

SSEN Distribution

COLLABORATION PLAN

May 2024



Substation identification and location with coordinates for both north and south.

Owner Type	Owner Name	Type	Class	Name
Filter 31,944 records	Filter 31,944	Filter 31,944 records	Filter 31,944 records	Filter 31,944 records
3rd Party	N/A	Primary		
3rd Party	SHEPD	Switching Station	Distribution	FAWLEY CENTRAL
3rd Party	N/A	Ground Mounted Distribution	Distribution	YOWIE BARCLAY WORKS
3rd Party	N/A	Ground Mounted Distribution	Distribution	PIER INDUSTRIAL ESTATE
3rd Party	N/A	Ground Mounted Distribution	Distribution	BUCHAN M&T
3rd Party	N/A	Ground Mounted Distribution	Distribution	GEOTHERMAL
SSEN	SEPD	Ground Mounted Distribution	Distribution	LOXWOOD NURSERIES
		Ground Mounted Distribution	T1K/LV	WOODBURY HILL MAST

Fields information

name	title	type	description	example	constraints
Owner Type	Owner Type	string	Owner Type	SSEN	
Owner Name	Owner Name	string	Owner Name	SEPD or SHEPD	
Type	Type	string	Whether the substation is Ground or Pole mounted	Pole Mounted Distribution	
Class	Class	string	Class of substation	12KV/LV	
Name	Name	string	SSEN Substation Number	HILL STREET	
Number	Number	string	Status	PU7B	
Status	Status	string	Data Confidence	Existing	
Data Confidence	Data Confidence	string	The SSEN Operating Area in which the substation is located	Surgey	
Fence Type	Fence Type	string	Locality	Indoor, Outdoor, Pole Mounted	
Operating Area	Operating Area	string	Locality	None	
Locality	Locality	string	Locality 1 (m)		
Locality 1 (m)	Locality 1 (m)	string	Locality 2 (m)		
Locality 2 (m)	Locality 2 (m)	string	Locality 3 (m)		
Locality 3 (m)	Locality 3 (m)	string	Locality 4 (m)		
Locality 4 (m)	Locality 4 (m)	string			



Scottish & Southern
Electricity Networks

DSO Powering Change



Purpose

As part of RIIO-ED2 Final Determinations for the electricity distribution price control, Ofgem asked Distribution Network Operators (DNOs) to coordinate related activities through the Smart Optimisation Output (SOO).

The SOO facilitates collaboration and partnerships between DNOs and their local stakeholders by structuring and packaging network and strategic development data to make them more accessible, transparent and interoperable.

The Smart Optimisation Output is comprised of two parts:

Part 1: Collaboration Plan (this document): Which will describe how Scottish & Southern Electricity Networks (SSEN) is collaborating with stakeholders through a more transparent and user-centric approach to the sharing of data and how we will work in partnership with stakeholders to support the development of local and regional net zero strategies.

Part 2: System Visualisation Interface; A combination of digital network tools on our website and [our open data portal](#).

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Our approach to sharing data

2.1.1

Describe the licensee’s approach to sharing data with stakeholders, as a minimum through the System Visualisation Interface, and describe how the licensee will take account of local stakeholder plans and/or requirements (eg changes in demand, generation, storage or services), to inform its own strategic network planning and smart optimisation activities.

Within the Distribution Data Strategy and Vision we set out in 2023, we have committed to building a data sharing ecosystem.

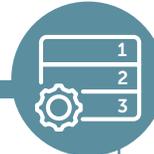
This is built on top of our data management foundation that will govern for outcomes, work with and adopt situational trust frameworks, and utilise our data domains as an organising principle for clear data ownership, stewardship and assurance. This data sharing ecosystem aims to create a marketplace for federated, connected data assets, products and utilising citizen platforms. As well as enabling SSEN Distribution to lead and participate in the evolution of the net zero data marketplace. Below are some of the activities and tools we have implemented to allow us to achieve this.

DATA PORTAL



Our [data portal](#), launched in October 2023, is a single interface for customers and stakeholders to access the data they need. We have added additional datasets since its launch and published the first draft of our data roadmap which we will continuously develop with the help of our stakeholders, informed by their needs and priorities.

DATA REQUESTS AND TRIAGE



We have a data triage process, that allows data consumers to [request, feedback, and share successes on data](#). This process ensures we are sharing data appropriately, managing risks with sharing data, and considering how we make data more accessible.

DATA INTEROPERABILITY



We work alongside the Energy Networks Association (ENA) and other DNOs to ensure that data published by each DNO is consistently understood and has the ability to be used in conjunction with each other. We worked with the ENA to develop and deliver a framework for allowing interoperable datasets to be created and published on the DNO’s Open Data Portals. A great example of this can be seen with the [Smart Meter LV Feeder Usage data](#), the methodology has paved a collaborative approach working across the industry.

ICEBREAKER ONE DATA ASSURANCE



We collaborate with Icebreaker One (IB1) to identify and tackle data silos and develop data sharing opportunities whilst ensuring customer privacy and cyber security measures are managed. We will continue to work with IB1 in 2024 to understand how we are able to start sharing all classifications of data in a secure and controlled manner, increasing the value of data publications and enabling trust in the data we share.

