

# SSEN DISTRIBUTION

Flexibility Services Procurement Statement 31/03/2025



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# **EXECUTIVE SUMMARY**

Scottish and Southern Electricity Networks (SSEN) Distribution is responsible for ensuring a safe and reliable supply of electricity to over 3.9 million homes and businesses in communities across two distribution licence areas: Scottish Hydro Electric Power Distribution (SHEPD) in the North of Scotland and Southern Electric Power Distribution (SEPD) in central southern England. At SSEN Distribution we are committed to meeting the evolving needs of the electricity grid and ensuring a secure and reliable energy supply. As such, we follow a 'Flexibility First' approach, meaning that Flexibility Services and Flexible Solutions (such as Access Products) are always considered first in the management of our networks. The use of flexibility enables us to improve efficiency through greater utilisation of existing and new network assets. How we plan to develop and evolve these tools is outlined in our Flexibility Roadmap<sup>1</sup>.

Flexibility means that we are better placed to accommodate the rapid growth in connections requests and installation of Low-Carbon Technologies (LCTs), such as electric vehicles and heat pumps. We combine flexibility with an intentional approach to network investment, aiming to ensure all our decisions are economically efficient and enable the transition to net zero.

In 2024/25 we have significantly increased our flexibility procurement efforts, tendering for over 550 MW of flexibility through ten procurement rounds. We tendered for 27 Extra-High-Voltage (EHV) Constraint-Managed Zones (CMZs) and 56 High-Voltage and Low-Voltage (HV/LV) CMZs identified through our Distribution Network Options Assessment (DNOA) process. We also tendered for 15 new CMZs identified through our West London connections-driven procurement initiative, and three CMZs identified by our outage planning teams. We introduced our new market platform ElectronConnect and assisted our Flexibility Service Providers (FSPs) in transitioning smoothly to the new procurement system. We have successfully signed 17 different FSPs to our overarching agreement in 2024/25. Full information on procurement activity in 2024/25 will be available in our Procurement Report which will be published on the 1 May 2025.

In this document, we outline our ambitious procurement plans for Flexibility Services during the 12-month period commencing on the 1 April 2025. We include the timelines for this procurement activity and information on where we foresee changes to our approach as we improve and streamline our processes. We also provide details on areas where we will assess the technical need and economic benefit of Flexibility Services, potentially providing further opportunities for flexibility.

In 2024/25 we were successful in attracting new FSPs to participate in our services and look to continue to do so going forward. We will carry out a minimum of three mini-competitions, which will give new FSPs an opportunity to sign our overarching agreement. These are expected to commence in April, July, and December.

In addition to the mini-competitions, we will run at least three long-term bidding rounds, three season-ahead bidding rounds, and month-ahead bidding rounds as required. The full timetable for these can be found in Appendix 4. In our first long-term bidding round in May, we intend to procure at least 21.93 MW of services across 20 CMZs. We currently aim to procure at least 48.07 MW in 26 CMZs in the February 2026 tender, and the September 2025 long-term tender will be used to procure additional Flexibility Services for any CMZs whose requirements have not been met by previous procurement efforts. The September and February bidding rounds are subject to change as more requirements are identified throughout the year and as our data sources improve closer to the time of procurement. The short-term bidding rounds will focus on procuring additional flexibility in CMZs where we are forecasting a shortfall for that month. Season-ahead bidding rounds will be used to procure for High- and Low-Voltage (HV/LV) CMZs identified through the DNOA process.

<sup>1</sup> https://ssen.tractivity.co.uk/images/blob/ac891aaa-7036-4ec1-9e9e-cb33fdfe50c9/SSEN-flexibility-roadmap-draft-0.2.pdf



Despite our success in ramping up the procurement of Flexibility Services in 2024/25, we have identified that a key barrier to the use of Flexibility Services is market liquidity, which has historically been low. This is particularly true of our Northern licence area, where the rural nature and lower uptake of LCTs makes aggregation more challenging. We recognise that lack of standardisation of Flexibility Services between different Distribution Network Operators (DNOs) is a significant barrier to participation for FSPs, and we have made substantial progress in this regard in 2024/25 with most of our flexibility procurement being in line with the standard products, the implementation of the new standard Flexibility Services Agreement and standard Pre-Qualification Questionnaire. We will continue to work on standardisation alongside other DNOs, the National Energy System Operator, the Energy Network Association Open Networks programme, and Elexon as the newly-appointed Market Facilitator. Key areas of focus will include further implementation of new standard products, introduction of the new market facilitator, Common Evaluation Methodology tool for the economic assessment of Flexibility Services, and baselining. In all areas, we will continue to prioritise FSP feedback. More detail of the specific areas we are collaborating on can be found in Section 4.



# 1.INTRODUCTION

Scottish and Southern Electricity Networks (SSEN) is the Distribution Network Operator (DNO) responsible for delivering electricity to over 3.9 million homes and businesses in the diverse geographies of the North of Scotland and central Southern England. Across our two licence areas, Southern Electric Power Distribution (SEPD) and Scottish Hydro Electric Power Distribution (SHEPD), our role is to ensure the secure, reliable, and efficient provision of power to our customers. Within Distribution System Operations (DSO) at SSEN, we work in partnership with our many stakeholders to optimise our electricity networks using Flexibility Services, Access Products, strategic network investment, data, and emerging technology. This optimisation will allow us to enable the changes to our customers' demands that are required to power a net zero future, including decarbonisation of transport and heat, and integration of renewable energy sources at maximum pace. The increased efficiency and utilisation of our existing networks should also result in better value and outcomes for all our communities and customers.

The purpose of this document is to set out our plans for the procurement of Flexibility Services in the 12-month period commencing 1 April 2025 and ending 31 March 2026, and the mechanisms we intend to use to procure these Flexibility Services. This is in line with our obligations set out in Standard Licence Condition 31E. We also provide detailed information on our procurement strategy, processes, and long-term ambitions for the development of flexibility markets. This statement can be used by Flexibility Service Providers (FSPs) and prospective FSPs to understand where we intend to procure Flexibility Services over the coming year, how to participate in our flexibility markets, what our processes look like and any plans for changes to our processes in the coming years.

Flexibility Services allow us to manage electricity flows on our network in order to enable faster growth of our network capacity as the needs of our customers increase, defer or potentially even avoid expensive network reinforcement, incorporate growing levels of Low-Carbon Technologies (LCTs) to enable our ambitious decarbonisation goals, and ensure the reliable supply of electricity to our customers in the most efficient and economic manner. **Section 2A.1 The Need for Flexibility Services** goes into more detail on the uses and benefits of Flexibility Services.

We identify requirements for Flexibility Services through several avenues. These include:

- 1. Distribution Network Options Assessment (DNOA) which identifies where we can use flexibility to defer or avoid reinforcement due to load growth on network assets.
- 2. Outage planning which identifies where Flexibility Services can be used to support outages and reduce reliance on diesel generation under outage conditions.
- 3. Connections requests where Flexibility Services could potentially be used to alleviate connections queues and enable faster connection times for our customers.

We explain in detail the mechanisms for identifying flexibility requirements in **Section 2A.2 Identification of Flexibility Requirements**.

We procure Flexibility Services in the form of several different products depending on the specific requirement and procurement timescales required. 100% of new Flexibility Services fully contracted for in 2024/25 are aligned with Energy Networks Association (ENA) standard products. Where we are currently procuring non-standard products this is due to no standard product filling the technical service requirements. This demonstrates a clear commitment to the ongoing standardisation of Flexibility Services between DNOs. The flexibility products we use are described in Section 2A.3 Flexibility Service Products, and our methods for selecting products is laid out in Section 2A.4 Flexibility Services Procurement Strategy.

Our procurement plans for the next year are described in **Section 2B Flexibility Procurement Plans**. Here, FSPs can find clear indications of where and when we intend to procure Flexibility Services, and which services we intend to use. We also go into more detail on other types of Flexibility Services we may procure in the coming



year, and our dispatch processes, to ensure transparency in our decisions. We signpost FSPs to the relevant websites where they can find out more about how we ensure these processes are fair and benefit our end customers.

Section 3 Tendering Process describes the processes and systems we will be using to procure Flexibility Services over the next year. In line with our commitments from our previous procurement statement, we have made great improvements to this process over the last year, primarily through the introduction of our market platform ElectronConnect, which now provides a single system for access to our markets from registration to bidding. We have also improved our processes through greater standardisation, particularly through the use of the ENA standard Pre-Qualification Questionnaire (PQQ) and Flexibility Services Agreement (FSA). Section 3 also details where we will seek to further improve these processes over the coming year in line with feedback from FSPs and to enable scalability in both numbers of FSPs and numbers of Constraint-Managed Zones (CMZs).

