

Ability to visualise data on the data portal using simple tools.

Ability to understand SSEN Distribution data publications through use cases publications, simple visual insights on our data, and how to use this data.

Interactive Roadmap and visibility over data requests, upcoming capabilities and datasets.

Enabling Capability for publishing data under shared licences through business to business data sharing.

Data Set Assurance Level 1 as standard enabling machine readable data and API access to data.



### Piloting of two restricted data sharing use cases



We want to enable restricted data consumer access to our geospatial.

We are focused on two data use cases around access to restricted geospatial asset information to authorised parties, and a business-to-business data sharing use case forming a data sharing partnership.

This will be implemented utilising the Open Energy Trust Framework to ensure data sharing is automated, frictionless and as efficient as possible.

Once proof of concept has complete, a retrospective review of data requests for sensitive and restricted data will be conducted with an update to the data roadmap to communicate and present when future restricted data will be available.



**Explore here** 

## **Engaging with the Virtual Energy System**



Working with National Grid ESO and Arup on a pilot programme to enable frictionless data sharing across the energy sector.

This Pilot will focus on data sharing between SSEN Distribution and National Grid ESO, with further developments in a multi-year programme.

This involved the collaboration between three parties of SSEN Distribution, National Grid ESO and Arup working on the process and technology to enable industry wide data sharing.

The includes requirements to meet Ofgem Data Best Practice through interoperability, data quality, metadata, and access requirements.

Pilot is projected to complete end of this year.



**Explore here** 



# CUSTOMER JOURNEYS SPOTLIGHT WHAT HAVE WE ACHIEVED IN THE PAST SIX MONTHS



Some key highlights...

#### **Continuous Improvement Cycle**

A well-established model, delivering regular improvements for our customers



Optimised Online Connections Application Journey



Improved, real-time access to power cut information via Power Track



Improved Search Engine Optimisation



30% accuracy improvement in estimated restoration times

We now have a dedicated Customer Service & Experience Design Team who focus on designing and implementing new services/products, and improving existing ones, across SSEN Distribution. In the past 6 months, we've made dozens of improvements, generating our highest customer satisfaction scores to date.

#### **Resilience Portal**

Bringing together governments, local authorities, charities, emergency service and utility providers to improve resilience



Through active engagement with our resilience partners, we identified a need to improve the way we communicate across various parties, especially during emergency events like a storm. We launched our Resilience Portal this winter, providing more than 100 parties with the ability to find information about our response, and for those parties to communicate with each other too.

We recognise that communication and access is not always possible and we ensure that there are suitable alternatives such as the continued ability to speak to someone and access to all our services via UK based contact centres.

You can read more on our vulnerability strategy here





#### Focus on accessibility

We've been focused on ensuring our digital services are accessible for all







Highest Ever Score on the Sitemorse Index

– Number 1 DNO



Inclusive by design
Adapting our design approach to ensure nobody gets left behind

As we continue to deliver new digital services for our customers, we understand the importance of ensuring no customer is left behind. We take accessibility seriously and have robust processes in place, including independent assessments, inclusive service panels and human centred service design approaches to keep us in check along the way.





# CUSTOMER JOURNEYS SPOTLIGHT WHAT IS OUR FOCUS IN THE NEXT SIX MONTHS?



#### **Connections Self Serve**



### Making it easier to request a new connection or service alteration

In the autumn, we plan on launching our first iteration of our Self-Serve Portal. Customers will be able to apply and receive an estimated cost on small scale connections activities, with plans to expand to further areas in various releases following this point.

#### **Customer Portal**



### One-stop-shop for managing customer requests

We will be improving and re-launching a new version of our customer portal – providing customers with a one stop shop where they can view their requested works with us, update their information and request additional support.

### **Channel Strategy**



### Optimising our contact channels to deliver improved customer service

We have now engaged the contact management solution market on finding a partner to support us in optimising our contact centre operations- this will enables us to better manage our customer service resources to answer customers quickly and ensure our channels are fit for purpose and delivering to customer needs.

As we've seen increasing number of vulnerable customers, this work becomes imperative.

### **CONTINUOUS IMPROVEMENT CYCLE**

**OUR WEBSITE** 



#### **POWER TRACK**



#### CONNECTIONS



We'll continue to invest in and improve our existing digital products – focused on delivering brilliant digital services for our customers.

