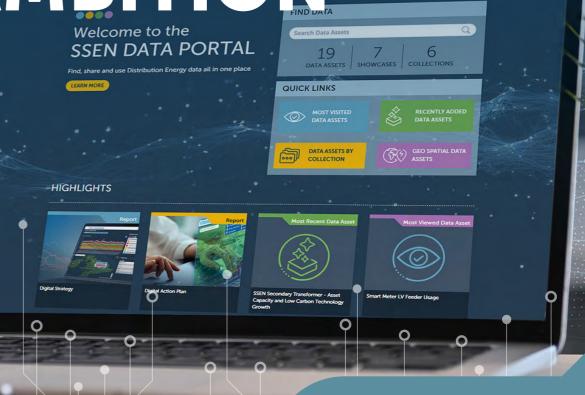


SSEN Distribution

DATA PORTAL VISION AND 5 YEAR AMBITION















WHAT IS THE SSEN-D **OPEN DATA PORTAL?**

OUR OPEN DATA JOURNEY

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ROADMAP TO THE FUTURE



ENGAGING WITH US

OUR COMMITMENT TO OPEN DATA

Our data portal principles and overview of our data portal strategy document.

We have developed an open data strategy to demonstrate our commitment to open data and the value it delivers to society. Our strategy was generated based on several key principles:

To support the drive towards Net Zero

To deliver wider benefits for society

To encourage innovation and collaboration

To align with industry standards

To fulfil our digital objectives



We are committed to delivering resources to users of our data portal that are of a quality standard, are updated at appropriate intervals, and can be trusted to support decision making.

Our data portal strategy document will help users to understand our ongoing plans to develop our portal and enhance the usability of our data. We will outline how our plans will deliver value for portal users, as well as for us.

To ensure that we develop a portal that is fit for user needs, we have based our ambitions on user feedback.

OUR OPEN DATA PORTAL

Overview of the our data portal and it's functionality

What is it?

The data portal is a single point of access for all SSEN Distribution Data.

It is designed to enable data consumers to easily find and access our data to help them make more informed decisions.

What can users do with it?











OUR OPEN DATA JOURNEY

Timeline of our journey to develop the open data portal.

Energy Data Task Force We launch our open data Our portal will support user recommends that energy portal with required datasets needs with greater efficiency systems data be made open and functionality and functionality 2023 **Beyond 2025** 2019 2022 We will enhance the data Ofgem requires DNO's to develop an interface for sharing process based on stakeholder needs sharing data

HOW OUR DATA SHARING HAS EVOLVED

Outline of key features that have been added to the portal since it's launch



Data Accessibility

- Provided access to data in machine readable format.
- Enabled users to access our data through API's.
- Created a new follow function for users to track data.
- Provided users with access to dataset and data portal guidance materials.





Supporting Information

- Provided users with access to useful third-party links related to our data.
- Delivered methodology statements for specific datasets.
- Shared relevant reports and documentations.
- Adopted Icebreaker One Dataset Assurance to ensure our data aligns with a standardised framework





Data Insight

- Delivered users with access to dashboards to visualise our data.
- Provided links to intelligence tools that utilise data from the portal.
- Generated data stories to help users better understand our data.



FEEDBACK DRIVES OUR LONG TERM AMBITION

Overview of the feedback driving our development.

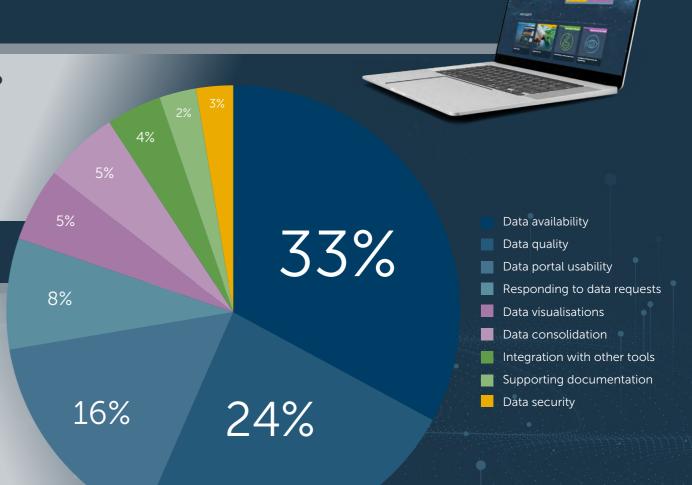
User Feedback Summary

We have been gathering feedback from stakeholders to ensure that our long-term ambitions for the open data portal are developed in line with their needs.