At SSEN, our role is to meet the varied and multifaceted needs of our customers in a fair and efficient way. To do this, it is crucial that we understand the needs of our stakeholder and as such stakeholder engagement takes a central role in our planning and strategy. As a DSO, one of our strategic priorities is delivering network flexibility at scale, and this necessitates proactive engagement with as many FSPs as possible. We also need to ensure that our processes and systems are communicated clearly but also are responsive to the needs of unique FSPs. **Section 4 Stakeholder Engagement** provides an overview of our plans for stakeholder engagement within the flexibility space and outlines the channels that we use to communicate with our stakeholders and FSPs as effectively as possible. This section focuses specifically on our engagement surrounding our flexibility procurement activities, but this overlaps with our publications and reports relating to our network planning processes. Stakeholders interested in how our strategic network planning processes and outcomes are communicated should refer to Section 2A.2 which describes where Flexibility Services sit within the overall strategic network planning process and signposts the relevant reports and publications.

Finally, **Section 5 Detailed Quantitative Assessment** goes into more detail on the detailed methodology behind the quantitative aspects of our flexibility processes, such as the cost-benefit assessment on when to use Flexibility Services and the response evaluation criteria to ensure that our assessment processes are transparent to stakeholders and in line with standardisation across other DNOs.



# 2A FLEXIBILITY SERVICES REQUIREMENTS

Changing requirements on our networks have prompted us to change our approach, from passively maintaining our network to actively managing power flows. As more demand, electric vehicles, heat pumps, and distributed generation and storage assets connect to our networks, our approach to network reinforcement has changed. We have established a robust strategic network planning process<sup>2</sup> which enables us to assess and select the correct network interventions for the needs of our customers, and disseminate these decisions transparently to our customers and stakeholders. Flexibility Services are a key part of this strategic network planning process because they allow more efficient use of existing network capacity, reduction or deferral of the need for network reinforcement, and the integration of LCTs and renewable energy sources. Beyond the clear benefits that Flexibility Services offer to the distribution network, they are also predicted to result in substantial benefits to the energy system as a whole. Efficient use of consumer-led flexibility could reduce the amount of generation and network infrastructure needed, potentially reducing the total system cost by £6-10 billion per year<sup>3</sup>.

This section outlines the types of issues experienced on the network, the process used to identify them, and how we decide whether to use Flexibility Services. The Flexibility Services options that are available to support the network and the process for selecting the appropriate service is also described in this section.

# 2A.1 The Need for Flexibility Services

The use of our network can be controlled through Flexibility Services, Access Products, Wholesale Market Co-Ordination, and Price Signals. These four interventions make up our Flexibility Toolkit. In this toolkit, Flexibility Services sit alongside signals given through our Distribution Use of System charges, Access Products which allow customers to connect faster to our networks through flexible connection agreements, and coordination with the National Energy System Operator (NESO) and wider market mechanisms as possible avenues to resolve network issues. Our Flexibility Roadmap<sup>4</sup> explains how these tools are used to maximise network use and improve wholesystem network efficiency. The decision of which tool to use and when is based on desired outcome, but also timescales and network voltage level for example in the long-term, access products and price signals may be preferable, but on shorter timescales Flexibility Services or market coordination may be more appropriate. Similarly, price signals and Access Products are useful at Extra-High-Voltage (EHV) levels, whereas only Flexibility Services and Market Coordination can be used across all voltage levels. Flexibility Services are specifically used to defer or avoid network reinforcements, manage outages (both planned and unplanned) and accelerate connections over both short and long timescales and across all voltage levels. This document focuses on the procurement of Flexibility Services over the next year.

There are three types of network constraint, shown in Figure 1. Our technical studies, economic analysis and feasibility assessments show that Flexibility Services can successfully manage thermal constraints and be cost effective and therefore represent most of our flexibility requirements.

There are two ways of managing voltage constraints, either by directly buying reactive power from a Distributed Energy Resource (DER) or changing active power use of any FSP. So far, only one CMZ has been identified where Flexibility Services can be used to resolve identified voltage issues (Isle of Skye and Wester Ross<sup>5</sup>). In

<sup>2</sup> Our strategic network planning process - SSEN

<sup>3</sup> Electricity distribution networks: Creating capacity for the future - NIC

<sup>4</sup> ssen-flexibility-roadmap-2024.pdf

<sup>5</sup> https://www.ssen.co.uk/globalassets/about-us/dso/publication--reports/ssen-dnoa-outcomes-report-november-2024.pdf

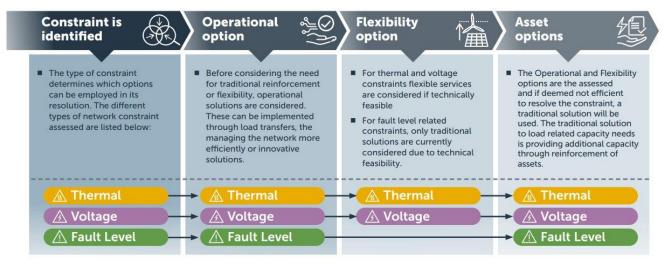
most cases, our network analysis has typically shown that Flexibility Services are not appropriate for resolving the identified voltage constraint. This is usually either because there are multiple circuit outages that need opposing responses, or because necessary levels of active power change to resolve the voltage issue would create other network constraints. For the Isle of Skye and Wester Ross, analysis has shown that it will be possible to manage the voltage constraint with active power services alone. Therefore, SSEN has no current plans to procure reactive power services. We will continue to evaluate voltage constraints for the use of Flexibility Services in 2025/26 and should the need for reactive power services be identified, we will incorporate this into our Flexibility Service procurement plans. It is difficult to resolve fault level constraints with flexibility, as it requires turning off (rather than reducing output) for sources of fault infeed. This would mean sustained periods of turning off DERs which is rarely economically viable.

Thermal and voltage constraints are time and season dependant, and we expect the number of identified constraints and need for reinforcement on our network to grow as we enable the transition to net zero.

# Types of constraints Fault level: when the maximum fault current exceeds what the network can safely manage during a short circuit event. Thermal Constraint: when the load on the network is greater than the ratings of our assets. Voltage constraint: when the network voltages are either above, or below maximum or minimum acceptable voltage levels set out in the statutory limits.

Figure 1: Constraint types from our Operational Decision-Making document<sup>6</sup>.

Figure 2: Diagram showing the outline of the DNOA process for different constraint types<sup>7</sup>.



# 2A.2 Identification of Flexibility Requirements

This section describes the processes we use for identifying flexibility requirements, from the initial constraint analysis to the cost benefit assessment of reinforcement against flexibility, through to how we publish the results of these processes transparently for our stakeholders. The backbone of this process is the DNOA methodology,

<sup>6</sup> https://www.ssen.co.uk/globalassets/about-us/dso/consultation-library/ssen-odm-framework-2024.pdf

<sup>7</sup> ssen-dnoa-methodology-2025-feb-draft140225.pdf



which lays out how we assess whether a constraint should be resolved with Flexibility Services or with traditional reinforcement options, or whether a smart solution can be considered. Following successful implementation and publication of the DNOA process in 2023/24, and positive feedback from stakeholders, we have extended this process to High-Voltage (HV) and Low-Voltage (LV) networks in 2024/25 and will continue to implement this process across all voltage levels in 2025/26. The refreshed DNOA methodology covering the extension to HV/LV was published for consultation in February 2025<sup>8</sup>, and after the incorporation of stakeholder feedback through the consultation and a stakeholder webinar<sup>9</sup>, the latest version of the DNOA methodology will be available on our DSO Publications and Reports webpage<sup>10</sup>. Additional flexibility requirements may be identified outside of the DNOA process, for outage management or connections acceleration, and these other use cases for flexibility are also described in this section.

# 2A.2.1 Identifying Future System Needs

Each year, SSEN Distribution commissions detailed projections on how generation, demand and storage connected to the distribution network could change in the next decade under four load growth scenarios. These are the Distribution Future Energy Scenarios (DFES). The data is used to analyse how network load may evolve and to make strategic investment decisions. The elements included in the DFES models are:

- Sources of demand electric vehicles, heat pumps and air conditioning, and strategic new housing and commercial developments;
- Distributed generation both renewable and fossil fuel; and
- Battery storage.

Constraint analysis is then completed using power system analysis to identify areas of the network where there are capacity limitations and the type of limitation (as described in Section 2A.1). The results of this constraint analysis feed into a Strategic Development Plan<sup>11</sup>, which is published annually for each Grid Supply Point (GSP). The Strategic Development Plan summarises all constraints identified in each GSP out to 2050 and lays out the plan for assessing and resolving these constraints. It identifies priorities for investment and potentially where constraints impact each other in the broader picture of the network area as a whole. The Strategic Development Plan also includes information on where Flexibility Services are already being procured and utilised within the network area under examination.

# 2A.2.2 Develop Options to Resolve

From the constraint analysis, different options are developed that could be used to resolve the identified issues. This process is performed differently depending on the voltage level in question.

Options considered include reinforcement, flexibility, and smart solutions. The Flexibility Service options can include how flexibility can be used in combination with an asset build solution to efficiently deliver additional capacity when needed. Smart solutions can include load transfers, managing the network more efficiently, or innovative solutions.