This will be done through quarterly release cycles.

A 'shop window' into SSEN providing a one stop shop with all the information our customers need to self-serve and find what they're looking for.

An industry leading service providing a streamlined experience to dealing with a power cut, at the click of a button or tap of a finger.

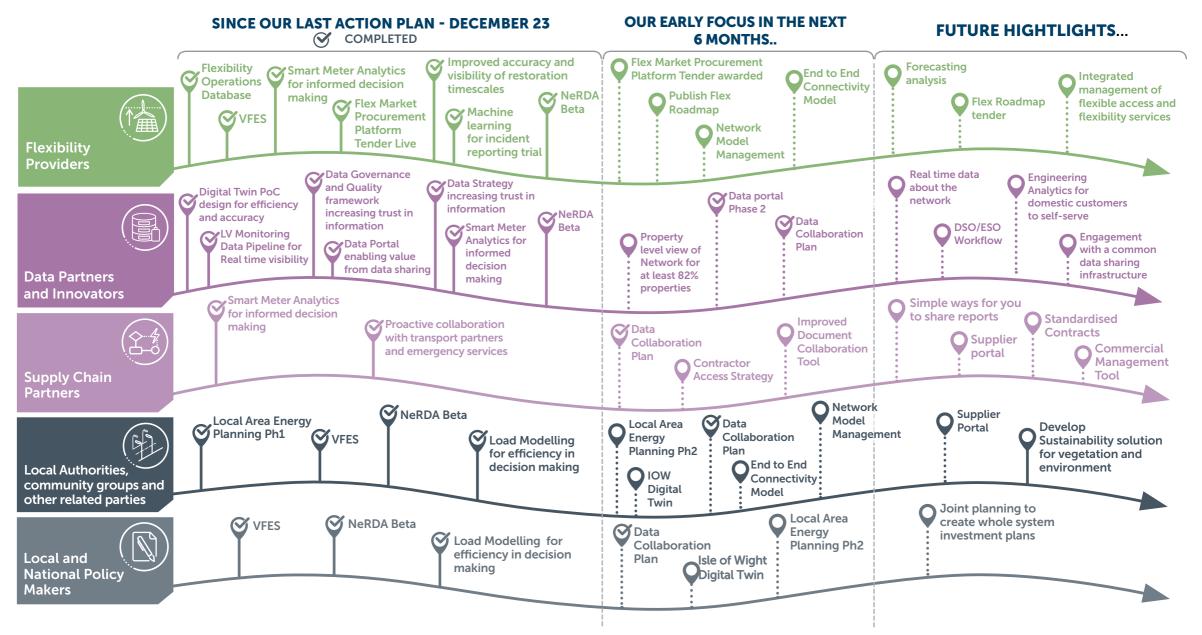
Improved experiences when requesting services like new connections for properties and low carbon technologies (EV's, Solar Panels etc).

#### 

## PRODUCTS AND SERVICES WE ARE DELIVERING FOR THE PEOPLE WE SERVE



## PRODUCTS AND SERVICES WE ARE DELIVERING FOR THE PEOPLE WE PARTNER WITH



## HOW WE WILL DELIVER OUR PRODUCTS AND SERVICES

#### **OUR DELIVERY APPROACH**





Our digital strategy outlines how we use "segments" to surface insights and create deeper understanding of our customers' needs.

We build the insights gained to design our products and services.



We will also engage the consumers of our services in the design process and integrate their feedback to improve our products.

Our commitment to adopt a 'test and learn' approach supports our ambitions stated for organisational alignment in our digital strategy.



Where it makes sense we will **pilot** new services and product updates with small audiences and gather feedback.

We will use this to make improvements before releasing to a larger audience.



We will continue to use our **Customer and Stakeholder Engagement Community** to shape and inform our actions.



We have developed **performance measures** for our Digital Action Plan that add value over and above existing price control measures. We will develop these through consultation with customers and stakeholders.

#### THE BENEFITS WE ARE SEEKING



1 To maximise learning from similar work taking place elsewhere in industry or wider.

We will reduce and avoid the introduction of complexity and inconsistency for our customers and stakeholders to reduce the costs of delivering our DSAP and realising our own and the UKs digitalisation ambitions.