Over the last 12 months we have held 3 data surgeries, issued a user feedback survey, and conducted internal workshops with data SMEs to gather portal feedback.

Insights Gathered:

- Users want us to focus on enhancing data availability, quality, and portal usability.
- The portal can be difficult for some users to navigate, and users want more support to identify appropriate datasets.
- Our data should be aligned with other DNO's.



OUR STRATEGY IS ALIGNED WITH INDUSTRY CHANGES

Outline of the industry trends that impact our portal development.



INDUSTRY OVERVIEW

The distribution energy industry is experiencing a significant transformation due to the rapid expansion in the use of renewable technologies.

The digital transformation of the grid and move towards the use of green solutions will generate significant value for organisations that can utilise data effectively. We work to support organisations to help realise the benefit of these new technologies and deliver value for end users. This will help enable the UK's ambition of economic growth



CLEAR GOVERNMENT TARGETS

- Focus on all DSOs to achieve 2030/2050 climate targets.
- Integration of new renewable energy technologies to the grid.
- Introduction of flexibility market services.
- Predictive analytics being used to optimise grid performance.
- Advanced adoption of electric vehicle charging.
- Growth in use of smart metering.



PUTTING THE NEEDS OF USERS FIRST

User personas, developed using feedback from data portal users and data subject matter experts.

LOCAL **AUTHORITY**



LAEP support, LCT opportunities, and understanding of constraints.

Provide high-level insights and consolidate data based on unique needs.

DOMESTIC CUSTOMER



Energy reliability, opportunities to reduce bills, and LCT opportunities.

Provide high level insights, analytics capabilities and consolidate data.

VULNERABLE CUSTOMER



Energy reliability, network expansion guidance, and cost saving opportunities.

Provide high level insights, promote cost saving opportunities and explain data value.

SYSTEM & **NETWORK OPERATOR**



Align plans between ESO and DSO, infrastructure planning, and grid reliability.

Share granular network data, help users understand the national perspective.

LOCAL AND NATIONAL **POLICY MAKERS**



Impact of regulations, regulation development, and future scenarios.

Outline the impact of policies and provide accurate future energy scenario data.

COMMERCIAL **BUSINESS**



Opportunities for investment, impact of constraints, and LCT connection potential.

Help to identify investment opportunities and provide granular LCT data.

BATTERY STORAGE OWNER



Network constraints. appropriate locations for placement and flexibility forecasts.

Provide granular location data in a digestible format.

DISTRIBUTION GENERATION CUSTOMER

Reliable flexibility forecasts and an understanding of wider industry context.

Provide accurate flexibility contract data and contextualise using third party data.

LARGE ENERGY USER



Reliable flexibility forecasts and an understanding of wider industry context.

Ensure that our development insights are accurate and timelv.

RESEARCHERS



Access to accurate, reliable, timely and granular data.

Continuously enhance the quality of our data and deliver granular data with insights.

OUR DATA PORTAL VISION

DATA PORTAL VISION

To empower users with seamless access to actionable data and intelligent insight to support informed decision making

The data portal is a central hub for all of our data and resources, enhancing transparency, building trust, and enabling smarter decision making.

It is an intuitive, open and innovative platform that is tailored for user needs.

The focus of all development is to prioritise efficiency, helping users to access quality data and insights as quickly as possible

We support users in understanding critical information based on our data and cultivate a community that will share ideas, drive innovation and promote best practice.

WHAT IS THE FUNCTIONAL STRATEGY TO ACHIEVE OUR VISION?

To achieve our vision for the data portal our functional strategy has been informed by stakeholder feedback, industry understanding, RIIO ED2 guidance, and user personas.

We are going to achieve our vision by focusing on these areas:

users



Delivering fit for purpose data

Deliver quality data that is fit for user needs through an accessible data portal.

Empowering users

Empower users with seamless access to data, information, and intelligent insight.

Providing high value data and insights

Provide users with timely data and insights that will deliver significant value without delay.