# 2A.2.3 Assessment of Options

Following the development of options, techno-economic analysis is completed to determine which of the options is optimal for delivery. The technical analysis considers how a solution is delivered, for example possible

<sup>8</sup> ssen-dnoa-methodology-2025-feb-draft140225.pdf

<sup>9</sup> Event Details | SSEN Distribution Network Options Assessment (DNOA) Webinar

<sup>10</sup> Publications & Reports - SSEN

<sup>11</sup> Our strategic network planning process - SSEN



construction requirements. For Flexibility Services, an assessment of potential required volumes of flexibility based on the DFES load projections is completed to determine how much flexibility would be required to effectively manage the constraint. This is then compared against data on customer numbers and capacity of different types of customers in the network area to rule out constraints where the flexibility requirement is too high to be met by the existing customers on the network.

A combined approach is used for economic analysis where the Ofgem cost benefit analysis tool is used for all solutions. The optimal asset-based solution is then compared with Flexibility Services using the Common Evaluation Methodology (CEM)<sup>12</sup>, developed through the Energy Network Association's Open Networks programme, to determine the number of years Flexibility Services are economic for. As of 2024/25, a new version of the CEM tool is used for the analysis, which alongside the development of in-house tools, has helped to expand our ability to assess flexibility on high volumes of network areas, including extending the assessment to HV and LV. Section 5 in this report explains this approach in more detail.

The different potential results from the DNOA are shown in Table 1 and are in page 13 of the draft DNOA methodology.

For each area where a flexibility solution is recommended, it is taken forward to assess the appropriate flexibility procurement strategy.

DNOA outcome	Description	Subject to annual review	% of 2024/25 DNOA outcomes that related to this solution
Flexibility	Where deferring reinforcement with flexibility is feasible and the economically optimal solution considering the networks short-term and long-term needs, and where it is necessary to enable construction.	Yes to signal latest views of flexibility needs	5%
Asset solutions	Where traditional asset solutions (upgrading, replacement etc) have been assessed to be the most efficient. This includes strategic solution sized to meet future needs.	No as handed to DNO function for delivery	30%
Operational management	Where the constraint does not require planning interventions as the need can be met with operational solutions or innovative technologies that are economically viable.	Yes to confirm continued operational viability	0%
Flexibility followed by asset solutions	Where deferring reinforcement with flexibility is feasible but for a limited time, after which network reinforcement is more economical.	Yes to signal latest views of flexibility needs	32%
Operational management followed by asset solutions	Where a constraint can be managed for operational solutions for a limited time, after which network reinforcement is needed.	Yes to confirm continued operational viability	33%
Signpost	Optioneering has concluded that flexibility will be required but not in this current procurement cycle.	Yes to signal latest views of flexibility needs	0%

Table 1: Potential outcomes from the DNOA methodology assessment<sup>13</sup>.

# 2A.2.4 Publish, Update and Deliver

The results from the techno-economic assessment feed into the DNOA outcomes reports<sup>14</sup> that are issued periodically. This analysis also directly feeds into the investment requirements detailed in our Network Development Plan<sup>15</sup> and Long-Term Development Statement<sup>16</sup>, which both serve to inform our stakeholders on the investment decisions made regarding our network.

Flexibility procurement activities are not accounted for in the load forecast data presented in the Long-Term Development Statement nor the headroom capacity data presented in the Network Development Plan. This is so that we and our stakeholders maintain visibility on how demand will be changing on our network unimpeded by

<sup>12</sup> Common Evaluation Methodology Tool v3 & Supporting Materials (Nov 2024) - Energy Networks Association (ENA)

<sup>13</sup> ssen-dnoa-methodology-2025-feb-draft140225.pdf

<sup>14</sup> https://www.ssen.co.uk/globalassets/about-us/dso/publication--reports/ssen-dnoa-outcome-reports-march-24.pdf

<sup>15</sup> Our strategic network planning process - SSEN

<sup>16</sup> Long term development statements (LTDS) - SSEN



the action we are taking to manage it. This approach allows identification of areas of our network that are predicted to be congested, and where there is headroom available, regardless of the actions used to mitigate this.

### 2A.2.5 Identification of Other Networks Needs

The DNOA process identifies Flexibility Services needed to support economic delivery of our network upgrade programme. However, this is not the only reason we use Flexibility Services. Other triggers for the procurement of Flexibility Services include acceleration of connections, outage management, and managing deliverability of network upgrades.

### **Connections Acceleration**

Areas of our network have experienced significant growth in connection requests, and it can take time for the network to be developed to enable these. Access Products allow connections with curtailable access rights whilst reinforcements occur, however Access Products are not an appropriate solution for all parties. Where this is the case, it may be appropriate to utilise Flexibility Services to enable new connections. We have trialed this in 2023/24 through the procurement of Flexibility Services in Fleet-Bramley, and again in 2024/25 in West London.

The changes to our connection and use of system arrangements resulting from the Access and Forward-Looking Charges Significant Code Review (Access SCR) include providing curtailable connections intended to promote greater flexibility. In 2025/26 we expect the energisation of our first flexible connections under Access SCR. We continue to monitor the growth and use of curtailable connections on our network to understand where Flexibility Services can be used to manage our contractual obligations for these connections.

### **Outage Management**

Flexibility Services can be used to reduce our reliance on mobile generation during planned outages, or to support the network in unplanned events. Requirements for these services can come directly from our Outage Planning teams who facilitate access to the network for our maintenance and construction teams, or the control room who manage the network response in the event of an unplanned fault. These requirements typically emerge throughout the year and will be publicised on our website when available.

### **Managing Deliverability**

The ambitious scale of the network upgrades needed to meet our customers' needs and net zero objectives means that prioritisation is essential to deliver the required works. This can mean that some areas are identified for deferral of reinforcement using Flexibility Services to manage deliverability. This can be either because the necessary reinforcement cannot take place quickly enough to meet projected demand growth, or because a network area has been deprioritised for reinforcement due to the ability to use Flexibility Services instead. This allows our delivery teams to focus on network areas where Flexibility Services may not be viable for deferring reinforcement. One example of this is Coshieville primary substation 17, which was projected to be overloaded in 2024/25. The CEM tool did not recommend deferral of reinforcement using flexibility services, however the earliest date that the reinforcement work could be delivered was 2027/28, therefore procurement of flexibility services for the intervening three years was recommended. Closer to real-time, a cost-benefit assessment will be performed to determine the most cost-effective way to mitigate the overload between dispatch of flexibility services and other network management options, to ensure the network remains compliant without compromising on the best value-for-money for our customers. More information on the dispatch decision-making process and other mitigation options is given in Section 2B.8.

Where a reinforcement project is delayed for any reason, Flexibility Services will also be considered to manage constraints arising during the delay period. Delivery teams will flag when a project is running behind, and areas where this delay may result in network overloads in the interim are identified. A new flexibility viability assessment

<sup>17</sup> https://www.ssen.co.uk/globalassets/about-us/dso/publication--reports/ssen-dnoa-outcomes-reports-july-2024.pdf



and cost benefit assessment is then performed to identify the most cost-effective and practical way to mitigate the interim overload. This may be additional Flexibility Services procurement, or other smart solutions.

# 2A.3 Flexibility Service Products

In our 2024/25 Procurement Statement, we committed to primarily using ENA standard products in the last financial year to improve standardisation between DSOs and ensure FSPs can access our flexibility services as easily as possible. In 2024/25 we exceeded this commitment as all of our procurement fully completed within 2024/25 was for standard products as defined by the ENA<sup>18</sup>. We have recently opened tenders for non-standard services as described in Section 2A.3.2, but this is only when none of the standard services will meet the technical requirements for the specific use-case we require. We currently contribute to the Open Networks working groups on the standardisation of flexibility products and will continue our activity in these forums as they transition to the Market Facilitator. We will also continue to purchase these standardised products going forward. Services that have previously been procured under the former product definitions will continue to be dispatched and extended as contracted until these contracts expire.

In some areas we have network-specific issues, for example the Outer Hebrides, where network stability requirements mean that local renewable generation has historically been curtailed in favour of thermal generators in outage situations when the network is islanded. We operate several such unique network areas. These each present unique scenarios for flexibility requirements to ensure our network can be managed. This can mean delivering a certain fault infeed, stability response, or frequency range. In each area the exact grid forming requirement can be unique. This means that for some situations we therefore need to use non-standard products. We only use a bespoke service where one of the existing products would not address the technical requirement.

We continue to innovate in the Flexibility Service space, looking to address some of the issues that are either forming a barrier to entry and reducing market participation or preventing us from selecting Flexibility Services as a viable option in the options assessment process. Our unique network areas and communities allow us to test new and innovative approaches. We plan to share the learning with all the DSOs and where successful and appropriate add any new products to the suite of standard products.

# 2A.3.1 Standard Services Overview

SSEN Distribution currently procure four services:

- Scheduled Utilisation (SU)
- Operational Utilisation (OU) 2-minutes
- Scheduled Availability + Operational Utilisation (SAOU) day-ahead
- Variable Availability + Operational Utilisation (VAOU) week-ahead

The definitions of these services are aligned with the updated and reduced Open Networks standards<sup>19</sup>. The payment structure for and definitions of these services are summarised in Figure 3.