We will align with industry through the ENA Data Working Group, our broader collaboration with other stakeholders, and by seeking feedback on areas where we should collaborate further.

We will continue to publish information on the data standards, underlying technologies and other information elements that enables customers and stakeholders to provide feedback and shape ours and others forward plans.

**7** To maximise the value delivered through the development of our products and services.

We are taking a holistic approach, recognising there are direct benefits to users but also broader societal benefits such as carbon reduction, enablement of new markets and supporting broader policy aims of digitalisation across the UK.

To maximise the uptake of our products and services by early alignment to customers' need

We will thoroughly test and evidence the need and opportunity before committing resources and developing any new product or service.

We will undertake market sizing and engage with stakeholders to determine how, where and when a product or service may be used.





**Customer Segment:** 

### HOUSEHOLDS OR SMALL BUSINESSES EXPERIENCING A POWER CUT



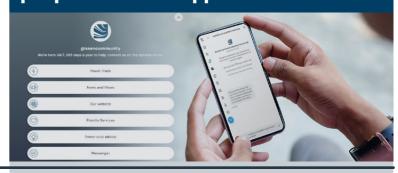
### Clearer communication about your needs



#### **Fault forecasting**



### Use digital channels to connect you with people to obtain support



# MMEDIATE

- Launched BetterWords Programme at SSEN a set of principles centred around simple communication for our customers.
- Our Website Journeys have been designed around a detailed set of customer needs and beahviours, ensuring the information they need is presented in a way that is relevant for them.
- Upskilling materials for customers on fault fixing, Smart Meters, Powertrack sign-up, and installation linkage.
- Improved collation and organisation of customer contact details to support customer communication and planning.
- Implement our Network Visibility Strategy to explain how we are increasing visibility of power flows across our entire network which will in turn allow us to anticipate faults before they occur.
- Published daily street-level half-hourly smart meter data across the our whole network.
- Engage with the wider market on solutions for managing our digital channels, alongside other contact channels.
- Our response time sits under 3 minutes for social media channels.
- Our PowerTrack Service is now our primary contact channel during a power cut. Serving over 1m customers a year. Full automation has been put in place to allow customers to self-serve their power cut journey end-to-end.



Improved communication of potential service interruptions after faults have occurred.

Standardised data format implemented across all channels for fault reporting.

Communication delivered to customers based on their individual personas, and via their channel of choice.



Roll out 20,000 LV monitors over ED2 to give greater visibility of the network.

Work to develop new methods to better monitor network integrity, from voltage quality monitoring to accurate fault detection and location data.



Interactive forms and live support options during a fault.

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Automation of updates tailored to different customer needs.



**FUTURE** 

**FOCUS** 





### **Customer Segment:**

### **CUSTOMERS WHO NEED EXTRA SUPPORT**



### Tailored plan for what you need to do in emergency situations



### Understanding and knowledge of your specific needs



### Make it easy for you to link with our partner support organisations



- Our Power Track app also complies with our accessibility standards and has a colour blind overlay added.
- Partner with charities and health professionals to provide bespoke advice to customers based on their needs.
- Trial our automated personal resilience plans for our most vulnerable customers.

- We have 905,380 customers on our Priority Services Register (PSR) which equates to 58% of eligible customers.
- We are continuing to run focus groups with customers to find out what they need to prepare for a powercut.
- Used our Vulnerability Future Energy Scenerios (VFES) to identify customers in vulnerable positions who may need and benefit from additional network investment.
- Making it easier for customers to join the Priority Services Register by continuing to promote <a href="mailto:thepsr.co.uk">thepsr.co.uk</a> and <a href="mailto:psrscotland.com">psrscotland.com</a>.
- Created PSR digital tool kit with downloadable publications.
- Launched an innovation project (Equal LCT) to explore commercial opportunities for the left-behind segments of society to participate in LV flex.
- Enhancing data in our customer mapping tool.
- Launch phase 2 of our PSR digital tool kit with videos and more interactive tools.

Vulnerability Identification Via Informative Data (VIVID) will develop new techniques to use smart meter and public data sets to identify which consumers would most benefit from timely, relevant and free offers of practical and financial support from their local authority, reputable charities and responsible energy companies.