WHAT ARE OUR OPEN DATA AMBITIONS?

Outline of the ambition for our data portal and our alignment with regulations

Functional Strategy Area

Delivering fit for purpose data

Empowering users

Providing high value data and insights

Our Ambition Areas



















Ease of Access and Usability

We will improve the ease of access to critical data and enhance usability



Data Availability and Refresh

We will increase the data refresh frequency and improve the quality of uploaded data



Advanced Analytics and Insights

We will offer users enhanced insights through advanced analytics tools and dashboards

Data Consolidation

We will enable users to consolidate data based on their unique needs using natural language processing

Maintain and Improve

We will maintain and continuously improve our advanced platform



Areas of ambition that align with our ED2 and ED3 regulatory responsibilities

Sharing insights beyond raw data

Sharing methodologies and insights beyond output data

Sharing data in an accessible and common format

Taking steps to improve data quality

Integrating of advanced technologies

AMBITION AREA: EASE OF ACCESS AND USABILITY

Outline of the key ambition areas for the open data portal



Based on feedback from users, we have determined that our first year of development should be focused on data availability, quality and portal usability



Automation and Integration

Improve the quality of data and the frequency of uploads by automating the onboarding of some data to the portal



Data Requests

Enhance the efficiency of the existing data request process, enabling users to gain responses to their requests at a faster rate



Documents

Enhance the users understanding of our data by providing methodologies, related third party data and reports



Insights

Provide users with enhanced insights through visualisation tools and dashboards to help them understand our datasets



Data Portal Usability

Enable users to navigate the data portal more efficiently by enhancing the user interface and providing more quidance resources

AMBITION AREA: EASE OF ACCESS AND USABILITY

	Current State	Future State Ambition	Outcome of Future Ambition				
Automation and Integration	 More data could be uploaded t othe portal automatically There are opportunities to enhance data consistency Data can be updated more frequently Users can use standard APIs for most datasets 	 Eliminate the need for manual intervention Enhance the quality of data at source Automatically onboard data to the portal Adopt open data formats and enhanced APIs 	 Reduces errors and enhances accuracy Enables access to greater volumes of data Enables simple integration with external systems 				
Data Requests	■ There is an opportunity to reduce the time taken to fulfil data requests	 Reduce the time needed to fulfil requests by enhancing existing process efficiency 	 Ensures faster fulfilment of user requests Helps to enhance the value and accuracy of responses 				
Documentation	 Shore methodology overviews are available for most datasets Data quality insights are not currently available Limited third-party resources are shared 	 Share detailed insights in our methodology Share data quality insights Provide links to relevant third-party data 	 Detailed methodologies will help enhance user understanding of our data Data quality insight will help users make better informed decisions 				
Insights	 We provide links to tools and dashboards that help users to review existing datasets There is an opportunity to share more insights Users can create basic graphs for some datasets 	 A consolidated network map that brings together all geoloction insights into one tool Self serve maps and charts Provide more unique insights that put our data into context and help simplify it for users 	 Ensures that data is available in an accessible format Helps to identify critical insights more efficiently Providing links to relevant data will help users to generate greater value from our data 				
Data Portal Usability	 We are focused on getting data onto our portal and ensuring it is refreshed at appropriate intervals 	 Share long term strategy report for our data portal Data portal guidance documents Data stories - detailed overviews of our data Enhance the intuitiveness of our portal interface 	 Our strategy will help users understand our ambitions and allow them the opportunity to influence our plans Data stories and reports will enable users to derive greater value from our data Helps to enhance the usability of our portal 				

AMBITION AREA: DATA AVAILABILITY AND REFRESH

Outline of the key ambition areas for the open data portal



We will focus on completing the automation of all data to the portal, making our data more available and easily accessible



All datasets will be onboarded to the portal from the SSEN data lake with no manual intervention



Enable users
to access a
consolidated
version of our data,
allowing them to
view data that is
most appropriate
for their needs



Data Catalogue

Provide users
with a complete
view of all SSEN
Distribution Data.
Users will be able
to view all data that
SSEN have whether
it is shared or not



Insights

Provide users with enhanced methods to interrogate and gain insight from our data.