<sup>18</sup> on-flexibility-products-alignment-(feb-2024).pdf

<sup>19</sup> https://www.energynetworks.org/assets/images/2023/Aug/on-flexibility-products-alignment-(feb-2024).pdf?1711357255



	Product	Description	Decision timescales	Payment
	Peak Reduction	This product seeks a reduction in peak power utilised over time. This response can manage peaks in demand.	Utilisation Instruction: At Trade	Utilisation
ıcts	Scheduled Utilisation	In this product, the time that flexibility is delivered has been pre-agreed in advance with the provider.	Utilisation Instruction: At Trade	Utilisation
e produ	Operational Utilisation	This product allows for the use case where the amount of flexibility delivered is agreed nearer to real time.	■ Utilisation Instruction: Real Time or Week Ahead	Utilisation
Flexibility service products	Scheduled Availability + Operational Utilisation	This product procures, ahead of time, the ability of an FSP to deliver an agreed change following a network abnormality.	<ul> <li>Availability Refinement: Not allowed</li> <li>Utilisation Instruction: Real Time or Day Ahead</li> </ul>	Availability + Utilisation
Flexibi	Variable Availability + Operational Utilisation	This product allows for DNOs and the ESO to procure a level of contracted capacity, but then refine the requirements in terms of availability closer to the event.	<ul> <li>Availability Refinement:         Week Ahead or Month         Ahead</li> <li>Utilisation Instruction: Real         Time or Day Ahead or Week         Ahead</li> </ul>	Availability + Utilisation

Figure 3: Standard Flexibility Service products.

### 2A.3.2 Non-Standard Services

As described in Section 2A.3., we have demonstrated our commitment to the use of ENA standards by procuring primarily standard products in 2024/25. However, in exceptional circumstances and only when absolutely necessary, there are situations when we may procure non-standard Flexibility Services. Examples of situations that we anticipate might require procurement of non-standard Flexibility Services over the next year are listed here.

### **Transformation of Load Managed Areas (LMAs)**

Our northern network utilises Load Managed Areas (LMAs), which were managed primarily by sending instructions via the Radio Tele-switching Service (RTS). The RTS signal is expected to be switched off in Summer 2025, resulting in a risk of increased peaks and sudden changes in demand on the LV network. This can be mitigated by installing a 5-port smart meter and then following the same LMA Schedules. We have introduced the Interim Payment Incentive; a service which provides a mechanism to highlight the importance and value of this flexibility and ensure we do not lose access to this successful diversification. The service is modelled on the ENA Standard Product of SU, with the only change being the payment is made per participating household rather than per megawatt hour. The aim is for this service to be a temporary approach whilst the Demand Diversification Service (described below) and the LV Flexibility Services are further developed. We successfully started procurement of this service in 2024/25 and expect to complete a second procurement round to provide opportunities for participation from additional electricity suppliers.

For the evolution of LMAs from mandated scheduling to a commercial mechanism, we are considering two different models for a Demand Diversification Service; Allocated Capacity and Dynamic Congestion Response. These services are being developed in conjunction with stakeholders to provide a route to market-based flexibility on the LV network, avoiding the need for large aggregation or baselining, and making flexibility appropriate for rural areas



where there is limited participation. We have completed virtual trials in 2024/25 and expect to build on these learnings for the next stage of trials in summer 2025.

### **Managing Islanded Networks**

In more remote areas of our network, there are routes that require regular maintenance and are often located near a high concentration of intermittent generators, such as wind and hydro. When there are outages, there can be a need to operate these networks in 'islanded mode' as they are no longer connected to the main electricity system, but we need to maintain electricity supplies to local communities. As a result, there is an ongoing need for network stability in these regions. The provision of a stability service by an FSP can minimise the curtailment of local renewable generation, thereby reducing reliance on thermal generators. One such region is the Western Isles, where we are seeking to implement a Stability Service. Procurement for this service started in March 2024/25 and we expect to complete this process in 2025/26. This requires a bespoke approach, as stability is not typically covered by ENA standard services. Similarly, in Shetland we are developing a bespoke service to maintain supply until diesel generation can be connected in the event of a transmission outage islanding the network, avoiding the need to run the diesel power station full-time. Procurement for this is ongoing and we expect the service to be operational in 2026. We are also investigating other ways we could reduce our reliance on diesel generation in islanded network areas with the use of Flexibility Services, but may require unique products to achieve this.

# 2A.4 Flexibility Services Procurement Strategy

Our Flexibility Service procurement strategy is used to determine which product is used and when flexibility is procured for a specific area.

Flexibility Service requirements are identified through different routes. The first route, which represents the majority of our identified areas, is via a DNOA recommendation for a Flexibility Service (typically deferral of a reinforcement for an economic benefit or to support the timing of the construction projects when looking at the overall work profile and available resources and equipment). Other routes for identifying Flexibility Service requirements include supporting outage management, potential fault scenarios, and acceleration of connections. In all cases, and at all voltage levels, the following information is gathered:

- Location of constraint and area of influence.
- Required volume of flexibility per season and per year.
- The time of day of the requirement.
- Forecast of expected utilisation of the service (excluding fault and outages where this may be more difficult to forecast).

This information is used to determine when flexibility is procured, which product is used, and develop the key information to allow FSPs to participate. For example, the location of the constraint and area of influence is used to create a CMZ. CMZs describe areas of the distribution network that can change energy use to reduce the impact of a constraint and are used to procure Flexibility Services via the ElectronConnect platform.

### 2A.4.1 Procurement Time Horizon

The timescales that we chose to procure Flexibility Services on are influenced by several factors. The time of understanding of the network need is an important factor, for example for unplanned outages we would prefer to use a service with a short dispatch time such as OU, whereas for needs we have visibility of a long time in the future a service such as VAOU may be appropriate. Another factor that affects this decision is market liquidity. In the past, low market liquidity has meant that on several occasions we have tendered for a certain volume of flexibility and this volume has not been met by the responses received. This trend in market liquidity was prevalent across 2024/25 and we expect it to continue for the next year, particularly in more rural network areas. Market liquidity therefore remains an important consideration in our procurement approach. Figure 4 is from our Flexibility



Roadmap and shows our approach to long- and short-term procurement. We expect to complete long-term procurement when we have low confidence in the market liquidity and move to shorter-term procurement where we have more confidence. Therefore, we are currently procuring more of our services in the long-term horizon.

CMZs which cover a larger number of users are typically easier to fulfil requirements for. Areas with high population density can result in large volumes of domestic aggregation and areas with many DERs can also result in liquid markets. Parts of our SHEPD network, which can be characterised as being rural with few DERs that can increase generation output, typically experience lower market liquidity. Across all our historic flexibility tenders, 46% of our requested capacity has been met in SHEPD compared to 77% in SEPD. This is also evidenced by the lower number of FSPs registered in SHEPD. This can also be seen in our Islands Request for Information (RFI) that we completed in 2024/25<sup>20</sup>. Of the 13 respondents, none viewed domestic flexibility as a capability in these areas due to the lack of population and some highlighted that there are low levels of flexible assets at the domestic level with considerable challenges in the supply chain preventing a rapid increase.

To estimate the market liquidity the required volume in each area is compared against the anticipated volume available at that location. The anticipated volume available is assessed based on what is connected in an area, historic flexibility engagement rates from SSEN data and publicly available data from other DSOs and NESO, alongside forecast uptake rates. Where the anticipated volume available is close to or below the required volume, it is expected to be an area with low market liquidity and long-term procurement will be used.

Also considered in determining the procurement timescale is which Flexibility Service product is being used. Where

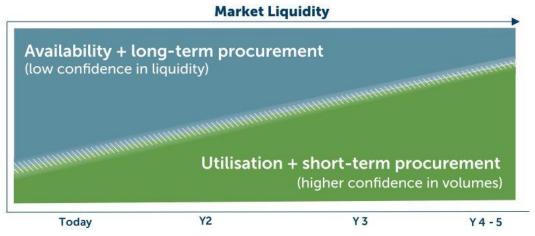


Figure 4: Approach to procurement timeline considering market liquidity.

Flexibility Service products have committed spend (such as SAOU or SU), a shorter time frame may be used than the market liquidity would suggest, so that dispatch is happening with the most up-to-date information on appropriate service windows.

### 2A.4.2 Product Selection

We select a flexibility product to meet a requirement based on a combination of certainty of exact requirement, FSP needs, and expected utilisation. We currently anticipate focusing on increasing procurement in our monthahead market, but we plan to extend into day-ahead markets in 2025/26. We expect the Application Programming Interface (API) capability of the ElectronConnect platform to be further developed to enable the success of a day-

 $<sup>20\ \</sup>underline{https://www.ssen.co.uk/globalassets/about-us/dso/flexibility-services/feedback-from-flexibility-service-providers-on-scotlands-islands-rfi\_external.pdf$ 



ahead market, which is still being progressed. For procurement completed closer to real time than month-ahead, we expect a utilisation-only service will be used.

