SSEN Distribution

DSO SERVICE STATEMENT

A stakeholder guide to our Distribution System Operation services, how we ensure delivery and avoid conflicts of interest.

March 2025

Scottish & Southern Electricity Networks

DSO Powering Change

Contents

Scottish and Southern Electricity Networks (SSEN) is the Distribution Network Operator (DNO) responsible for delivering power to homes and business across our two licence areas of central southern England and the North of Scotland.

SSEN provides Distribution System Operator Services (DSO Services) for the Distribution Networks we own and operate.

About SSEN Distribution

One of six DNOs in Great Britain, our electricity distribution network delivers power to over 3.9 million homes and businesses across the diverse and unique geographies of the north of Scotland and central southern England.

OUR PURPOSE

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

OUR VISION

We're **powering change** with **every connection**

OUR FOUR PRIORITIES

- Delivering a safe, resilient and responsive network
- Providing a valued and trusted service for customers and communities
- Accelerating progress towards a net zero world
- Making a positive impact on society

DNOs have a critical role in facilitating economic growth and our net zero future at a local and regional level and that's why SSEN's purpose and vision is all about empowering the communities we serve to make that transition.

SSEN's DSO Services ensure our networks provide the capacity our communities need today and tomorrow.

OUR DISTRIBUTION NETWORK AT A GLANCE

Over **3.9 million** homes and businesses

More than **1 million** customers on our Priority Services Register

Over **128,000km** of overhead lines and underground cables

460km subsea cables powering island communities

Over **4,400** employees across the country

Figures as of July 2024

About the service statement

Our DSO Service Statement has been prepared to guide stakeholders through our governance arrangements and the capabilities we have put in place to ensure we operate efficiently and effectively to deliver maximum customer benefit, and details the measures we have taken to mitigate conflicts of interest.

A "conflict of interest" could occur in situations where SSEN's wider Distribution Network Operator (DNO) responsibilities and obligations run counter to, or oppose Distribution System Operation (DSO) service delivery. Whilst conflict may be perceived or actual, SSEN acts in all cases to identify, manage and remove this risk.

In the following pages we present, in detail, the fundamental principles we apply to the provision of DSO services, how our DSO and wider DNO functions interact, the tools and processes we utilise to make key decisions and how our Advisory Board perform independent customer focussed scrutiny and challenge.

The structures, tools and capabilities detailed in this document constitute our 'code of conduct' to which all SSEN DSO colleagues adhere so we can ensure delivery and avoid conflict of interest.

'The Advisory Board exists to scrutinise and challenge SSEN on their DSO, critically assuring their methodologies, decisions and approaches. As such we welcome the transparency provided to stakeholders by this Service Statement which details SSEN's approach to DSO governance'

Gareth Miller,
Chair of the DSO Advisory Board

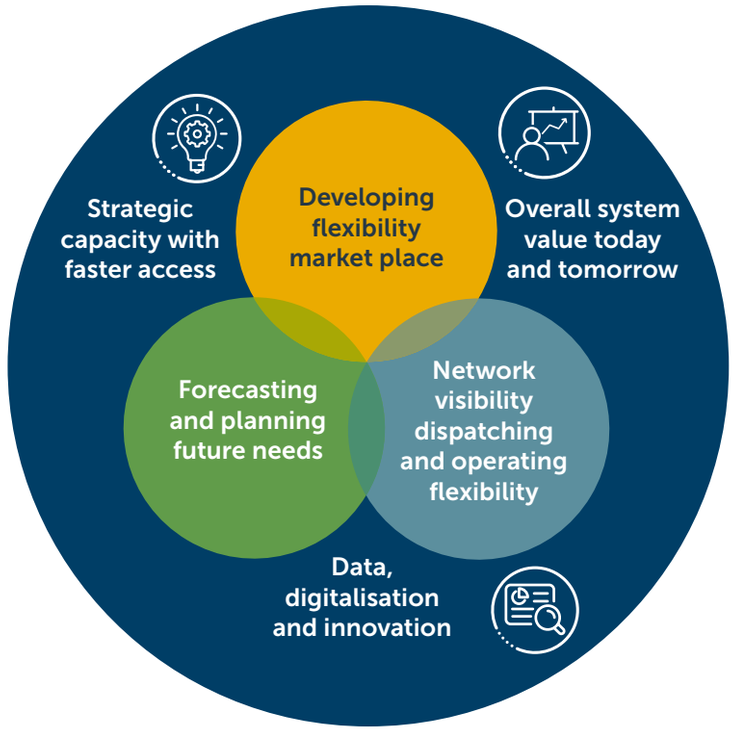
'SSEN gave a great deal of consideration to our DSO Operating Model, commissioning expert research to ensure we had a cost-effective, transparent approach that mitigated potential conflicts of interest. Our Service Statement lays out in detail our approach and how it supports the delivery of real benefits for our stakeholders.'