STAKEHOLDER ENGAGEMENT AND STRATEGY (IB1)



We continuously engage our stakeholders to improve the customer experience for accessing our data, their priorities for future data releases and how we can improve data quality and accessibility. This informed our initial data roadmap and will allow us to drive a use case lead approach going forward. IB1 will support SSEN in 2024 to communicate with external stakeholders to understand the benefits and use-case of data publications and the value it brings.



SOO interaction and interface



2.1.4 Explain how the activities from their DSO, LRE (Load Related Expenditure- work to release more network capacity) and Digitalisation Strategy and Action Plan interact with one another and interface with the SOO.



Our approach to boundaries and interfaces



2.1.2

Explain the licensee's approach to considering boundaries and interfaces (through the SOO, such as with adjacent licensees, embedded IDNOs, other utilities eg water, gas networks, electricity Transmission Owners (TOs) and the Electricity System Operator (NESO) and detail how the licensee is working across different energy vectors, including heat and transport, to facilitate whole system optimisation.)



Boundaries & Interfaces

SSEN Distribution's approach to support the challenge of whole system optimisation through our boundaries and interfaces as part of Smart Optimisation Output includes:

- Building close working relationships with our industry partners and peers, including adjacent licensees, embedded Independent DNOs (IDNOs), and other utilities like water, gas, and Electricity Transmission Operators.
- This will include building of collaborative partnerships, methodologies, and standards to enable secure, frictionless interoperable data and information sharing.

SSEN Distribution will also look to build partnerships and relationships with our data consumers, understand the use cases for data access, and ensuring that our data is a product.

- This will ensure that we can enable the use of data to support valuable use cases, and is fit for the purpose it serves.

SSEN Distribution is also engaging with the [Virtual Energy System Pilot](#), a data sharing infrastructure project that focuses on automated frictionless data sharing, through trust frameworks, IT infrastructure and data architecture.

- The virtual energy system pilot will allow authorised access to timely and accurate data with the ability to work with it in near real-time.

Project SWAN

Project SWAN (Southwest Active Network Management) aims to improve the communication and coordination between SSEN and National Grid Electricity Transmission (NGET) through the use of Active Network Management of the border between the two networks, allowing for near real time information flows which mitigate against constraints and allow for the connection of more distributed energy resources (DERs).



Heat & Transport

SSEN will focus on data sharing and collaboration agreements to enable heat and transport.

This is drawing on lessons learnt from past innovation projects such as:

SKYLINE

Skyline was a Network Innovation Allowance (NIA) project focused on establishing data sharing agreements with companies involved in the leasing, sale or installation of electric vehicles (EVs) and EV chargers. Project closed in 2022, after successfully demonstrating ability for parties involved in automotive or charge point industries to share data with DNOs earlier than a connection application would. We are now assessing a proposal to move the service into BAU and engaging other DNOs via the ENA.

RE-HEAT

SSEN collaborates with Scottish Power Energy Networks (SPEN), Scottish Government, local authorities, and E.ON in the NIA-funded Re-Heat Project. This involves installation of heat pumps with storage units for the purpose of monitoring and control to reduce energy consumption during peaks and charging when renewable energy supply is high. SSEN shares Geographic Information System (GIS) network data and network rating and loading information.

EV CHARGING

A dedicated design team at SSEN collaborated with Transport Scotland and Perth and Kinross and Highland Councils to determine the most cost-effective solution for the installation of EV charging infrastructure at strategic locations along the A9 trunk road. 34 sites assessed; 13 connections designed and quoted; and 10 sites taken forward to date.

Current Projects:

SEACHANGE

A project in partnership with European Marine Energy Centre (EMEC), Power Networks Demonstration Centre, and Ricardo, that will carry out fundamental work to model what the ports and harbours in the new net-zero world will look like, with a focus on ensuring they support both internal trade, and their local communities.

UNLOCK

This project, working with Regen and Environmental Project Support, will look at ways in which the connection of new generation can be accelerated, within existing network capacity limits to help facilitate the Isle of Wight's Net Zero aspirations.

MAXFLEX

This project involves the creation of Energy Flexibility Certificates, which will help firms, and Local Authorities, better understand the potential opportunities for them. Our partners for this project are Baringa, the University of Reading, and the Greater London Authority.



Development of regional projects, plans, and net zero strategies

2.1.5 Detail how the licensee is collaborating and partnering with other stakeholders in the co-development of certain strategic regional projects, plans and net zero strategies, where these are being led or coordinated by others. Active participation, by licensees, in the development of these strategies is fundamental and the Collaboration Plan should explain how interested stakeholders can access people and information from within the licensee’s organisation to support such collaborative projects.



Regional planning

The SSEN Data Portal is a single point of access to all the data Scottish and Southern Electricity Networks publishes.

This catalogue brings visibility of our network assets, their location, their usage, and their performance, which can support the delivery of stakeholders’ regional projects and Net Zero planning. All data assets published under a creative commons licence will have a direct link to how the data can be used.

SSEN has been supporting the development of Local Area Energy Plans (LAEPs) by hosting local authority roadshows in both licence areas and providing access and onboarding sessions for the [LENZA tool](#), produced with Advanced Infrastructure, a GIS tool which assists in the creation of a LAEP.