- ++ Reach over 1m customers registered for Priority Services.
- (+) Contact all PSR customers to cleanse data every two years.
- We will continue to move forward our plans for a bespoke and automated personal resilience plan.
- Introduce bespoke channels to allow new ways for customers to engage with us.
- Enhanced data-sharing agreements to ensure coverage is across both licence areas with water companies.





**FUTURE** 

**FOCUS** 

### **HOW WE MEASURE OUR SUCCESS**





**Customer Segment:** 

HOUSEHOLD OR SMALL BUSINESS WHO WANTS TO CONNECT TO THE NETWORK



### Making it quick and easy to get a connection quote



Providing accurate estimates for speed of connection



Options on how to speed up connection timeframes and how customers could earn money from flexibility



- Partnered with EATL to develop a self serve connections portal.
- Simplification of the customer journey.
- Improved data capture via self serve channel management.

- Launched an indicative pricing tool where customers can get an idea of a price before completing a full application.
- Published average times to quote and connect on our website.
  - Optimise scheduling activities to drive increased capacity.

- Published daily street-level half-hourly smart meter data across our whole network.
- Using flexibility as a tool to connect customers faster.
  Accelerated 2.5GW connections through flexibility in constrained area of West London.
- Strengthening our connectivity model through analytics.

### Provision of a single platform for customers to view their entire journey

- Better provision of information to customers at the start of the journey.
- Capturing information in such a way that enables semiautomated triaging of applications.
- Improved visibility of the end-to-end workflow for both Customers and our teams.

- Streamlined quote letters to provide clarity and consistency for customers.
- As part of our 'self-serve connections' project, customers will be able to get a better idea of timings for their connections works.
- Structured data will be used to provide insight and analytics across customer trends.





**FUTURE** 

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**Customer Segment:** 

#### **BUSINESSES WHO HAVE LARGE SCALE CONNECTION REQUESTS**



Work together with you and share data to develop a connections design quickly



Providing accurate estimates for speed of connection, supported by a great customer experience via our website, or via your channel of choice



Provide you with easy access to the information you need at the right time at all points in the connection process



Key planning information and data sets provided through Data Portal.

Customers are able to easily access our capacity maps, highlighting both generation and demand related constraints on our network.

Optimise scheduling activities to drive increased capacity.



We have improved visibility of our works queues so that our teams can provide customers with better estimates on time scales.

Connections Relationship Managers supporting faster connections across our regions.



Published daily street-level half-hourly smart meter data across the our whole network.

 We'll publish our LTDS based on Common Information Model standards from November 2024.

Enhancement of SSEN website to include Knowledge Base integration and enablement of customer dialog services such as web chat and guided assistance models.

Customer portals updated to enable visibility of work progress to the customer and ability to provide relevant information.

Customer information is mastered and integrated to build customer profiles and utilise data analytics to inform forecasting.



**FUTURE** 

**FOCUS** 





**Providing more information about where** flexibility services are wanted today and in the future



- Published our Operational Decision Making (ODM) framework which shows how and when we dispatch flex and our Seasonal Operability Report which details the outcomes so stakeholders can monitor performance and engage on future changes.
- Significant expansion of real-time network visibility with 20.3K HV, EHV, 132kV SCADA data points published; and 84.1K LV circuit and 36.4K substation half hourly profiles published daily
- Increasing our Low Voltage (LV) network monitoring where it is beneficial to do so to provide a greater range of products and locations where flexibility services would be most useful.

Providing tools that forecast the use and benefits from flexibility services under different circumstances and across different products



- New data exchanges published enabling 720MW of capacity to be accessed through the Local Constraint Market.
- Published our roadmap showing where and when we use flexibility.
- Outlined future network needs and revenue opportunities for flexibility providers through 18 DNOA outcomes.
- Selected our next flexibility generation market platform.

**Establishing common standards for data** sharing to allow interaction with any other network operators nationally



- 11 aggregators and suppliers voluntarily registered to protect consumers interests by following the HOMEflex Code of Conduct during the National Grid DFS 23/24
- We've procured over 700MW of flex services, deferring over £44m of reinforcement through flexibility dispatch.
- Accelerated 2.5GW connections through flexibility in constrained area of West London.
- Improving our flexibility processes and procuring at scale to improve market confidence.