Andrew Roper
Director, Distribution System Operations

Distribution system operation in SSEN

Our DSO team **strategically plan** and efficiently provide **capacity and faster access** to a **smart energy network, enabling services** from Distributed/ Consumer Energy Resources to create a net zero world at optimal **whole system value** for our **customers** today and tomorrow.

- We provide information to customers and enable capacity through our toolbox of **strategic investment, flexibility services** and **access products.**
- We help improve time to connect and keep costs down using **flexibility** and **innovation**.
- We have aligned our DSO organisation to deliver the Ofgem defined **DSO functions**, **whole system**, innovation and open data requirements to enable **competition**.
- Our DNO organisation has a **separate DSO function** for managing **capacity**. Our decision-making **governance frameworks** enable **transparency** and allow SSEN to effectively mitigate any **perceived conflicts of interest**.
- We utilise the RIIO-ED2 **Totex Incentive Mechanism** (TIM) to incentivise **efficient investment** and the DSO incentive to drive outcomes delivering **customer** and **societal benefit**.



Our Stakeholder Priorities

Enable decarbonisation through strategic investment and the application of flexibility, releasing capacity quickly and efficiently

Grow the number of customers participating in flexibility services, simplifying the process and increasing possible revenues

Support a smart and fair transition

Improve the connections experience by offering: more options, more choice, and more insights driving faster decisions

Drive economic growth by supporting local area energy plans and engaging on strategic development plans

Governance that delivers

Our governance arrangements ensure transparent, unbiased actions that accelerate us towards net zero.

We believe that close working between DSO, Asset, Customer and Delivery teams is critical to efficiently achieving net zero. Under our governance model, DSO functions are separate from our Asset, Customer and Delivery functions but remain part of the same organisation enabling efficient end to end processes and systems.

There are clear decision-making accountabilities for load (DSO) and non-load (Asset). We mitigate any potential conflicts of interest through additional assurance and independent oversight of our DSO function. Our integrated business model enables us to operate efficiently by sharing data between functions to deliver our connections pipeline and Low Carbon Technologies (LCT) uptake more quickly.

Functional separation, with independent challenge

DSO teams are functionally separate from other DNO activities (such as asset management or delivery). The Director of DSO has specific, **independent accountability** at executive level. The DSO Subcommittee reports directly to the Distribution Executive Committee and is independent from Asset and Delivery functions.

Our **DSO Advisory Board** is fully independent and competitively selected to provide challenge and scrutiny across our DSO activities.

Further information on **Page 7 and 8**

Transparent Decision Making

Our DSO Function is **accountable** for all **capacity (load)** decisions within SSEN

We consult on how we make our decisions, and we publish all our decisions. Our **methodologies, roadmaps** and **development plans** are all available on our website.

We use targeted and intentional engagement that best meets the needs of our **stakeholders**. We seek independent assurance. We communicate our decisions and outcomes and **publish** key operational and performance indicators.

Further information on **Page 9**

Functional accountability and responsibility to manage conflict

SSEN operates to the **Distribution Governance and Investment Framework (DGIF).** This sets out formal interaction and decision-making between DSO and wider DNO activities (such as asset management, connections and delivery).

Stage gated decisions consciously manage handover of **requirements** from DSO to Asset/ Delivery teams for design and delivery choices, modification to requirements and other areas of **potential conflict or change**.