### Variable Availability + Operational Utilisation - week-ahead

VAOU is used for longer-term EHV procurement (more than month-ahead) because the combination of Availability and Utilisation payments allows us to hold capability where it is needed but also to return capacity to the market when not required.

Most of our long-term procurement is for VAOU – week-ahead, which has month-ahead availability confirmation and week-ahead dispatch instructions. We expect to continue this in 2024/25.

In the long-term VAOU markets, the contractual commitment for delivery starts at the acceptance of the Availability Instruction. If an FSP declines an Availability Instruction, there are no penalties or contractual implications. Some of our FSPs have provided positive feedback on this approach, particularly emphasising the potential for FSPs to participate in these services prior to connection, allowing a revenue pipeline to build up. Aggregator FSPs have also highlighted that they may use accepted VAOU contracts to indicate areas to focus their recruitment efforts.

### Scheduled Availability + Operational Utilisation - day-ahead

Over the past year we have successfully introduced procurement at slightly under month-ahead (using an SAOU product), which is a market that opens after the Availability Instructions for the VAOU – month-ahead service have occurred. This allows us to procure additional volumes in areas that have been under-procured or where FSPs have been unable to fulfill Availability Instructions that have been contracted. We have also used this service this year to procure for areas where we have forecast flexibility requirements in the short-term where we do not have long-term contracts in place, such as Milnathort and Barvas. We are looking to expand the use of these markets over the next year. The variation we are using is day-ahead dispatch with availability confirmation at trade.

### **Scheduled Utilisation**

SU may be used in situations where market liquidity is very low to give clear price incentives for the volume to be dispatchable. In the February 2025 bidding round, we introduced the use of SU to allow management of small HV and LV CMZs, where the large number of CMZs make the individual dispatch decisions a potential barrier to scaling up these markets across the entire network.

We have implemented this approach based on learnings from other DSO's Flexibility Services and feedback from FSPs about the potential challenges of HV and LV procurement. Following initial dispatch of these services in Summer 2025 we will review this approach and gather more FSP feedback, but we expect to continue to procure SU services for HV and LV CMZs.

### **Operational Utilisation**

OU is used in situations where utilisation-only services are required due to the short-term nature of the requirements, but where we need to be able to dispatch services (unlike SU which is not dispatchable). An example of this is an outage requirement from the control room, where we do not know when we will need a service so must be able to dispatch at short notice in the event of a network fault occurring.

We recognise these services can be difficult for FSPs as the use of these is difficult to predict. To improve understanding with our FSPs procurement of these services in 2024/25 has been done with a 0 MWh forecast utilisation reflecting the potential limited use. Where OU services have been accepted the expected use or circumstances has been discuss with these FSPs following contract award. We will continue to build on feedback from FSPs about the best implementation of these services.



# 2B FLEXIBILITY PROCUREMENT PLANS

### 2B.1 Procurement Focus

Our procurement plans for this financial year 2025/26 focus on the following areas:

- 1. Continuing to increase the number of active FSPs. These are FSPs that have signed our overarching agreement and are either actively participating in Bidding Rounds or responding to dispatch instructions.
- 2. Mature our combined short- and long-term procurement for identified areas to maximise the volume of Flexibility Services procured to meet our network needs.
- Continue to develop our Local Flexibility Strategy and service procurement. Building on learning from the LV procurement completed in February 2025; Demand Diversification Service Trials and the LMA Interim Payment.
- 4. The procurement of services to reduce diesel reliance and increase network stability for our island communities.
- 5. Expansion of our procurement timescales to day-ahead markets.

### 2B.2 Procurement Timescales

In 2025/26 we will continue to hold long-term tenders at set points in the year as well as running monthly short-term markets. We will also this year be running season-ahead bidding rounds concurrent with our long-term bidding rounds. Long-term bidding refers to services where service delivery starts in more than 3-months' time, season-ahead requirements are usually for the coming season (1-3 months), and short-term bidding is for requirements at less than month-ahead (after availability confirmation for VAOU). The long-term and season-ahead bidding rounds will start in May, September 2025, and February 2026. Short-term bidding rounds are held monthly where there is a need the following month. In some cases, where there are a large number of season-ahead requirements for one season, these may be procured ahead of three months to avoid going out for a very large number of CMZs in one bidding round. For example, the season-ahead requirements for winter 2025/26 will be split between the May and September bidding rounds, despite the fact that May is slightly more than three months ahead of winter.

In 2025/26 we aim to trial procurement of Flexibility Services at day-ahead for the first time. Our ambition is to start this procurement in Autumn 2025 and we expect to be using an SU product. Prior to commencing these tenders, we intend to collaborate with FSPs to minimise the barriers to entry to such markets.

We will continue to provide opportunities for new participants in our markets with contracting periods, or minicompetitions. We will have at least three opportunities for new FSPs to join our markets in Spring 2025, Summer 2025, and Winter 2025/26. A timetable of our procurement activities can be found in Section 3.2.

# 2B.3 Requirements for Long-Term Bidding Rounds

In this section we will detail our upcoming requirements for long-term bidding rounds. These are mostly based on areas where we have identified a need for Flexibility Services through our DNOA process at EHV, with requirements in the next three years. The service we will be procuring for all CMZs identified through the EHV DNOA process will be VAOU – week-ahead.

In the event that control room requirements are identified, these will be procured during a long-term bidding round, but the service procured would normally be OU. For example, the February 2025 bidding round included primarily VAOU services, with some OU services that had been identified by our control room and outage planning teams.

Where there are multiple year requirements, each year will require a different bid, allowing FSPs to have different costs and volumes for different years. We are continuing to review the best approach for longer service windows,



as FSPs have indicated durations over 90 minutes can restrict participation. However, it may not be possible to always break these into smaller windows as this could result in shifting demand to another constrained time of day. These considerations may mean we break some requirements into smaller windows to maximise participation at the point of procurement.

Our expected tender requirements are subject to possible change as more detail becomes available. For example, as load forecasts evolve, our requirements may change in volume or in location. Additionally, in the event of the delay of a reinforcement, additional CMZs may be needed or requirements extended for existing CMZs. Finally, if a previous bidding round has not secured sufficient volume of responses for a certain CMZ, that CMZ may be included in another long-term bidding round. For these reasons the data in this section should be viewed as illustrative, signposting areas of planned future procurement, rather than definitive.

# 2B.3.1 May 2025 Bidding Round

The May 2025 bidding round features primarily EHV DNOA requirements that are forecast in the next two financial years. Table 2 breaks down the VAOU – week-ahead requirements in the May 2025 bidding round per region. Each row represents one year of requirements.

In the May 2025 bidding round, we will also procure for any CMZs that have previously been tendered for and are identified as having a shortfall in volume. These requirements will be added to the tender requirements following the results from the February tender. CMZs with under-procurement that have requirements in the year 2025/26 will be procured for in the May bidding round. Under-procured CMZs with later requirements will go into the September 2025 bidding round.

All the constraints in this bidding round are Generation Turn-Up (GTU) or Demand Turn-Down (DTD) thermal constraints.

CMZ Name	Licence Area	Peak Capacity Required (MW) <sup>21</sup>	Forecast Utilisation (MWh)	Voltage Level Flexibility Procured at (kV) <sup>22</sup>	Service Year	Service Window(s)
Birdham	SEPD	0.23	0.60	11	27/28	Winter: 14:30-16:30
Chalvey	SEPD	5.92	52.35	11	27/28	Winter: 14:00-20:30
Chichester	SEPD	1.15	3.90	11	27/28	Winter: 16:30-19:00
Egham	SEPD	0.34	0.90	11	27/28	Winter: 17:00-19:00

<sup>21</sup> Where there is more than one service window for a CMZ, these service windows will have differing capacities. The Peak Capacity Required (MW) is the capacity of only the greatest requirement. All planned tenders are for active power services so capacities are in MW and no MVAr capacities are given.

<sup>22</sup> The voltage level represents the highest voltage level an asset may be connected to in order to participate.