Enable greater variety of contract timeframes and enhanced customer experience through our new market platform.

- Refine and develop our Flexibility Roadmap to ensure we optimise the full range flexibility services, access product and price signals.
- Use our new third-party market platform to enable a greater variety of contract time frames (including shorter term procurement) and an enhanced customer experience.

Utilising innovation to address the specific needs of our communities.

- Supporting Icebreaker One and developing requirements for (+) standardised data sharing licenses.
  - Working with Industry Peers, Ofgem, and DESNZ to define a common approach to data sharing across the open data spectrum.

Scottish and Southern Electricity Networks Distribution





**FUTURE** 

**FOCUS** 

MMEDIATE







**Establish data-sharing partnerships with** organisations who want to innovate



Digital maps of our network are available to our partners through more data assets such as low voltage monitors and smart meters



Simple and fast services to request data from our business that adhere to data best practice



IMMEDIATE

We have implemented the SSEN Data Portal to enable easier access to the data we publish today. We have had 1400 visitors to our data portal since launch in October, with over 5000 page views.



- Used data and collaboration to understand communities' long term and granular network needs.
- Improved the quality and accessibility of data to ensure continued value for stakeholders.
- Collaborating and coordinating with NESO and others to enable market access, interoperability and system integrity.

- Shared realtime data across all voltages via the NeRDA portal which sees 3k+ visits a month, with approx. 20% first time users and around 20 API users engaged.
- Launched Local Energy Net Zero Accelerator (LENZA) tool that has been provided to all our local authorities.
- Published daily street-level half-hourly smart meter data across the our whole network. This has seen a 65-fold increase in street level LV data point visibility as a result.
- Consulted on and published our data roadmap.
- 5,130 New users to our Data Portal, 543 Return users, 34 Data **Access Requests**
- Progress and trial data sharing opportunities to support innovation in system coordination and reveal new insights. Work with industry partners such as DCC and NESO.
- Continuously engage with our stakeholders to improve the customer experience for data access, future release prioritisation, and improving data quality and accessibility.
- Introducing the "Trust Framework" where we verify and authenticate users before granting access to our sensitive data.
- Collaborating with Ofgem and DESNZ to ensure we maintain data security whilst still adhering to our license obligations.

Develop and share Icebreaker One learning as best practice.

Develop system coordination through increased data sharing.

Increase operational data sharing and extend, evolve and formalise operational coordination.



Refine network visibility through the advanced application of smart metering data and other external data sets to augment our network connectivity model

Provision of Geospatial Mapping capability to the data portal for data assets that contain geospatial data.

Stakeholder-led development of data portal and platforms.

Informed by our stakeholders, continue to prioritise the release of new data sets through our data portal and new capabilities in LENZA.



**FUTURE** 

**FOCUS** 







Improve your access to procurement events using digital platforms



Easy way for you to receive work orders and share progress updates through our Work **Management System** 



Simple and fast services to request data from our business that adhere to data best practice



- Give you access to digital maps of our network so you can work safely around our assets.
- Engaging with you earlier by using our fault forecasting tools, so we can jointly respond in the best way.
- ✓ We are integrating smart meter data to allow faults to be predicted before they happen.
- Continue retendering for the service you pay for to deliver our safe dig records, a service that has been in place many years.

- Greater standardisation and automation of job pack creation.
- Engaged suppliers earlier.
  - Allocating work more efficiently to our supply chain.
- Grouped projects where it benefits us both.
- Moved to standardised practices and working methods.

- Simple ways for you to share reports with us, including Carbon Footprint data and safety information.
- Publication of data roadmap to inform of upcoming data publications via data requests and pro-active data publishing.
- Development of an interactive data publication roadmap detailing upcoming data requests, data publications, and data capabilities.

Standardised contracts and agreements that make it faster to on-board supply chain partners.

Commercial management tool to make it easier for both large and small supply chain partners to work with us.

- Improved and earlier cross-functional collaboration via "Integrated Teams", enabled through Common Data Environment, improved change control and feedback
- Give Supply Chain Partners access to our digital catalogue "iBuy" to order materials and tools.
- Notification of new data sets and plans to relevant parties.
- Supplier portal for collaboration around planning, design and communication with SSEN.