Further information on **Page 10 and 11**

DSO functional separation

Our organisational structure enables us to drive our **Smart, Fair, Now** approach - ensuring transparent, unbiased actions as we efficiently accelerate towards net zero.

We believe that close working between DSO and wider DNO functions is critical to achieving that transition. Therefore, under **Our governance model,** the DSO and wider DNO functions are part of the same organisation, but with strict functional separation in place to mitigate any bias toward asset ownership.

Our integrated DSO business model enables us to operate more efficiently, deliver our connections pipeline and enable LCT uptake more quickly by avoiding arbitrary friction or delay. DSO services are provided by SSEN in accordance with our Distribution Licence obligations under the Electricity Act (see page 12 for further details).

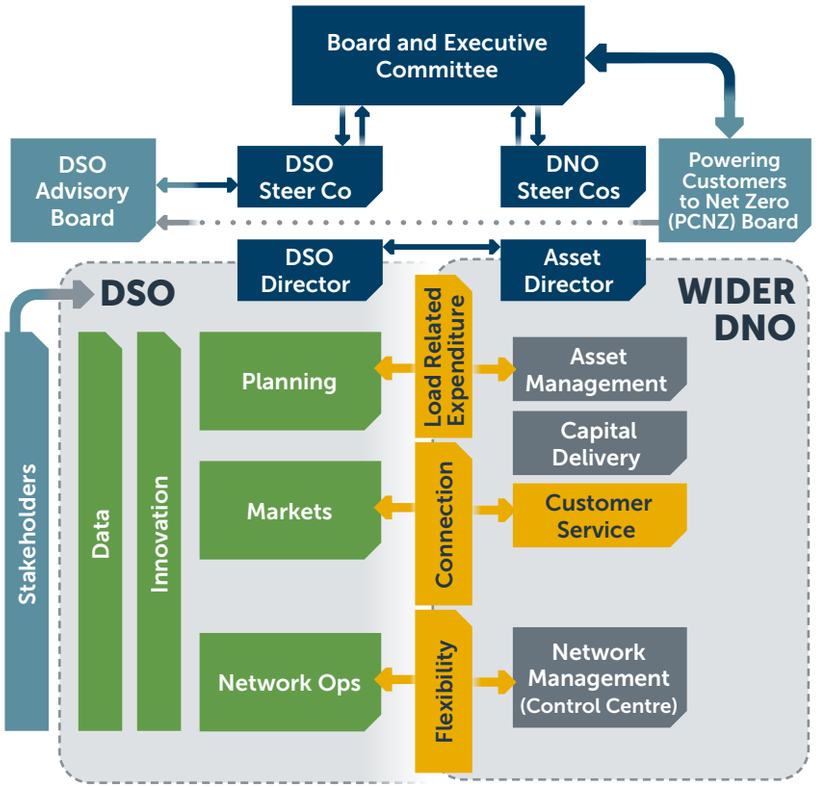
Our DSO function includes system planning, market development, network operations, data and innovation. These areas report to the DSO Director, overseen by our independent DSO Steering Committee. The DSO Director is a member of our Executive Committee and reports to the Managing Director of SSEN Distribution. Similar but separate arrangements are in place for the wider DNO functions.

Our DSO Advisory Board provides independent challenge and scrutiny - they are intentionally separate from our day-to-day processes so they can provide effective and unfettered oversight (see page 8 for further details of our advisory board).

Stakeholder and customer confidence is maintained by consultation on, and publication of key decisions and decision-making frameworks (such as Distribution Network Options Assessment, DNOA and Operational Decision-Making, ODM) and by making our data and information publicly available.

Our wider DNO functions are responsible for direct customer interactions (such as new connection enquiries) and for developing and delivering our construction plans. **DSO functions** are responsible for the load related investment decisions, the development and scheduling of flexibility and access management, and point of connection and upstream works for connections (see page 10 for further details of DSO to wider DNO accountabilities to manage and avoid potential conflicts of interest).

Following careful consideration and exploration with independent external experts, we concluded that this model of governance delivers most effectively and economically for our stakeholders. This enables us to maximise accountability and transparency, and limit unnecessary and unwanted costs, complexity and delay which in turn means we can focus on delivering the capacity and services our customers need now and into the future.