AMBITION AREA: DATA AVAILABILITY AND REFRESH

	Current State	Future State Ambition	Outcome of Future Ambition
Automation and Integration	 More data coule be uploaded to the portal automatically There are opportunities to enhance data consistency Data can be updated more frequently 	 Eliminate the need for manual intervention for data uploads entirely Enhance the quality of data at source Automatically onboard data to the portal 	 Reduces errors and enhances accuracy Enables access to greater volumes of data
Consolidated Data	 Users can download different types of data The user does not always have an understanding of all the data which we share 	 Users can create bespoke datasets. Users can select the type of data attributes that they want to view 	 Reduce the manual effort required to review and download multiple datasets to find insight Enables users to find the data that they need faster, leading to more efficient decision making
Data Catalogue	 We share a list of all data assets available in the portal Users are not aware of all the data that we manage 	 We will share a list and description of all data managed by ourselves Users will be able to view the status of all data owned by us Users will be able to select 'request data' against each dataset or attribute type in the organisation 	 This will help users to quickly identify which data is shared or open without needing to send a request Reduced the manual effort involved in the data request process for users It will help support the data request process by allowing users to see a list of all of our data
Insights	 Our data is shared on the portal in a tabular format Our visualisation tools and dashboards present the existing data in a visual format 	 Use third party data to put our data into context Enable users to request more advanced insights and support Users can request more advanced insights from our data modelling and SME teams 	 Help users to understand the relevance of our data by putting it in context using third party resources Enables users to gain insights from data SME's and analytics experts within our organisation Provides bespoke insights for specialist user types

AMBITION AREA: ADVANCED ANALYTICS AND INSIGHTS

Outline of the key ambition areas for the open data portal



In our next phase of development, we will focus on providing users with advanced analytics and insights.





from our data SME's.



Advanced Search

Develop an advanced search tool that will enable users to find the most appropriate data based on a description of what they need



Customisable Dashboards

Enable users
to generate
customisable
dashboards so that
they can see the
most critical insights
that they require at a
glance



Advanced
Charts and Maps

Enhance the chart and map capability of our data portal. Provide users with detailed charts and maps that enable them to drill deeper into our data



Contextual Reports

Put our data into context by sharing specialist reports around our interpretation of what is happening in the industry

AMBITION AREA: ADVANCED ANALYTICS AND INSIGHTS

	Current State	Future State Ambition	Outcome of Future Ambition				
Advanced Insights	 Our data is shared on the portal in a tabular format Our visualisation tools and dashboards present the existing data in a visual format 	 Develop high value detailed insights based on specific use cases for stakeholders Provide access to advanced insights for stakeholder groups that will benefit from specialist insights 	 Generate enhanced value for users by providing specialist insights 				
Advanced Search	 Users need to know what they are looking for before they search for it on the portal Users search for the name of the dataset that they are looking for 	 Provide users with an advanced search tool that enables them to search for the type of data they want using general terms Users will be able to outline what type of data they need to access and an advanced solution will be able to point them towards the most appropriate data 	 Enables the user to find the data they need and gain insights at a faster pace SSEN often receive requests for data that exists on the portal; this will help users to better understand what data is available Reduces the manual effort required to identify which dataset has the insight you require 				
Customisable Dashboards	 Users need to download multiple datasets to gain access to the insights that they need Users need to use analytics tools to consolidate and visualise data We share high level dashboards for specific datasets 	 Enable users to generate customisable dashboards directly from the data portal Provide users with the ability to decide on the placement of graphs and insights on their dashboard Provide dashboard training and recommendations 	 Enables users to review our data at a faster pace Provides access to visualisations that help to simplify complex datasets Enhances the value of the portal for users by making it align with their needs 				
Advanced Charts and Maps	 Users can create high level charts directly from the portal with some limitations Users can review our data using high level mapping solutions 	 Review and enhance the chart building capabilities of the data portal Provide users with enhanced analytics capabilities Use third party data to put SSEN data in context 	 Enables users to gain quick insights into our data without needing to download data manually Helps users to understand the relevance of our data by putting it in context using third party resources 				
Contextual Reports	 Data is shared in a raw format on the data portal Users can access reports and third party links related to our data 	■ We will provide regular top-level analysis of our data and its potental implications on the wider market	 This will improve our level of collaboration and openness This will help users to make more informed decisions 				