SSEN responds to local authority Infrastructure Delivery Plan consultations with network information and data and meets with regional planning and related organisations to discuss data sharing and collaboration.

E-Tourism was a NIA project investigating the impact on the distribution network from high volumes of visitor driven EVs during the tourist season. Project completed in 2022, completing both the studies on **Northern Scotland** and the **Isle of Wight**, and completing an additional assessment of two use cases on the Isle of Wight and the possible alternative solutions which could be utilised by Local Authorities/tourism or site operators to help minimise impacts from grid constraints when trying to install EV charging at those sites. Used DFES, SSEN Distribution asset data and data from tourism operators along with insights from the Local Authorities.

SSEN Distribution has worked with **SSEN Transmission** and other regional stakeholders to develop a whole system net zero strategy for the Outer Hebrides. This work has required data exchange between organisations to allow whole system modelling and will be extended to the Inner Hebrides and Orkney in 2024.

We are working with **SGN** to help them understand the potential implications of electrification of off-grid gas networks in the North of Scotland.



National Digital Twin Programme

SSEN Distribution have been working with the Department of Business and Trade and the Local Council on the Isle of Wight to support the development of the National Digital Twin Programme.

- This has a focus on addressing a number of use cases from reducing the carbon footprint of the island through flexibility and renewable generation, through to ensuring the islands whole system resilience and safety.
- This programme looks to ensure that the use cases and outputs benefit all actors, and that those putting in, also get something out.
- SSEN Distribution is supporting today in the provision of network usage data on the Isle of Wight, as well as supporting the decarbonisation use cases.



Icebreaker One Project Perseus

SSEN Distribution are also starting to work with Icebreaker One on Project Perseus, a whole system project looking to unlock access to finance that reduces emissions faster by automating sustainability reporting for every Small and Medium-sized Enterprise in the UK.

- SSEN Distribution as part of the energy sector can provide vital data and information on energy network capability, capacity, and usage to support net zero development and opportunities.



Net Zero Strategies

SSEN publishes annually the [Distribution Future Energy Scenarios](#) to model how load on the network may evolve in four consumer and societal transformation scenarios to 2050.

This publication reviews local areas’ development planning and Net Zero related projects to improve our network load forecasts. This year’s publication will include local authority reports to assist with regional Net Zero strategising.



Development of Net Zero Roadmaps

2.2

Licensees must participate fully in the development of LAEPs, net zero roadmaps and other strategies and cross-utility solutions, led by local and regional authorities and supported by the communities they serve, that will enable least cost decarbonisation pathways for power, heat and transport, where the involvement of the licensee is material in the successful planning and delivery of such strategies and solutions.

SSEN is rolling out our Local Energy Net Zero Accelerator (LENZA) to local authorities across both licence areas. LENZA is a geospatial planning software that provides access to datasets crucial for making energy planning decisions and to decarbonise heat and transport, including:

- Network topology data
- Locations and supply areas of our substations, from GSP to secondary substation voltage levels
- Headroom at these substations in the form of a RAG status
- Location and capacity of embedded generation
- Non-SSEN datasets on low carbon technology and heat network potential along with datasets on socio-economic demographics, off-gas areas, energy consumption, EV charge point locations, traffic statistics, listed buildings, conservation areas

Data from Local Area Energy Planning (LAEP) / Local Heat and Energy Efficiency Strategies (LHEES) created outside of LENZA are being ingested and visualised in LENZA so these plans can be incorporated into SSEN's strategic network development.

SSEN is working with UKPN and NGED to ensure data interoperability for local authorities spanning more than one DNO's licence area have access to their entire region's network data.

Through the Greater London Authority, SSEN Distribution provides network data to support the development of Local Area Energy Plans to understand development ambitions, net zero targets and how they impact our distribution network. The data sharing is bi-directional and includes network information, such as asset locations, building information (energy performance certificates), reinforcement plans, development plans.



Motorway Service Area Project

SSEN are working in partnership with the Office of Zero Emission Vehicles (OZEV), National Highways, the ENA, all Distribution Network Operators (DNOs), and motorway service area operators to provide a common approach for DNOs to provide optimum and efficient network solutions to facilitate the roll-out of Motorway Service Area (MSA) EV charging infrastructure. This capacity ramping approach provides:

- Assurance that capacity will be available for anticipated future demand, as and when it is needed.
- Application of use of system capacity charges in line with anticipated maximum usage as load grows.
- A common framework that will be made available for use by other technologies/customer types.