SSEN commissioned independent analysis to inform the design of our DSO governance

"Our analysis suggests the most cost-beneficial solution is DNO-DSO integration. However, clear rules and measures to ensure functional separation, alongside the regulatory mechanisms currently in place, will help mitigate conflicts of interest. This less disruptive approach gives Distributed Energy Resources (DER) greater confidence in flexibility markets without the loss of DNO management time and duplication of overhead costs that would be caused by more severe business separation."

Richard Druce, Senior Managing Director, NERA

Independent challenge - OUR DSO Advisory board

SSEN's DSO Advisory Board is made up of experts in consumer engagement, community energy, energy markets and system operation, energy policy, and law.

The board meets to critically evaluate our plans and methodologies, with your interests at the forefront of their minds.

Its purpose is to perform independent customer focussed scrutiny and challenge, critically assuring methodologies, decisions and approaches, and associated levels of transparency, that underpin the four primary objectives at the heart of SSEN's DSO strategy. In doing so, the DSO Advisory Board works to build customer trust in the performance and integrity of SSEN's DSO activities and accelerate the transition of the whole energy system to net zero

Gareth Miller

CHAIR

Gareth Miller is the Chairperson of SSEN Distribution's DSO Advisory Board.

Dr Nicki Clegg

MEMBER

Dr Nicki Clegg brings 30 years' experience in a diverse range of sectors to her role the DSO Advisory Board.

Bridget Hartley

MEMBER

Bridget is leading the setting up of a Regional Energy Strategic Planning capability for Great Britain; a new role recently given to the NESO.

Dr Charlotte Johnson

MEMBER

Charlotte has over 10 years of experience researching social justice and participation in energy system change.

Dan Roberts

MEMBER

Dan has over 25 years of experience as an economic consultant in the GB energy sector, and is currently a Director at Frontier Economics.

Professor Jan Webb

MEMBER

Jan is Professor in Social and Political Science at the University of Edinburgh, and co-director of the UK Energy Research Centre, where she leads research on local and regional energy systems.

CASE STUDY

Technical Assurance of our Distribution Network Options Assessments

Each of our quarterly DNOA outcomes reports have been assessed by Threepwood, an independent engineering consultancy. Our Advisory Board has provided oversight and challenge to check our assurance process.

Early findings from our first output report included that, whilst our System Planning engineers had considered all relevant aspects of option development these had not always been recorded in their documentation. Threepwood also advised in one case that we could summarise the outputs from cost benefit analysis (CBA) tools more clearly.

These insights have been taken into account in subsequent DNOA outcomes reports.

Threepwood Consulting

Tools and capabilities to make key decisions

DSO decisions accelerate our journey to net zero. We have significantly grown our capabilities to meet the challenge and continue to invest in our people, tools and systems to ensure we effectively support our customers and communities.

	Strategic Development Plans (SDPs)	Distribution Networks Options Assessment	Network connection planning	Operational decision-making framework	Real-time, open and shared data & reports
					