Horndean	SEPD	0.68	0.95	33	27/28	Winter: 17:00-18:00
Portsmouth	SEPD	0.36	0.24	33	25/26	Winter: 17:00-17:30
Ashgrove	SHEPD	1.06	7.25	33	27/28	Winter: 15:30-18:30
Ashludie	SHEPD	0.71	3.25	11	26/27	Winter: 16:30-18:30
Banchory	SHEPD	0.79	4.50	11	26/27	Winter: 16:00-18:30
Banchory	SHEPD	1.57	16.10	11	27/28	Winter: 15:00-19:30
Burghead	SHEPD	0.13	0.30	11	27/28	Winter: 17:00-18:00
Drumrunie	SHEPD	0.01	0.05	11	27/28	Winter: 16:30-18:30
Drymen + Kepculloch	SHEPD	0.46	1.05	33	27/28	Winter: 17:30-18:30
Dufftown	SHEPD	0.33	1.15	33	27/28	Winter: 07:30-09:00
Forres Scheme 2	SHEPD	1.25	6.00	33	26/27	Winter: 15:00-16:00 17:00-19:00
Forres Scheme 2	SHEPD	3.13	53.55	33	27/28	Winter: 08:00-11:30
						14:00-20:00
Forres Scheme 3	SHEPD	0.04	0.10	11	26/27	Winter: 17:00-18:00
Forres Scheme 3	SHEPD	1.64	15.00	11	27/28	Winter: 15:00-19:00



Kepculloch	SHEPD	0.30	1.05	11	26/27	Winter:
						08:00-08:30
						17:00-18:30
Kepculloch	SHEPD	0.76	8.15	11	27/28	Winter:
						08:00-08:30
						15:00-19:30
Newtonhill	SHEPD	0.18	0.20	11	27/28	Winter:
						17:30-18:00
Nostie Bridge	SHEPD	0.15	0.50	11	27/28	Winter:
						17:00-18:30
Oldmeldrum	SHEPD	0.19	0.65	11	27/28	Winter:
						16:30-18:00
Raigmore	SHEPD	0.55	9.40	11	27/28	Winter:
						08:30-14:30
						15:00-15:30
						Spring:
						09:00-11:30
						12:00-13:00 Autumn:
						09:00-11:30
						12:00-13:00

Table 2: May 2025 bidding round anticipated flexibility requirements for VAOU – week-ahead response services.

# 2B.3.2 September 2025 Bidding Round

This procurement round primarily focuses on CMZs with earlier start dates that were not fully procured for in previous tenders, with requirements from 2026/27 onwards. The CMZs that will be tendered for and the volumes will be determined by the responses received to the May 2025 bidding round, so this information will not be available until prior to the September bidding round. When the requirements for this bidding round have been finalised, these will be advertised on our website and on ElectronConnect. This allows those who did not have overarching agreements at the time of the first tender to participate, and allows any FSPs who have recruited new assets between bidding rounds to extend their capacity for service provision.

# 2B.3.3 February 2026 Bidding Round

Table 3 shows the planned tender request volumes and locations for the February 2026 long-term bidding round. Some CMZs have been identified where flexibility procurement will be needed in the February 2026 long-term bidding round, but the requirements analysis is still ongoing. These CMZs have been indicated in Table 4



Currently all requirements within Table 3 are GTU or DTD thermal constraints and we expect we will be procuring the VAOU – week-ahead response service.

This procurement round primarily focuses on network needs that start in 2028/29, although it may also include CMZs with earlier start dates that were not fully procured for in previous tenders.

This biding round is also where additional requirements from our Outage Planning and Control Room teams are most likely to be included. These requirements typically become available as the year-ahead planning process provides visibility of expected Transmission and Distribution outages that may require Flexibility Services.

CMZ Name	Licence Area	Peak Capacity Required (MW)	Forecast Utilisation (MWh)	Voltage Level Flexibility Procured at (kV)	Service Year	Service Window(s)
Birdham	SEPD	0.58	1.60	11	28/29	Winter: 14:30-16:30
Chapel	SEPD	0.07	0.05	6	28/29	Winter: 14:30-15:00
Egham	SEPD	1.68	7.70	11	28/29	Winter: 16:30-19:30 March: 17:30-18:30 April: 17:30-18:30 Autumn: 17:30-18:30
Emsworth	SEPD	0.51	0.70	11	28/29	Winter: 17:30-18:30
Fort Widley	SEPD	1.84	3.75	33	28/29	Winter: 17:00-18:30
Horndean	SEPD	1.97	7.80	33	28/29	Winter: 16:30-18:30 March: 18:00-19:00 April: 18:00-19:00 Autumn: 18:00-19:00
Netherhampton	SEPD	0.39	1.30	33	28/29	Winter: 17:30-19:30 March: 18:30-19:30 April:



						18:30-19:30 Autumn: 18:30-19:30
Petersfinger	SEPD	2.67	30.45	33	28/29	Winter: 07:00-10:30 15:00-21:00 March: 17:30-19:00 April: 17:30-19:00 Autumn: 17:30-19:00
Rownhams – North Baddesley	SEPD	0.70	1.45	33	28/29	Winter: 17:00-18:30
Springfield Road	SEPD	1.79	18.35	11	28/29	March: 15:30-20:00 April: 15:30-20:00 Autumn: 15:30-20:00
Wallingford	SEPD	0.45	1.20	11	28/29	Winter: 17:00-19:00
Weston	SEPD	4.15	34.70	11	28/29	Winter: 16:30-21:30 March: 17:00-19:30 April: 17:00-19:30 Autumn: 17:00-19:30
Portsmouth	SEPD	14.19	86.86	33	28/29	Winter: 15:00 – 19:30
Ashgrove	SHEPD	2.47	34.00	33	28/29	Winter: 08:00-09:00 14:00-20:00
Banchory	SHEPD	2.29	33.95	11	28/29	Winter: 14:00-20:30



Drumrunie	SHEPD	0.02	0.15	11	28/29	Winter: 15:00-19:00
						15:00-19:00
Dufftown	SHEPD	-	-	33	28/29	-
Forres Scheme 2	SHEPD	5.36	197.9	33	28/29	Winter: 07:00-22:00 Spring: 07:30-10:00 16:00-19:30 Autumn: 07:30-10:00 16:00-19:30
Forres Scheme 3	SHEPD	3.53	68.10	11	28/29	Winter: 07:30-12:00 14:00-20:30
Newtonhill	SHEPD	1.16	6.60	11	28/29	Winter: 16:30-19:00
Nostie Bridge	SHEPD	0.45	3.85	11	28/29	Winter: 16:30-20:00 Spring: 18:00-19:00 Autumn: 18:00-19:00
Oldmeldrum	SHEPD	0.64	5.80	11	28/29	Winter: 15:00-19:00
Raigmore	SHEPD	1.13	34.00	11	28/29	Winter: 08:00-17:30 Spring: 08:30-13:30 Autumn: 08:30-13:30
Tressady	SHEPD	0.03	0.15	11	28/29	Winter: 15:00-15:30 16:30-18:30

Table 3: February 2026 bidding round anticipated flexibility requirements for VAOU – week-ahead response services.

CMZ Name	Licence Area	Year
Dufftown	SHEPD	28/29



Fareham	SEPD	-

Table 4: CMZs identified for inclusion in February 2026 bidding round with capacity and service window analysis ongoing. Exact requirements will be published closer to time of tender.

# 2B.4 Requirements for Season-Ahead Bidding Rounds

We have assessed the HV and LV network within our licence areas through our DNOA methodology and so far, we have identified 462 areas in SHEPD and 1367 areas in SEPD which are eligible for local flexibility. According to FSP feedback and considering the capabilities of our existing systems, a utilisation-only service is preferred for a product with so many CMZs. This is because the requirement for each area is a relatively small volume, resulting in each area individually being reasonably low value to the FSP. A utilisation-only approach therefore avoids the high volume of dispatch instructions that would otherwise need to be sent and processed by FSPs. For this reason, in 2024/25 we decided to procure SU to meet these requirements. We tendered for our first round of SU products for HV/LV CMZs in February 2024. The market liquidity for such small CMZs is expected to be quite low, so we have elected to procure a season-ahead service. This is because we still want to be able to procure again at month-ahead where we have not met our capacity, but on the other hand we do not want to procure at long-term timescales because the degree of certainty over load-growth scenarios in small network areas is much lower than over large network areas where aggregation and diversification increase certainty.

We identified 73 HV/LV CMZs with requirements in winter 2025/26. Ordinarily, these would all be procured at season-ahead (between one and three months ahead of delivery), however due to the high number of CMZs and in light of this being a relatively new process, we have elected to split the procurement for these CMZs over two bidding rounds to reduce the administrative burden on FSPs of having to bid in so many CMZs simultaneously. Therefore, some of these winter season-ahead requirements will be captured in the May bidding round, with the rest included in September.

In the May bidding round, we plan to procure flexibility for 10 CMZs in the SHEPD area, with a summed total peak capacity of 0.21 MW. Similarly, we plan to procure flexibility for 27 CMZs in the SEPD area, with a total capacity of 0.52 MW.

The exact requirements and list of CMZs for SEPD and SHEPD will be made available on our website and on our ElectronConnect platform prior to the season-ahead bidding rounds in May, September, and January. A summary of the number of CMZs and the capacities we are seeking by GSP is provided in the below tables.

Grid Supply Point Name	Licence Area	Number of LV CMZs	Total Capacity (MW)	Forecast Utilisation (MWh)
Arboarth	SHEPD	1	0.014	0.032
Craigiebuckler	SHEPD	1	0.013	0.075
Kintore	SHEPD	3	0.089	0.495
Lyndhurst	SHEPD	1	0.034	0.194
Nairn	SHEPD	1	0.020	0.068
Peterhead Grange	SHEPD	1	0.013	0.074



Stronoway	SHEPD	1	0.011	0.053
Willowdale	SHEPD	1	0.020	0.093
Bramley	SEPD	1	0.015	0.042
Cowley	SEPD	8	0.140	0.473
East Claydon	SEPD	1	0.033	0.181
Fleet	SEPD	3	0.045	0.136
Lovedean	SEPD	3	0.048	0.155
Mannington	SEPD	1	0.032	0.153
Melksham	SEPD	5	0.080	0.231
Minety	SEPD	2	0.054	0.257
Nursling	SEPD	3	0.072	0.053

Table 5: Summary of local flexibility CMZs planned for the May bidding round, by GSP.