AMBITION AREA: DATA CONSOLIDATION

Outline of the key ambition areas for the open data portal



We will move on to focus on consolidating data for users to provide them with access to data attributes that are most relevant for them



Advanced Search

Provide users with an advanced search tool that will enable them to find the most appropriate data based on a description of what they need



Intelligent Insights

Enable users to have questions answered around any of our datasets using trained generative Al



Automated Datasets

Automatically generate a dataset based on a description of what type of insight you require



Advanced Insights

Provide specialist users with more advanced AI and data SME driven insights

AMBITION AREA: DATA CONSOLIDATION

	Current State	Future State Ambition	Outcome of Future Ambition				
Advanced Search	 Users need to know what they are looking for before they search for it on the portal Users search for the name of the dataset that they are looking for 	 Provide users with an advanced search tool that enables them to search for the type of data they want using general terms Users will be able to outline what they need to see and an advanced solution will be able to point them towards the most appropriate data 	 Generates enhanced value for users by providing specialist insights Reduces the manual effort required for users to find the type of data that they are looking for Enables users to gain insights at a faster pace 				
Intelligent Insights	 Users can view descriptions for each dataset Users can view high level methodology statements to learn about how our data was developed Users can view reports to learn more about our datasets 	 Users can ask basicquestions about our data and can receive helpful answers to support decisions Users can learn about our data without needing to review detailed reports 	 Users will be able to learn about how to use our data effectively Users will gain efficient access to critical insight for decision making with minimal manual effort 				
Automated Datasets	 Data is shared in a raw format on the data portal Users can download or view API to data and use their own analytics capabilities to identify connections 	 Automatically generate a dataset based on a description of the type of the data the user needs Based on the users description, provide them with a bespoke dataset with appropriate data attributes 	 Users will be able to automatically generate appropriate datasets for their specific needs Users will be able to get to insights at a faster time We will reduce the length of time required to respond to user data requests 				
Advanced Insights	 Our data is shared on the portal in a tabular format Our visualisation tools and dashboards present the existing data in a visual format 	 Develop high value detailed insights based on specific use cases for stakeholders Provide access to advanced insights for stakeholder groups that will benefit from specialist insights generated by data SME's abd advanced Al solution 	 Generates enhanced value for stakeholders by providing high value specialist insights Reduces the time required for data SMEs to provide insights to users 				

AMBITION AREA: MAINTAIN AND IMPROVE

Outline of the key ambition areas for the open data portal



We will ensure we stay consistent and focus on developing, maintaining and improving our advanced platform



Data Lake Integration

Continually review the alignment between source systems, the data lake and SSEN data portal. Ensure that data quality is tracked and improved



Data
Consolidation

Continue to identify opportunities to improve the efficiency of data consolidation and getting users access to insight



Advanced Insights

Continue to identify opportunities to provide and enhanced service to organisations that require specialised insights



Open Insights and Visuals

Continually enhance the quality and availability of insights and visualisations

AMBITION AREA: MAINTAIN AND IMPROVE

	Current State	Future State Ambition	Outcome of Future Ambition				
Data Lake Integration	 More data could be uploaded to the portal automatically There are opportunities to enhance data consistency Data could be updated more frequently 	 Continue to identify and review opportunities to enhance the data lake integration Develop a process for automatically triaging all data in the data lake as attributes rather than datasets 	 Improves the ease of access to data for users Proactively triaging data removes the need for users to request data 				
Data Consolidation	 Users can download different types of data The user does not always understand what data we have available 	 Continue to identify and review opportunities to provide users with consolidated datasets Review the effectiveness of data consolidation features in terms of user satisfaction Provide links to bespoke datasets for common data portal user groups, based on reviewing user activity 	 Improves the users ability to generate datasets that are fit for their unique needs Reduces the effort required to download multiple datasets Users requirements will be anticipated based on data analysis, helping to reduce the time required to generate insights 				
Advanced Insights	 Our data is shared on the portal in a tabular format Our visualisation tools and dashboards present the existing data in a visual format 	 Regularly identify and review opportunities to provide users with enhanced insights Review the effectiveness of enhanced insight features in terms of user satisfaction 	 Improves the users ability to access enhanced insights that are fit for their unique needs The solution will be improved based on user feedback 				
Open Insights and Visuals	 Data is shared in a visual format for several datasets Our visualisation tools and dashboards present our data in a visual format 	 Continue to identify and review opportunities to provide users with strong data visualisation capabilities Review tooling options around data visualisations 	 Improves the users ability to visualise data on the portal in a manner that suits their needs Ensures that we onboard appropriate visualisation tools based on user requirements 				