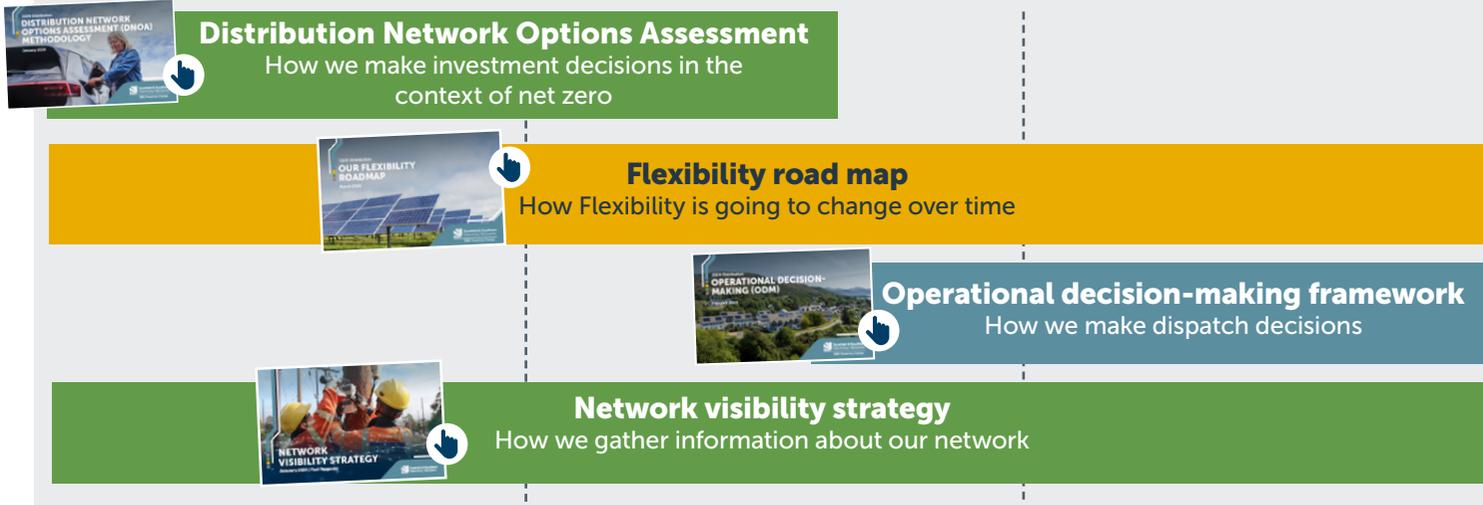
Building DSO capabilities, releasing capacity and connecting customers faster

2.1.3 Explain how the licensee's enhanced digitalisation and DSO capabilities are informing the licensee's future upgrade plans and flexibility procurement

Identify system needs

Release capacity

Optimise capacity



How we are driving transparency and coordination



Our extensive engagement with stakeholders has shown that they value clear information about:

- How, when and where we are releasing capacity (as set out in our Distribution Network Options Assessment (DNOA) method and individual DNOA summaries)
- What our roadmap is for flexibility services and access products
- How we operate our network to efficiently coordinate planned outages, access rights and wider system activities, and *How we are increasing network visibility.

Data and transparent decision underpins our strategy, with a clear data roadmap and access to data via our data portal. Regularly published key performance indicators through our newsletter and detailed information on our work to further build capability and gain external advice and scrutiny.





Our system visualisation interface

Part 2 Develop a system visualisation interface - a section of the licensee's website and open data portal that provides access to this package of forward-looking, open and accessible, digital network tools and related information. Developments should be incremental throughout ED2.

What is it?

The data portal is a single point of access for all SSEN Distribution Data that we publish with our industry peers, partners, regulator, and even our customers and the public. The portal is designed to make finding the right data and accessing it easy for our data consumers. Data consumers are able to browse, search, view, visualise and download data.

Click to open the SSEN Data Portal



How do we decide what data to publish?

We categorised Stakeholders based on 4 main user groups that could interact with the SSEN Data Portal



For each user group we:

- Mapped our DSO Strategy Personas
- Developed use cases based on understanding of your data needs
- Identified how we meet those needs through our data products today and in the longer term
- Published a data roadmap setting out what data we intend to publish



Reader instructions:

Read through the user groups, use cases and data products and validate the assumptions being made about your data needs.



What we need from you...



1

Your data needs – in order for us to provide the right data in a usable format for you, it's important you share with us what data you want and how you want it shared.

2

Share your data with us – making data sharing a two-way relationship allows us to work together to find optimal opportunities and solutions

3

Tell us the type of insights that you want from our data so you can use the information effectively

DATA PORTAL USER GROUP



Not Connected

“ I want to connect to the network, and I am not sure where to start and would like to learn more about connecting to the network ”

GROUP PERSONAS

<p>Local authority</p>  <p>Cllr. Walker is the Chairman of Shellworth County Council. He wants his Council to make a positive contribution to net zero.</p>	<p>Domestic customer</p>  <p>Kate invested in solar panels on her property when the Feed in Tariff was at its height. She has since installed a battery to store the power she generates.</p>	<p>Commercial business</p>  <p>Claire works for national home builder, 'Harvey Homes' as a Utilities Planner. She needs to understand the potential problems for connecting new homes to the grid well in advance.</p>	<p>Battery storage owner</p>  <p>John's business is installing batteries of different sizes on both the distribution and transmission networks.</p>	<p>Distributed generation customer</p>  <p>Carla is a solar farm owner and operator. She wants to expand her current solar farm and build an investment plan for new projects.</p>	<p>Large energy user</p>  <p>Keith operates a manufacturing plant that consumes large amounts of electricity which can vary significantly throughout the day.</p>
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I want to...



- Understand how to connect, where and how much it would cost me
- See visibility of near real time consumption in my area
- See technical information to help me with modelling

To do this, I can use....