Grid Supply Point Name	Licence Area	Number of LV CMZs	Total Capacity (MW)	Forecast Utilisation (MWh)
Carradale	SHEPD	1	0.027	0.187
Charleston	SHEPD	1	0.019	0.111
Inverness	SHEPD	1	0.011	0.026
Keith	SHEPD	1	0.011	0.013
Kintore	SHEPD	4	0.060	0.307
Persley	SHEPD	2	0.030	0.165
Redmoss	SHEPD	1	0.031	0.214
Woodhill	SHEPD	1	0.019	0.136
Amersham	SEPD	2	0.049	0.201
Axminister	SEPD	1	0.020	0.083
Botleywood	SEPD	1	0.013	0.055
Bramley	SEPD	2	0.033	0.127
Cowley	SEPD	1	0.019	0.078
Ealing	SEPD	1	0.032	0.131
East Claydon	SEPD	1	0.024	0.132



Fawley	SEPD	1	0.020	0.084
Fleet	SEPD	4	0.065	0.283
Lovedean	SEPD	1	0.015	0.041
Mannington	SEPD	4	0.085	0.316
Melksham	SEPD	3	0.043	0.158
Minety	SEPD	1	0.013	0.053
Nursling	SEPD	1	0.025	0.105

Table 6: Summary of local flexibility CMZs planned for the September bidding round, by GSP.

# 2B.5 Requirements for Short-Term Bidding Rounds

Following the move to overarching agreements in 2023, we are now able to host bidding rounds at shorter notice for FSPs with whom we have an existing agreement when network requirements are identified. Short-term bidding rounds are currently held at three weeks ahead and are for SAOU – day-ahead response services. We use these bidding rounds to fulfil areas where we did not procure enough flexibility to meet our requirements in previous bidding rounds, to support FSP unavailability, or to match updated forecasts which are higher than previously expected. More information on our operational decision-making process is available in Section 2B.8.

In September 2024, we conducted our first SAOU – day-ahead response bidding round as planned, to procure additional flexibility capacity in the Stokenchurch and Alderton CMZs. In 2025/26, we intend to keep procuring SAOU day-ahead response services as needed.

Table 7 shows the expected short-term requirements for SAOU – day-ahead response services for 2025/26 delivery that are currently known. All requirements are for GTU or DTD response and all constraints are thermal. The expected short-term bidding round requirements will be reviewed and assessed every month before the biding round starts, depending on the updated forecast, network capacity, and accepted VAOU – week-ahead contracts. The requirements are subject to change, and the full detail of the exact requirements will be found on ElectronConnect and our website the week before bidding opens. More areas may be added as we gain more understanding about the forecast and FSPs capability to deliver in CMZs that will be newly dispatched this year. The forecast utilisation in the table includes the current expected utilisation for the total CMZ, some of which will be dispatched from already procured VAOU – week-ahead contracts.

It is possible that short-term bidding rounds will not be run where there is no requirement for flexibility capacity identified. We are currently anticipating this will occur in May, June, July and August. Lower network loadings during the summer months cause this pattern.

CMZ Name	Licence Area	Peak Additional Capacity (MW)	Forecast Utilisation (MWh) <sup>23</sup>	Months for Delivery of Service	Expected Service Window
Alderton	SEPD	0.03	0.85	April	08:00-09:00
Alderton	SEPD	0.29	18.25	April	17:00-20:00
Stokenchurch	SEPD	0.74	62	April	17:00-20:00

<sup>23</sup> The forecast utilisation is for the whole CMZ and not for this smaller SAOU requirement. exact utilisation will depend on price between FSPs.



Faringdon	SEPD	0.2	14.9	September	17:30-20:00
Stokenchurch	SEPD	0.74	66.4	September	17:30-20:30
Alderton	SEPD	0.4	60	September	15:30-20:30
Faringdon	SEPD	0.2	14.9	October	17:30-20:00
Stokenchurch	SEPD	0.74	66.4	October	17:30-20:30
Alderton	SEPD	0.4	60	October	15:30-20:30
Faringdon	SEPD	0.2	14.9	November	17:30-20:00
Stokenchurch	SEPD	0.74	66.4	November	17:30-20:30
Alderton	SEPD	0.4	60	November	15:30-20:30
Barvas	SHEPD	0.13	3.9	November	17:00-18:00
Milnathort	SHEPD	1.35	80	November	16:30-20:30
Barvas	SHEPD	0.13	3.9	December	17:00-18:00
Milnathort	SHEPD	1.35	80	December	16:30-20:30
Barvas	SHEPD	0.13	3.9	January	17:00-18:00
Milnathort	SHEPD	1.35	80	January	16:30-20:30
Barvas	SHEPD	0.13	3.9	February	17:00-18:00
Milnathort	SHEPD	1.35	80	February	16:30-20:30
Barvas	SHEPD	0.13	3.9	March	17:00-18:00
Milnathort	SHEPD	1.35	80	March	16:30-20:30
Faringdon	SEPD	0.2	14.9	March	17:30-20:00
Stokenchurch	SEPD	0.74	66.4	March	17:30-20:30
Alderton	SEPD	0.4	60	March	15:30-20:30

Table 7: Expected short-term bidding requirements for SAOU – day-ahead response services for 2025/26 delivery.

# 2B.6 Requirements for Day-Ahead Bidding Rounds

We have indicated we intend to trial day-ahead bidding rounds in 2025/26. We expect this will be a utilisation product, most likely Scheduled Utilisation, but we continue to engage with FSPs on what they feel will be most accessible. As we develop this service, we will initially use the same approach to what we have under-taken with the successful introduction of short-term bidding rounds in 2024/25 and will look to procure areas we have under-procured previously or where FSPs indicate unplanned unavailability.

Therefore Table 7 includes a list of the areas we may initially investigate for day-ahead bidding. This will be dependent on the providers we have participating in the service and any volume we have unprocured.



# 2B.7 Other Procurement Activity

There is additional procurement activity anticipated to occur throughout the year that will be different to our usual processes and involve different Flexibility Services.

# 2B.7.1 LMA Interim Payment

As described in Section 2A.3.2, we have introduced a temporary service to support the transition to alternatives to the RTS in SHEPD. To help protect the network from the adverse effects of sudden convergence in previously automated demand schedules, we believe this specialised SU-style service is critical because these solutions are primarily deployed in areas where we have historically struggled to procure other Flexibility Services. Rental housing, housing association, and council housing are all overrepresented in LMAs and our aim is for the interim payment to provide a path for these homes to transition to other types of Flexibility Services. We have collaborated with several teams within Ofgem, including the Smart Metering team, to ensure the messaging around RTS functionality being decommissioned is consistent and clear.

Following initial procurement of this service, we will run a second procurement activity to maximise the participation opportunity. We expect to run this procurement exercise in June and July 2025.

### 2B.7.2 Demand Diversification Service

We will be running field trials from April until August 2025 for the two possible designs for a Demand Diversification Service that we have identified. Following the trials, we will determine which service(s) we intend to implement to support the evolution of our existing LMAs. LMAs are an arrangement for managing controllable loads to prevent the LV network overloading. Originating in the 1980s as an alternative to traditional reinforcement, LMAs are used in our SHEPD licence area and impact approximately 80,000 customers. They rely on RTS to manage switching loads like electric storage heaters, according to an LMA schedule. This controlled diversification has successfully allowed us to spread the use of high energy storage heaters whilst still ensuring domestic customers had access to the lowest possible tariff.

Following the maturity of Flexibility Service markets and increased interaction from suppliers and behind-the-meter aggregators, we have started investigating how this mandated requirement can be evolved into a commercial, market-driven structure allowing the benefits of flexibility to be returned to those providing the services. Two potential commercial mechanisms have been developed with the support and contribution of industry stakeholders; Allocated Capacity and Dynamic Congestion Response. More information about the two services including detailed service design can be found on our website<sup>24</sup>.

Where possible, the Flexibility Services procurement process will be followed to reduce the variation from our business-as-usual process. We will be using the standard FSA from the ENA as a basis for the specific LMA services. For the trials in 2025, these services will be procured through separate tender to our current Flexibility Services to ensure any trial-specific obligations are captured appropriately. Our pre-qualification process opened in December 2024 to help enable the commencement of field trials in March 2025<sup>25</sup>. This trial is an innovation project funded by NIA rather than a business-as-usual process.