ACHIEVING OUR AMBITION

To deliver our ambition, co-ordination and innovation will be required across industry

CONTINUAL ENGAGEMENT



Working with users to understand motivations for accessing data and enhancing usability

SUPPORT REQUIRED



- 1. User Feedback
- 2. User Recommendations
- 3. User Data Requests

INNOVATION



Innovation in how we offer enhanced insights through analytics and natural language processing

SUPPORT REQUIRED



- 1. Industry specialist insight
- 2. Data science and engineering expertise

NOVEL METHODS



Employ explainable Artificial Intelligence and Generative Modelling to carefully interpret siloed and disparate data sources

SUPPORT REQUIRED



 Data science and engineering expertise

REGULATORY FRAMEWORK



Understanding trust frameworks and sharing data and insights in sufficient granularity to create stakeholder confidence

SUPPORT REQUIRED



- 1. Regulator recommendations
- 2. DNO expertise

DATA EFFICIENCIES



Employ state of the art models to understand how to collect, analyse and store data efficiently to minimise cost and maximise value

SUPPORT REQUIRED



- 1. Data science and engineering expertise
- 2. Input from Data SME's

INDUSTRY COLLABORATION



Communication and alignment across energy generators, developers and partners

SUPPORT REQUIRED



- 1. DNO's
- 2. Developers
- 3. Industry Partners

ROADMAP

Our high level, long term roadmap for the data portal and user type impacted

		USER TYPE													
		Domestic Customer	Commercial Business	Battery Storage Owner	Distributed Generation	Large Energy User	Network and System	Vulnerable Customer	Researcher	Local and National Policy	2025/26	2026/27	2027/28	2028/29	2029/30
OUTCOMES	Local Authority	Don	Con	Batt	Dist	Larç	Net	Vulr	Res	Loc					
Improved data quality and refresh through automation	Х	X	X	X	X	X	X	X	X	X			•		
Improved data request and response rate	Х	X	X	X	X	X	X	X	X	X		•			
Access to methodologies, third party data and reports	Х	X	X	X	X	X	X	X	X	Х					
Enhanced visualisation tools	X	X	X	X	X	X	X	X	X	Х					•
Enhanced user interface and guidance resources	X	X	X	X	X	X	X	X	X	X	•				
Data onboarded to portal with no manual intervention	X	X	X	X	X	X	X	X	X	X					
Users enabled to consolidate data based on needs	X	X	X	X	X	X	X	X	X	X				New York	
Users can view a list of all data that SSEN own	X	X	X	X	X	X	X	X	X	X					
Enhanced methods to interrogate our data	X	X	X	X	X	X	15 THE	X	X	•					
Advanced insight and specialist guidance at a cost	X	X	X	X	X	X	X	X	X	X					
Advanced search tool for locating appropriate data	X	X	X	X	X	X	X	X	X	X					
Customisable dashboards to view insights at a glance	X	X	X	X	X	X	Х	Х	X	X	• •				
Users can review data with detailed charts and maps		X	X	X	X	X	X	X	X	Х					
Data put into context by sharing specialist industry reports		X	X	X	X	X	X	X	X	X					1. 11: 11: 1
Advanced search tool that will generate bespoke datasets		X	X	X	X	X	X	X	X	X					
Generative AI that answers complex data questions	X	X	X	X	X	X	X	X	X	X					
Advanced AI and data SME driven insights for specific users	X		X	X		X			X						
Data quality is tracked and improved	X	X	X	X	X	X	X	X	X .	X					

ENGAGE WITH US

How to contact our data team

STAKEHOLDER ENGAGEMENT

For any general data enquiries

data@ssen.co.uk













Data Portal Users:

"We use SSEN data to support new developments and/or refurbishment projects we are looking at so we can identify project risks at an early stage."

"We use the data portal to understand network behaviour and issues in local areas" "SSEN data is integral to the local authority membership work that we do"

"We use SSEN data to identify where we would have the best opportunity of getting a grid connection"