- The [Long Term Development statements](#) provide information for anyone connecting to our distribution system at extra high voltage (EHV) level (including HV busbar of primary substations). It is designed to help to identify and evaluate opportunities for entering into arrangements with us relating to use of system or connection.
- The [Network Development Reports](#) for both SHEPD and SEPD that sets out our longer-term Network Development Plans.
- [Distribution Network Options Assessment Methodology](#) and future outputs. Our DNOA outlines our decisions on where to invest in network infrastructure or procure flexibility to meet future capacity needs in the longer term.
- The [Near Real Time Data Access \(NeRDA\)](#) tool which makes the most granular data on our network, from the higher voltages, down to the low voltage network, available to anyone in near real-time. Our Open Data licence obligation means anyone can access NeRDA, and see visualization of our network data via maps, dashboards, downloading datasets and can even connect directly via an API (machine to machine) to automate the data streams into their own internal systems.
- The [Load Model](#) is a machine learning product which estimates half-hourly annual demand profile for each household based on a series of demographic, geographic and heating type factors. To enable us to estimate capacity on the electricity network while protecting individual customers data privacy, modelled data is used and aggregated up the networks hierarchy based on the combinations of customers associated with each asset. This view is supplemented with the forward Distribution Future Energy Scenarios (DFES) which highlight the expected impact of low carbon technology on the network (LCT) such as heat-pumps or electricity vehicles.
- The [Generation Availability and Contracted Demand map](#) for both license areas provides an indication of the networks capability to connect large-scale developments to major substations. Accompanying the map, the heat map spreadsheets for both of our network regions provides Grid Supply Point (GSP) details, GSP and substation transformer ratings, fault level information, and contracted and quoted generation projects at each GSP.
- The [Embedded Capacity Register \(ECR\)](#) has been developed to provide better information to electricity network stakeholders on connected resources and network requirements. Each Distribution Network Operator (DNO) will host a register which will provide accessible information at a local and national level. The register uses a format agreed through the Energy Networks Association's Open Networks project, an industry initiative aimed at transforming the operation of energy networks and delivering a smart grid. Our register provides information on generation and storage resources (>=50kW) that are connected, or accepted to connect, to the electricity distribution networks owned and operated by us and it will be updated on a monthly basis. The register also includes information on the flexibility services that are being provided by connected resources, assisting to control or schedule demand and/or generation to reduce network constraints.
- SSEN Distribution has reviewed provided access to shape file data containing geographical position and attribution of the electricity network covering the SEPD and SHEPD DNO areas. This data is provided through various tools to ensure the integrity and security of our network locational data. We have provided access to Electric Office Web Portal for Independent Connection Providers to view, query and print map based GIS Data. We provide extracts and daily updates of our Network to LSBuD for safe dig purposes. And we have worked with UK Government and Scottish Government on providing data for the NUAR and VAULT.

Specific to: Battery storage owner



- Future network needs and revenue opportunities relevant for batteries
- Transmission constraints



Connected



I am connected to the network, and I want to learn more about utilising my assets and connection to create value through flexibility and access products

GROUP PERSONAS

Commercial business



Claire works for national home builder, 'Harvey Homes' as a Utilities Planner. She needs to understand the potential problems for connecting new homes to the grid well in advance.

Battery storage owner



John's business is installing batteries of different sizes on both the distribution and transmission networks.

Distributed generation customer



Carla is a solar farm owner and operator. She wants to expand her current solar farm and build an investment plan for new projects.

Large energy user



Keith operates a manufacturing plant that consumes large amounts of electricity which can vary significantly throughout the day.

Aggregator



David is the CEO of a flex aggregator company. He builds portfolios of flexible energy resources and trades them in energy markets.

I want to...



- Understand how I can monetise my assets from flexibility services
- Know when I am likely to be called upon as a provider of flexibility services
- Decide the right price when looking at bidding into a flexibility service
- Know what flexibility services have been dispatched
- Understand planned reinforcements that relate to my application
- See information on past and future outages
- Know about Constraint Management Zone (CMZ) restrictions
- Know what else is within my region
- Know what is the forecasting growth

To do this, I can use....



- The [Long Term Development statements](#) provide information for anyone connecting to our distribution system at extra high voltage (EHV) level (including HV busbar of primary substations). It is designed to help to identify and evaluate opportunities for entering into arrangements with us relating to use of system or connection. Our statements include the following: network data; the likely development of our distribution system; plans for modifying the distribution system; and identification of parts of the distribution system that are likely to reach capacity limit in the next years.
- The [Network Development Reports](#) for both SHEPD and SEPD that sets out our longer-term Network Development Plans
- The [Real Time Outage Dataset](#) - The map-based Powertrack tool allows our customers to get access to near-real time outage data on the SSEN Distribution Network. This includes Planned and Unplanned Outages as well as some supporting information on affected postcodes and reasons for the outage
- The [National Fault and Interruption Reporting Scheme \(NaFIRS\) report](#) is an annual export of the details of planned and unplanned outages on the SHEPD and SEPD distribution networks reported under the National Fault and Interruption Reporting Scheme (NaFIRS).
- [Standard Licence Condition 31E \(SLC31E\) Procurement Report & Statement's](#).
- A [Distribution Future Energy Scenarios \(DFES\)](#) analysis for both licence areas of the LCT uptake scenario projections for EVs, electricity fuelled heating technologies and domestic rooftop solar PV capacity to secondary substation and feeder level, year by year, out to 2050.
- [Contract Award Notices \(CAN\)](#) as found on 'Find A Tender'
- The [Flexibility Market Price Statement](#) provides the Exceeded Import Curtailment Price and Exceeded Export Curtailment Price using flexibility market data which has been determined in accordance with this Schedule 2D of the DCUSA.
- [Distribution Network Options Assessment Methodology](#) and future outputs (DNOA), outlines our decisions on where to invest in network infrastructure or procure flexibility to meet future capacity needs in the longer term.
- [Operation Decision Making Framework \(ODM\)](#) sets out the way in which we dispatch Distributed Energy Resources (DER) to meet short term capacity needs

And in the future...