	Long term electricity system blueprints	**Develop and evaluate detailed options to address capacity needs**	**Identification of point of connection and reinforcement works for new connections**	**Coordination of flexibility dispatch, access rights, outage planning & wider system action**	**Sharing granular data about our network to support coordination and drive innovation**
Process	Our DSO team combine stakeholder insights at a local level with the national Future Energy Scenarios (FES) to develop Distribution Future Energy Scenarios (DFES) and conduct power system analysis to identify capacity needs out to 2050. Each Strategic Development Plan has modular build and flexibility options for a specific network area, typically a Grid Supply Point.	Detailed network reinforcement and flexibility options are prepared, evaluated and compared to maximise consumer value. Our DNOA decisions are shared with stakeholders to increase awareness of future network developments and new opportunities for the use and provision of flexibility.	New connection requirements are served by our DNO Customer team. With the related scheme analysis and design necessary to release new capacity prepared by our DSO System Planning team. Our approach ensures the DSO is fully accountable for network capacity and can make well-informed decisions.	Our Operational Decision-Making (ODM) defines clear dispatch principles to ensure safe, secure and efficient interaction between flexibility services, access rights and outages on our network. It sets out the operational interactions between DSO and DNO teams alongside other System Operators.	We have prioritised the publication of real-time data across our network. We routinely exchange operational and planning data with the NESO and are piloting data sharing infrastructure so that our customers and stakeholders can benefit from a smarter, more flexible, electricity network.
New Capabilities	Our Whole System team and **Net Zero Specialists** support Local Authorities and stakeholders. **Over 400 stakeholders** are using our LENZA tool to support their community energy plans and provide input to our strategic development plans.	Our analysis uses the **Common Evaluation Methodology (CEM)** alongside the **Deterministic Cost Benefit Analysis (CBA)** and **Strategic CBA**. We have developed and refined our **independent assurance** process to give confidence in our outcomes.	Our System Planning team have grown by more than **20 FTE (Full Time Equivalent) since April '24,** through innovative schemes such as **Electrical Power Networks Engineering and Power System Analysts supported by Oxford and Loughborough Universities**. We use industry-leading power flow analysis software and we're unlocking our network modelling data so customers can self-serve.	Our ODM has **set the industry standard.** We report quarterly and refine through stakeholder feedback. Flexibility and access rights are managed using flexibility market, **active network management & dispatch platforms**. Our next generation of tools are being developed through the **Systems for Flexibility Programme.**	Our **NeRDA** and **Smart Metering data** sets provide unrivalled insight into how our network is used from the street level upwards. By applying rigorous internal and external data governance and partnering with **IceBreaker One** we have developed new capabilities in the data needed for system wide coordination.

DSO and wider DNO accountabilities to manage and avoid potential conflicts of interest

SSEN operates to the Distribution Governance and Investment Framework (DGIF). This sets out formal interaction and decision-making between DSO and wider DNO services such as asset management, customer connections and delivery.

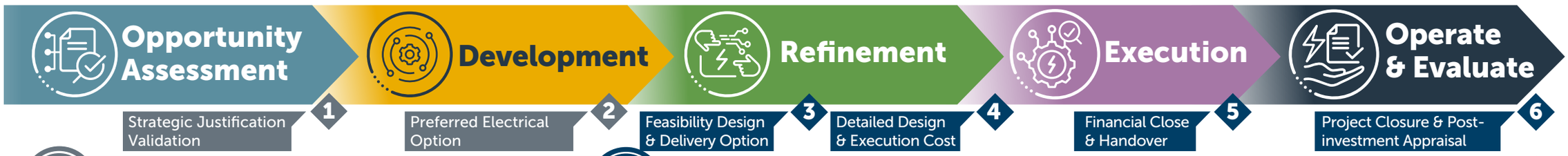
The DSO function is responsible for all load decisions (e.g. network capacity) and considers the efficient mix of flexibility, access management and network investment options using the tools and methodologies summarised on page 9. The DGIF uses documented Investment Decisions points (ID) to consciously manage design and delivery choices, modification to requirements and other areas of potential conflict or change.

DSO load decisions are completed at the Opportunity Assessment and Development stages of DGIF with the concluding decision recorded in an Electrical Asset Needs Case which is formally approved and handed over during the ID2 gate process to our delivery function. The delivery function then complete Refinement to enable coordination for efficient delivery with the wider asset programme (e.g. non-load) prior to Execution by our delivery team functions.

Any conflict between DSO load decisions and asset health driven work or connection timelines are addressed through coordination meetings at the Opportunity Assessment stage. If these have not been adequately addressed before ID2 gate, any conflict must be identified and resolved at Gate 2 by DSO, Asset management & delivery functions, representing the load and non-load network needs, respectively. If agreement cannot be reached, this is escalated to senior management from both functions and ultimately to the SSEN Executive if required.

New connection requirements are served by SSEN's DNO Customer team. Schemes above materiality are issued to the DSO team at Development stage to identify Point of Connection and reinforcement works. They proceed to Refinement stage via ID2, once the Customer team have received an offer acceptance.