**FUTURE FOCUS** 

IMMEDIATE





**Customer Segment:** 

LOCAL AUTHORITIES, COMMUNITY GROUPS AND OTHER RELATED PARTIES

Provide detailed forecasts for where the growth in low carbon technologies will be in the local community



Provide access to information about capacity updates and network investments that SSEN will undertake in the local area



Work together with local authorities and other stakeholders to identify the impact of their plans on the energy networks



MMEDIATE FOC

Worked with Regen to improve the quality and accessibility of DFES through provision of local authority



We are creating a bespoke data-visualisation tool for stakeholders to actively engage with our DFES data set.



Published first DNOA outcomes reports and our Network Development Plan showing headroom capacity and providing details of our future plans.



Our second DNOA outcomes report is due to be published later in June. This will be followed with further quarterly updates.

Appointed 5 Net Zero Advisors who can build long-lasting relationships with the local authorities in their proximity and support their Local Area Energy Plans or Local Heat and Energy Efficiency Strategies (in Scotland).



Supporting local authorities to use LENZA to develop

Create local energy markets to support communities' transition to net zero.



Expanding our DNOA process to cover lower voltage requirements and energy efficiency opportunities.



Sharing Strategic Development Plans with local authorities (+) and other stakeholders to build collaborative programmes of work to Net Zero.

**FUTURE** 

**FOCUS** 





**Customer Segment:** 

### LOCAL AND NATIONAL POLICY MAKERS

Provide detailed forecasts for where the growth in low carbon technologies are across the whole network, based on our better understanding of network usage, and present them in easy-to-use ways



Provide easy access to information about both historic and planned network upgrades, using better reporting tools and our data sharing portals



**Improve our Data Governance and Data** Quality so we can share and update data when we need to, and be ready to adapt to industry changes



Work with Regen and large energy users to improve the quality and accessibility of DFES

- Published initial strategic development plans showing future requirements on network area.
- Significant expansion of real-time network visibility with 20.3K HV, EHV, 132kV SCADA data points published; and 84.1K LV circuit and 36.4K substation half hourly profiles published daily.
- Key planning information and data sets provided through Data Portal.

Worked with NERA and stakeholders to identify the most efficient way to mitigate conflicts.

Progress and trial data sharing opportunities to support innovation in system coordination and reveal new insights. Work with industry partners such as DCC and NESO

🔗 Collaborating with Ofgem and DESNZ to ensure we maintain 🕽 data security whilst still adhering to our license obligations.

Reviewing process and tooling opportunities to provide seamless integration between data governance and data publishing activities.

Continue to develop this dataset as well as the publication of the view of our network load model that details Low Carbon Technology growth across SHEPD license area.

Increase operational data sharing and extend, evolve and formalise operational coordination.

Refine strategic development plans to ensure they provide the data that stakeholders need.

**FUTURE FOCUS** 

### **HOW YOU CAN GET INVOLVED**

We value stakeholder feedback to improve our business and your views will make a real difference to the digital future so please let us have your opinions.



- To what extent do you agree with the content of our strategy and action plan? Please let us know where you think we could improve.
- To what extent has this document increased your understanding of the opportunities enabled by our Digital Strategy? Please let us know where clarity can be improved.
- To what extent has this document increased your understanding of the potential of Open Data to enhance value to the customers and the communities that we serve?
- To what extent do you feel that we are making progress in meeting the current and future needs of our customers in a digital world?
- In the process of digitalising the business and opening up data securely where should our priorities be focused? For example EV connections, whole system planning, customer supply interruptions.
- In the process of digitalising the business and opening up data securely, where should our priorities be focused? For example EV connections, whole system planning, customer supply interruptions.