- Flexibility Services Contract Register Outcomes of procurement activity and list of contracts from various parties to provide flexibility services



DATA PORTAL USER GROUP



Collaborator



I want to collaborate with other stakeholders e.g. NESO, DNOs/DSOs, local authorities etc



GROUP PERSONAS

<p>System and network operator</p>  <p>Anish works for the NESO's Control Room team that forward plans what energy flexibility will be necessary to balance the system.</p>	<p>Commercial business</p>  <p>Claire works for national home builder, 'Harvey Homes' as a Utilities Planner. She needs to understand the potential problems for connecting new homes to the grid well in advance.</p>	<p>Battery storage owner</p>  <p>John's business is installing batteries of different sizes on both the distribution and transmission networks.</p>	<p>Distributed generation customer</p>  <p>Carla is a solar farm owner and operator. She wants to expand her current solar farm and build an investment plan for new projects.</p>	<p>Large energy user</p>  <p>Keith operates a manufacturing plant that consumes large amounts of electricity which can vary significantly throughout the day.</p>	<p>Aggregator</p>  <p>David is the CEO of a flex aggregator company. He builds portfolios of flexible energy resources and trades them in energy markets.</p>	<p>Local authority</p>  <p>Cllr. Walker is the Chairman of Shellworth County Council. He wants his Council to make a positive contribution to net zero.</p>
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I want to...



- Understand future energy predictions, scenarios and plans for my local area
- Plan energy usage by area, so I need to know plans on the rollout of EV charge points for public use
- Understand future forecasts
- Know what flexibility is needed in what area and when
- Know what flexibility has been purchased in the past
- Understand how your control room will deconflict with the NESO control room
- Know what your future flexibility strategy, development and innovation plans are

To do this, I can use....



- The [Lenza](#) geospatial planning software, providing data on network constraints and empowering planners to make better informed decisions about where to install new energy assets in their local areas.
- [Standard Licence Condition 31E \(SLC31E\)](#) Procurement Report & Statement's
- The [Flexibility Market Price Statement](#) provides the Exceeded Import Curtailment Price and Exceeded Export Curtailment Price using flexibility market data which has been determined in accordance with this Schedule 2D of the DCUSA.
- SSEN Distribution has reviewed provided access to shape file data containing geographical position and attribution of the electricity network covering the SEPD and SHEPD DNO areas. This data is provided through various tools to ensure the integrity and security of our network locational data. We have provided access to Electric Office Web Portal for Independent Connection Providers to view, query and print map based GIS Data. We provide extracts and daily updates of our Network to LSBuD for safe dig purposes. And we have worked with UK Government and Scottish Government on providing data for the NUAR and VAULT.
- [Contract Award Notices \(CAN\)](#) as found on 'Find A Tender'.
- The [Flexible Power Map](#) is one month ahead of each tender, further details on service requirements are published on the...
- The [DSO Capabilities roadmap](#) sets out how we will enhance our capabilities over time in order to deliver on our ambitions for DSO including how the control room of the future may operate.
- [Distribution Network Options Assessment Methodology](#) and future outputs (DNOA), outlines our decisions on where to invest in network infrastructure or procure flexibility to meet future capacity needs in the longer term.
- Our [Flexibility Road Map](#) describes our flexibility approach and how this will evolve over time



DATA PORTAL USER GROUP



I know exactly what I want

“ I know exactly what data I am looking for and just need access to it or to **get in touch** ”

GROUP PERSONAS

<p>System and network operator</p>  <p>Anish works for the NESO's Control Room team that forward plans what energy flexibility will be necessary to balance the system.</p>	<p>Commercial business</p>  <p>Claire works for national home builder, 'Harvey Homes' as a Utilities Planner. She needs to understand the potential problems for connecting new homes to the grid well in advance.</p>	<p>Battery storage owner</p>  <p>John's business is installing batteries of different sizes on both the distribution and transmission networks.</p>	<p>Distributed generation customer</p>  <p>Carla is a solar farm owner and operator. She wants to expand her current solar farm and build an investment plan for new projects.</p>	<p>Large energy user</p>  <p>Keith operates a manufacturing plant that consumes large amounts of electricity which can vary significantly throughout the day.</p>	<p>Aggregator</p>  <p>David is the CEO of a flex aggregator company. He builds portfolios of flexible energy resources and trades them in energy markets.</p>	<p>Local authority</p>  <p>Cllr. Walker is the Chairman of Shellworth County Council. He wants his Council to make a positive contribution to net zero.</p>
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I want to...