Overview of DGIF for DSO network capacity (Load) investment



	DSO		Wider DNO (Asset, Delivery, Operations etc.)		
DSO	Consider options to meet **DFES** and **Strategic Development Plans (SDP).**	Distribution Network Options Assessment. Confirm **Electrical Asset Needs Case**.	Support investment planning process.	**Procurement of Flexibility** and monitoring of delivery to ensure needs met.	**Operation of flexibility** as per **ODM** and monitoring of ongoing operations.
Wider DNO	Provide asset and connections information.	Provide **design information** to support optioneering and assessment.	**Detailed design** and **coordination** alongside wider programme.	**Construction** and **reconfiguration** of asset-based solutions .	**System Control** and **outage management** as per **ODM**.

What does this mean in practice?

Our DGIF process ensures rigorous and transparent decision-making between DSO and wider DNO teams for our customers' benefit. The DGIF process enables us to evaluate efficient options and maintain full accountability in our decisions. It also assists in reviewing straightforward asset replacement decisions within the framework of CP30 and net zero targets.

CASE STUDY

Management of Deliverability

Bilsham - DSO analysis indicated that the Bilsham section of the network required asset-based reinforcement to increase capacity. Whilst this is the lower cost option, through the DGIF process it was found the time required to implement does not meet the requirement. As a result, the DSO team prepared a flexibility solution to increase capacity within the timescales required.

Abernethy – During the first stage of the DGIF it was identified that there is a network constraint in the Abernethy 33kV network. A hybrid approach was agreed between DSO and delivery teams in order to alleviate constraints using flexibility whilst accommodating the time required for construction.

Selsey and Birdham – Asset teams intended to replace obsolete poles due to safety reasons, this would have incurred multiple delivery challenges. It was found during the DGIF process that this section of the network would soon be thermally constrained, so the DSO team efficiently brought forward their plans to enhance the network and release capacity, addressing the pole in the process.

CASE STUDY

Management of Asset Health works

Netley Common – The Asset team planned to replace the primary transformer on a like-for-like basis. When reviewed by the DSO team a future thermal constraint was identified that would require additional capacity at the substation. Following detailed cost benefit analysis, the most cost-effective solution was found to be replacement of the assets with a larger capacity, implemented within the timeframe needed by the Asset team whilst also resulting in fewer future interventions.

Botley Wood – Our Asset team identified an asset to be replaced on a like-for-like basis. When reviewed by the DSO team through the DGIF process, the Strategic Development Plan for that area identified a potential future increase in load and the DSO team suggested interventions to enhance asset size to accommodate anticipated growth. However, after detailed cost-benefit-analysis under the DGIF process, this acceleration wasn't found to be sufficiently economic, and the scope of work remained unaltered.

Queens Lane North – Asset based inspection identified significant deterioration in transformer cooling fins and oil pumps. The cheapest immediate solution would have been to replace these components alone. DSO review determined, however, that it was more economically efficient to address network capacity by widening the work of the delivery team to replace transformer assets.

CASE STUDY

Using DNOA to develop and evaluate detailed options to address capacity needs

Banchory – The Primary substation and circuits supplying Banchory require additional capacity by 2026-27. Following evaluation under our DNOA methodology, the most efficient option has been selected to commence flexibility procurement from 2024-25 and release capacity using flexibility from 2026-27 through to 2029-30 at which point an asset-based solution will be required.

Kirkwall – The Primary substation in Kirkwall requires additional capacity by 2027-28. Following evaluation under our DNOA methodology, the most efficient option has been selected to manage the network operationally using smart solution and to then release capacity by constructing a new primary substation in 2027-28. Flexibility was unable to be utilised due to insufficient flexible assets.

All our DNOA outcome reports are available at:

SSEN DSO Publications & Reports

Our obligations under Act, Regulation, Licence and Code

DSO Services are provided in accordance with our Distribution Licence obligations under the Electricity Act, the Electricity at Work Regulations, and Electricity Safety, Quality and Continuity Regulations.

Our Distribution Licences consist of: the Electricity Distribution Standard Licence Conditions, alongside the Electricity Distribution Licence Special Conditions for Southern Electric Power Distribution plc, and the Distribution Licence Special Conditions for Scottish Hydro Electric Power Distribution plc. Standard licence conditions link to industry codes, including: the Distribution Code, the Grid Code, the Smart Energy Code, the Balancing and Settlement Code and the Retail Energy Code.