### **DIGITAL FEEDBACK SURVEY**

If you would like to give general feedback or fill out our questionnaire, please go to: ssen.co.uk/about-ssen/digital-strategy/open-to-you-digital-strategy-feedback/







### **GLOSSARY**

Term	Description
Active Network Management (ANM)	Control systems used in circuits to manage generation and load for specific purposes.
Application Programming Interface (API)	A set of defined rules that enable different applications to communicate with each other.
Artificial Intelligence (AI)	Artificial Intelligence can be used as a branch of computer science that can simulate human intelligence.
CIO	Chief Information Officer.
CVP	Consumer Value Proposition.
Data and Digitalisation Steering Group (DDSG)	The ENA Group which ensures that digitalisation and data is delivered effectively and co-ordinated with other company strategies.
Data Asset	A data asset is in any type of data that has value. Such as a system, web page, output file or database.
Distribution Future Energy Scenarios (DFES)	An analysis based methodology that directly supports electricity networks with long term strategy and network planning processes, at a localised level.
Digital Strategy and Action Plan (DSAP)	This refers to our Digital Strategy available <u>here.</u> The Digital Action Plan is this document.
Distributed Energy Resource Provider (DER)	Electricity generation units located within the electricity distribution system at or near the end user.
Distribution Network Operator (DNO)	The operator of the electric power distribution system which delivers electricity to most end users.
Distribution System Operator (DSO)	DSOs are responsible for managing and maintaining the distribution grid, which is a crucial component of the energy distribution system.
Electric Vehicle (EV) charge points	Charging points for vehicles that use electricity to improve efficiency or replace other fuels.
Energy Network Association (ENA)	Industry body representing the companies which operate the electricity wires, gas pipes and energy system in the UK and Ireland.
Estimated Time to Restore (ETR)	The estimated time we believe it will take to restore your power. This update is available through the Powertrack tool during a power outage.
Geographic Information System (GIS)	The information we hold about the network in our core system.
Inter-Control Centre Protocol (ICCP)	This refers to the standard for a digital communications link between different control centres for the exchange of real-time operational data.
Isle of Wight (IOW)	The Isle of Wight is an island off the south coast of England.
Local Area Energy Planning (LAEP)	LAEP is a process designed to deliver effective local action to contribute to the 2050 net zero.
Local Constraint Market (LCM)	The Local Constraint Market pays people and businesses to use this excess wind power locally in Scotland, as an alternative to curtailment.

Tawaa	Description
Term	Description
Long term development statement (LTDS)	Long Term Development statements is to provide information for anyone connecting to our distribution system at extra high voltage. It is designed to help to identify and evaluate opportunities for entering arrangements with us relating to use of system or connection.
Low Carbon Technologies (LCT)	Refers to a range of technologies that have the potential to significantly lower our global carbon footprint.
Local Energy Net Zero Accelerator (LENZA)	Geospatial planning software, powered by Advanced Infrastructure's LAEP+ infrastructure, provides data on network constraints, empowering planners to make better informed decisions about where to install new energy assts in their local areas.
Low Voltage (LV)	This refers to voltages up to, but not including, 1kV.
Near Real Time Data Access (NeRDA)	Making near real-time data from our network available to stakeholders.
National Electricity System Operator (NESO)	Electricity system operator for Great Britain
Priority Services Register (PSR)	A register of all customers in an electricity distribution area that are of pensionable age, have a disability, are chronically sick, require special communication needs, depend on electricity for medical reasons, have children under five in the household or require certain information and advice about supply interruptions.
Regional Development Programmes (RDPs)	Refers to projects that identify where reinforcements that are preventing customers from connecting to the network and aim to provide tools and resources to help.
RIIO-ED2	The next price control covering the five-year period from 1 April 2023 to 31 March 2028. A link to our RIIO-ED2 business plan can be found <u>here</u> .
Southern Electric Power Distribution (SEPD)	Southern England distribution licence area.
Scottish Hydro Electric Power Distribution (SHEPD)	North of Scotland distribution licence area.
South West Active Networks (SWANS)	Our mechanism to allow more customers to connect to distribution network ahead of transmission reinforcement by using an ANM system.
Supervisory control and data acquisition (SCADA)	A control system architecture comprising computers, networked data communications and graphical user interfaces for high-level supervision of machines and processes.
SSEN	Scottish and Southern Electricity Networks.
Vulnerability Future Energy Scenarios (VFES)	A vulnerability-based project with aims of benefiting consumers in vulnerable situations by predicting the scale and location of such situations as well as what new situations may cause vulnerability.

## **ENGAGE WITH US**

For any queries or to request further information, please contact us on:



















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