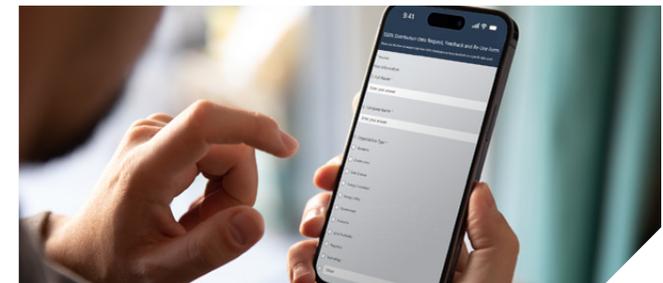
- Be able to find data as easily as possible
- Be able to download, read and interpret data in an easy way
- Be able to contact SSEN about what this data means to me
- Access the information without cost
- Access without needing delayed permissions

To do this, I can use....



- [Open Data portal](#) - Our Open Data licence obligation means anyone can access the open data portal, free of charge and use tools such as NeRDA, see visualizations of our network data via maps, dashboards, download datasets and even connect directly via an API (machine to machine) to automate the data streams into their own internal systems.
- The [SSEN Data Roadmap](#) to know when data will become available in the future. The roadmap promotes open collaboration and transparent data sharing with stakeholders by outlining clear milestones and objectives. This ensures stakeholders are well informed about the data journey, promoting trust and cooperation in achieving common data-related goals.

- The [SSEN Distribution Data Request, Feedback and Re-Use Form](#) allows you to request data or leave feedback on a specific data asset.
- The [catalogued collections of data](#) on the data portal to find related data sets easily. The metadata associated with each data item





Changes in data assets, digital tools and strategic planning decisions

2.1.6 Highlight and reflect changes in the wider data assets, digital tools and strategic planning decisions and strategic planning decisions that are feeding into the SOO.

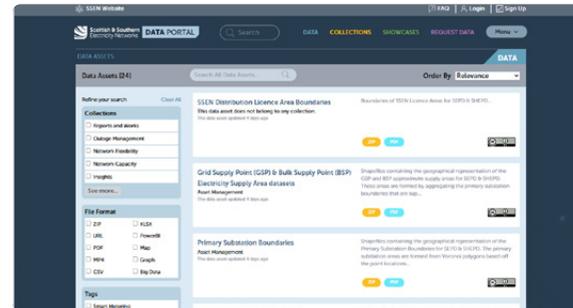


Data Portal Changes

SSEN Distribution's data portal is working with government and advisors to ensure we maintain the right level of controls, measures, and protection to allow the publication of restricted datasets.

This is laying the groundwork for future data sharing past Open and Public data classifications, where access to data can be restricted to authorised individuals and groups enabling all the functionality has to date, and any future capabilities made available through the portal as well.

This will include the development of the Trust Framework and the ability to share against our 2 initial use cases: our geospatial network data with authorised data consumers; Local Constraint Market data with National Grid NESO.



Click to open the Data Portal





Engaging with our stakeholders and how you can get involved

Feedback and measuring effectiveness

Approx.

430

Stakeholders engaged with



14

Stakeholders events held



Stakeholder feedback



"Requests for further data and easier access to data to unlock opportunities and facilitate decarbonisation"

"Want to see greater standardisation and cooperation between DSOs as well as with the NESO"

"Sharing of the end-to-end processes to provide trust and improve participation"

"Desire for transparent and purposeful decision making with simplified decision-making framework"

"It is important to be open and transparent when evaluating network needs"

"Visibility of utilisation volumes wanted"

How you can get involved

What's next?



SSEN is focused on delivering for the communities we serve and doing our part to ensure a just energy transition.

SSEN is focused on delivering for the communities we serve and doing our part to ensure a just energy transition.

We're continually engaging with stakeholders to speak about things that matter to them.

This document shows our commitment to collaborating with an array of stakeholders, from Local authorities and Academia to System Operators. And the work doesn't stop there.

Sign up to our DSO Newsletter where you can receive updates on our latest projects, strategy and action plan development. This is where you will also find our upcoming events and engagements where we will continue to collaborate with other stakeholders in the co-development of strategic regional projects, plans and net zero strategies.

You can also keep up to date with our events at



ssen.engage-360.co.uk

Sign up for our DSO newsletter





Glossary

Term	Description
Aggregators	A new type of energy service provider which can increase or moderate the electricity consumption of a group of consumers according to total electricity demand on the grid.
BAU	Business As Usual
CMZ	Constraint Managed Zones . These zones make use of technologies providing flexibility to alleviate network constraints, deploying them as an alternative to traditional network reinforcement in the management of peak demand.
Data triage	Systematically find issues which should inhibit open data, identify the 'least impact' mitigation technique(s) and make the process transparent.
Decarbonisation	Reducing the carbon intensity in terms of emissions per unit of electricity generated.
DER	Distributed Energy Resources. Any resource on the distribution system that produces or stores electricity. This can include distributed generation, storage, heat pumps and electric vehicles as well as other technologies.
Digital System Map/ Digital Twin	A digital representation of a real-world entity or system.
DNO	Distribution Network Operator
DNOA	Distribution Network Options Assessment
DSO	Distribution Systems Operator. The directorate within SSEN that supports a more flexible network operation. Uniquely placed to ensure simple and consistent access to new markets for our active customers through maximising the utilisation of our existing electrical and communication networks.
DSOAB	DSO Advisory Board
DSAP	Digital Strategy and Action Plan
EMEC	European Marine Energy Centre
ENA	Energy Networks Association
EV	Electric Vehicle
GIS	Geographic Information System
HV	High Voltage
IB1	Icebreaker One
IDNO	Independent Distribution Network Operator
KPIs	Key performance indicators
LAEP	Local Area Energy Plan. A data-driven and whole energy system, evidence-based approach that sets out to identify the most effective route for the local area to contribute towards meeting the national net zero target, as well as meeting its local net zero target.
LCT	Low Carbon Technologies