Electricity Act 1989 s9 General duties of Electricity Distribution Licence holders:

- To develop and maintain an efficient, co-ordinated and economical system of electricity distribution
- To facilitate competition in the supply and generation of electricity

Electricity at Work Regulations, Electricity Safety, Quality and Continuity Regulations and The Distribution Code

- Specifically, the management of network capability, network loading, and quality of supply

Electricity Distribution Licence conditions including:

6A	Smart Metering Systems and Provision of Information to the Secretary of State
7A	Whole Electricity System Obligations
10A	Smart Metering – Matters Relating to Obtaining and Using Consumption Data
13	Charging Methodologies for Use of System and connection
20	Compliance with Core Industry Documents
21	The Distribution Code
21A	The Smart Energy Code
22	Distribution Connection and Use of System Agreement
24	Distribution System planning standard and quality of performance reporting
25	Long-Term Development Statement
25B	Network Development Plan
31E	Procurement and use of Distribution Flexibility Services
SpC 4.8	Distribution System Operation output delivery incentive
SpC 9.5	Digitalisation
SpC 9.13	Smart Optimisation Output

Stakeholder led investment in our capabilities

We consult, publish, and regularly review our overall strategy, annual action plans, our specific roadmaps, and our approach to increasing our capabilities to meet stakeholder needs. All our information is published online at SSEN DSO

Partnering with stakeholders

Our ongoing dialogue with our stakeholders to seek their views and expertise provides us with confidence that the improvements we are making to our offering is co-created by our DSO community.

Whether it is forecasting and planning future needs, developing an inclusive flexibility marketplace, developing network flexibility at scale or driving transparency and coordination, the views and contributions of our stakeholders are vital.

Their input provides much valued endorsement of our approaches when we get it right, and helps us course correct when navigating periods of change, or service expectation.

Data and Digital Services

Data roadmap
Our plans for sharing data and what it can be used for

Collaboration Plan
How we share data with stakeholders and partners

Data portal
Where to access our data

Network visibility strategy
How we gather information about our network

CASE STUDY

Creating our Network Insight Series

During our Autumn Series we held a variety of workshops and meetings with our stakeholders. We learned that customers looking to connect to our network needed more guidance on how to use the information we published and our long-term development plans for specific areas on our network.

In response we created our Network Insight Series which presents our Strategic Development Plans (SDPs), construction plans and open data sets for individual areas on our network.

Quick links to DSO and wider DNO services

New electricity connections

We offer a variety of services to help with your new electricity supply

New electricity supplies

Inform our strategic network development

Review, inform and guide our plans for network development

Our strategic network planning process

Flexibility Services

Help strengthen our electricity network and earn money by registering as a flexibility service provider

Flexibility Services

Access Products

For earlier connections and whilst we work to add more capacity

Access products

SSEN Distribution Data Portal

Find, share and use Distribution Energy data all in one place

SSEN Data Portal

Doing the right thing

SSE's guide to good business ethics

As part of the SSE Group we work in an open and honest way. To do that, we have to understand what is right and wrong and operate to the same ethical standard.

SSE's guide to good business ethics is a general guide which supports the adoption of the right values, attitudes and behaviours to contribute to an ethical business culture at SSE. The information within this guide applies to all SSE employees, as well as people employed by other organisations to work on SSE's behalf.

Beyond rules, process and procedures this guide works to ensure we capture and manage new or unforeseen risks and conflicts of interest, so our staff, colleagues and stakeholders have confidence in our actions.

We have enhanced whistleblowing procedures through our externally hosted 'Speak Up' phone line and email service, so our employees can be confident that there will be no personal implications if they report wrongdoing about a colleague's conduct or the company's practices.

ENGAGE WITH US

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

stakeholder.engagement@sse.com

www.ssen.co.uk

x.com/ssencommunity

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linkedin.com/company/ssencommunity

SCAN ME

Sign up for our DSO newsletter

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DSO Powering Change