Term	Description
LENZA	Local Energy net zero Accelerator. SSEN's tool for supporting local authority LAEPs.
LHEES	Local Heat and Energy Efficiency Strategies
LSBuD	Line Search Before you Dig
LV	Low Voltage
MSA	Motorway Service Area
NDP	Network Development Plan
NeRDA	Near Real-Time Data Access
NESO	Electricity System Operator. The electricity system operator for Great Britain, making sure that Great Britain has the essential energy it needs by ensuring supply meets demand.
NGED	National Grid Electricity Distribution
NGET	National Grid Electricity Transmission
NIA	Network Innovation Allowance
NMF	Neutral Market Facilitator will provide a market for trading use of Distributed Energy Resources (DERs).
NUAR	National Underground Asset Register
Open Data	Data in a machine-readable format that can be freely used, shared and built on by anyone, anywhere, for any purpose.
OZEV	Office of Zero Emission Vehicles
RAG	Red, Amber, Green visual indicator status
RIIO-ED2	Price control for Electricity Distribution (2023-2028)
SEPD	Southern Electric Power Distribution
SHEPD	Scottish Hydro Electric Power Distribution
SIF	Strategic Innovation Fund
SPEN	Scottish Power Energy Networks
SOO	Smart Optimisation Output
SSE	Scottish and Southern Electricity
SWAN	Southwest Active Network Management
TO	Transmission Owner
VFES	Vulnerability Future Energy Scenarios
Vault	Data vault providing access to information on the Location of Underground Pipes and Cables



Appendix 1: Engagement and change logs

We've expanded our data provision for customers	
Insights	Action
Greater granularity of data needed to help unlock flexibility. <i>(Data for flexibility roundtable date)</i>	We published data from two million smart meters, updating it daily with figures on half hourly consumption, as well as near real time data from LV, HV and EHV monitors in substations across our network.
Want accessible data to develop future energy predictions, scenarios and plans for their communities. <i>(repeat request from local authorities, at events and bilaterals)</i>	We developed our LENZA tool so local authorities could directly pull our data for their Local Area Energy Plans and offered it at zero cost to all the local authorities in our license areas.
Need standardisation of the definitions and datasets between DNOs to facilitate the path to net zero. <i>(request in workshops and in Data Roadmap Consultation response)</i>	We led an ENA session with the other DNOs to agree a Data Collaboration Plan. This has delivered a clear and consistent structure and approach across all DNOs, enhancing clarity and ease of use.

We've put flexibility at the heart of our strategy	
Insights	Action
Need confidence in our end-to-end process as a key prerequisite for facilitating market participation <i>(Flexibility webinars)</i>	We published our flexibility roadmap which outlines why and when we use flexibility as well as our plans for flexibility in the future.
Increased data sharing needed to drive reduced delays in delivery and to develop business cases for new energy assets at our flexibility data workshop. <i>(Flexibility providers bilaterals)</i>	We launched our data portal and have shared a data roadmap committing to sharing more and more open data for use by our stakeholders.
Want clarity and coordination on the compatibility of different flexibility opportunities. <i>(Multiple stakeholders, multiple channels)</i>	We engaged with the NESO to ensure the use of standardised products and promote non-exclusivity.
Need confidence in our ability to manage large volumes of trade as the market grows. <i>(Flexibility providers)</i>	We've invested in new platforms and increased the conversion rate from what's contracted to what's delivered.

Options assessment and conflict of interest mitigation	
Insights	Action
We must consider the broader benefits of network investment. <i>(Multiple stakeholders)</i>	We enhanced our cost-benefit analysis to consider the wider socio-economic benefits that can arise from network interventions.
Want greater openness and transparency when evaluating network needs. <i>(Scottish Islands Whole System Webinars)</i>	We consulted on our DNOA process and published the outcomes of decisions as well as using an independent third-party to produce load growth evidence studies.
There is a need for ability to assess network options holistically. <i>(Local authorities – LAEP bilaterals)</i>	We updated our DNOA methodology to give clear insight and description of the factors influencing a decision as well as outlining all the credible options.

DER dispatch decision making framework	
Insights	Action
Key priority for transparency and purposeful decision-making during dispatch. <i>(Flexibility providers)</i>	We published our Operational Decision- Making framework which demonstrates how we make fair and efficient decisions for a resilient network when dispatching DER.
Seeking confidence that control rooms could easily operationalise our decision-making Framework. <i>(ODM Consultation response)</i>	We engaged both our control rooms during the development of our decision making framework and published a control room vision that underpins the interaction between our DSO and DNO teams.

ENGAGE WITH US

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



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