# 2B.7.3 Unique Network Areas

Western Isles Stability Service

<sup>24</sup> The Future of Load Managed Areas - SSEN

<sup>25</sup> The Future of Load Managed Areas - SSEN



In March 2025, SSEN launched a new tender process for a novel DSO stability service in the Western Isles. The need for this service is driven by outages where the subsea cable connecting the islands to the main transmission system is unavailable. In this scenario, intermittent renewable generation on the islands has in the past needed to be curtailed in favour of large-scale thermal generation which offers more network stability. The provision of a Flexibility Service on the Western Isles by an FSP which is able to change its output quickly to match local demands and intermittent generation would allow renewables such as wind generation back onto the network.

This service can therefore reduce reliance on ageing diesel generators, maintain operation of the network if an element is lost, and increase the integration of renewable generation, with significant predicted benefits in terms of both cost and decarbonisation. The aim of this tender is to secure a contract by summer 2025.

Given this is not an ENA standard service, it does not fit in with the typical procurement process. It also differs from other Flexibility Services in that we are looking for a multi-year contract with a single provider. As a result, we are conducting this tender on a different platform using an Open Procedure tender to identify suitable service providers. We intend to use as much of the standard contract as possible for the contractual arrangements. The tender is currently active and, once it closes, it is expected to take three to six months to work with respondents to make technical clarifications.

### **Shetland Enduring Solution**

Shetland has historically been run by SSEN Distribution as a completely islanded network, operated by Lerwick power station. In conjunction with SSEN Transmission, we aim to connect Shetland's distribution network to the GB electricity system for the first time. This will substantially reduce reliance on diesel generation from Lerwick power station. However, a solution is required to ensure security of supply to Shetland in the event of an outage of the transmission network. This solution will run as a generation turn-up Flexibility Service which can meet demand on Shetland for up to 45 minutes until the standby Lerwick power station is running.

Since this service requires an FSP that can maintain the islanded network during outage conditions, the technical requirements are highly bespoke. Hence, it is not suitable for a standard ENA product. Instead, we have tendered for the standby solution as a service which we expect to be live in 2026. More information about the options considered and the solution developed is available in our Shetland Enduring Solution re-opener application<sup>26</sup>.

### 2B.7.4 Contract Extension

We have several contracts that are one year in length with options for extensions for up to four years. We expect to continue to extend these contracts in specific areas and will aim to run new tenders when these contracts expire. The contracts we expect to extend are listed in Table 8.

CMZ Name	Licence Area	Services	Type of Response (GTU/DTD or GTD/DTU)	Flexibility Service Provider	Max Total Contracted Capacity (MW)	Contract Expiry Date	Contract Details
Islay	SHEPD	Secure	GTU/DTD	Inver Hydro	1.95		4 x 1 year Contract Signature: 1/11/22
Islay	SHEPD	Dynamic	GTU/DTD	Inver Hydro	1.95	1	4 x 1 year Contract Signature: 1/11/22
Islay	SHEPD	Restore	GTU/DTD	Inver Hydro	1.95		4 x 1 year Contract Signature: 1/11/22

<sup>26</sup> Microsoft Word - Shetland Enduring Solution - Reopener Submission\_REDACTED



Logie	SHEPD	Sustain	GTD	Tullo	17	24/12/25	4 years from
Pert				Windfarm			Contract start date
				Limited			(24/12/21): 1-year
							optional extension
							period

Table 8: List of contracts that may be extended in 2025/26.

# 2B.7.5 Local Energy Markets Alliance (LEMA)

We are a founding member of the Local Energy Markets Alliance (LEMA)<sup>27</sup>. LEMA aims to bring together organisations to develop commercial, market-based solutions to increase the implementation of local energy initiatives. The alliance aims to progress beyond innovation projects into regular, sustainable activity.

Our work with LEMA on flexibility markets is looking at market growth opportunities, particularly focusing on developing a Flexibility Service called the Community Smart Access option. This product will help to accelerate new local electricity demands, such as low-carbon housing developments, while longer-term reinforcements take place. We aim to investigate how we can use the existing Flexibility Service products in a different way to reduce barriers to participation. An approach like this will encourage up-take of LCTs such as electric vehicles, solar panels, and heat pumps, while also enabling faster connection times through promoting high efficiency, flexibility-ready housing.

We are continuing to explore how this would be procured, including routes such as via our market platform or as a response to a connection request from an appropriate provider. This work is being done in collaboration with LEMA as collaborative body who can challenge us on new approaches. We aim to finalise the service design for this and begin looking for opportunities to deploy the service in 2025/26.

# 2B.8 Dispatch

Once Flexibility Services have been procured, the next stage is scheduling availability, and then the eventual instruction of utilisation. At every stage, updated forecasts and data are used to predict the best way to mitigate any constraints within the contractual arrangements we have in place and to minimise costs for our customers. Simplicity in our scheduling and dispatch systems and transparency in our decision-making are very important to ensure that the services are accessible and fair for all FSPs. This section details the mechanisms we use for scheduling and dispatch of existing Flexibility Service contracts, and how we make these decisions.

# 2B.8.1 Scheduling and Dispatch Mechanism

Scheduling means the issuing of availability instructions (where applicable) or securing SU contracts. Dispatch means the issuing of utilisation instructions. We have the functionality to schedule and dispatch services either by phone, email, or API to allow for instant communication from ourselves to the FSPs. Figure 5 shows the process and options for scheduling and dispatching flexibility that we utilise.

<sup>27</sup> Local Energy Markets Alliance - Commercial Market Solutions | Local Energy Markets Alliance (LEMA)



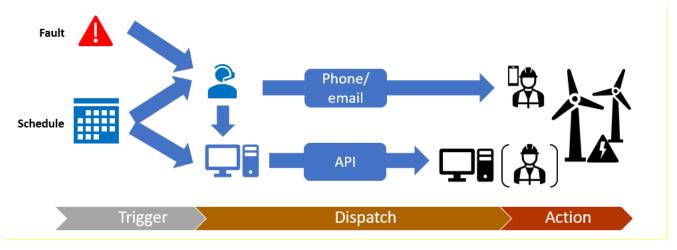


Figure 5: Scheduling and dispatch mechanism.

Phone, email, and API are all currently used to allow us to involve as many distinct types of FSP as possible. Over time our aim is to transfer as many FSPs as possible to API dispatch, which is currently done through the Flexible Power platform. We endeavour to include as many FSPs as possible in our services, and have therefore maintained the option for manual dispatch for most services in response to FSP feedback. However, we do require FSPs to be registered on Flexible Power to receive API utilisation instructions for SAOU day-ahead services. This is due to the short dispatch timescales for this service and the volume of utilisation instructions required to manage these contracts at short timescales. Currently VAOU day-ahead and OU can only be dispatched manually and not via Flexible Power, however these are subject to change in future.

We will schedule Flexibility Services at varying timescales depending on the service and need as described in Table 9. Note that legacy services are included in this table due to the fact that where we have existing contracts in place which predate ENA standards, we have elected to continue dispatching these services in respect of the FSPs diligence in engaging with our processes.

Service	Availability Refinement	Period Covered by Availability Refinement	Utilisation Instruction	Period Covered by Utilisation Instruction
Legacy Sustain	Not Applicable	Not Applicable	1 month	1 season
Legacy Secure (forecast- based)	5 weeks	1 month	3 days	1 week
Legacy Dynamic	At least 5 days	Variable	At least 15 mins	1 day
Legacy Restore	Not Applicable	Not Applicable	At least 15 mins	1 day
Scheduled Availability + Operational Utilisation – day-ahead	2 weeks	4 or 5 weeks	1 day	1 day



Variable Availability + Operational Utilisation – week-ahead	5 weeks	4 or 5 weeks	3 days	1 week
Scheduled Utilisation	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Operational Utilisation	Not Applicable	Not Applicable	2 mins	1 day

Table 9: Scheduling times by Flexibility Service type.

# 2B.8.2 Dispatch Decision-Making Framework

Every year, we publish a document called the Operational Decision-Making (ODM) framework. This explains how decisions on the dispatch of Flexibility Services are made, and how we mitigate the flexibility shortfall risks. Flexibility shortfall occurs when there is not enough volume of flexibility services available to meet our network requirements. Appendix 3 includes a diagram of the detailed steps taken when assessing capacity at month-ahead and day-ahead and outlines the shortfall risk management procedure. In 2025/26, we will continue publish the Seasonal Operability Reports which explain how we have applied our decision-making process to actual network events and demonstrate the key performance indicators regarding to flexibility services scheduling.

In July 2024, we hosted a webinar to update stakeholders on the latest developments in ODM. For the first time, we outlined our approach to managing flexibility shortfalls, including potential risks and mitigation strategies. In November 2024, following stakeholder feedback, we published our updated draft ODM document<sup>28</sup>. This draft went out for consultation and our updated version was released in March<sup>29</sup>.

# 2B.8.3 Managing Shortfall Risk

Managing the risk of flexibility shortfall is critical to the safe and secure operation of the network. Flexibility shortfall can occur for a number of reasons, including but not limited to: FSPs declaring unavailability, delays to reinforcement works, under-procurement, short-term demand forecasts higher than original predictions, and unavailability of FSPs due to network outages.

Once a shortfall event has been identified, a flexibility shortfall risk assessment is completed which assesses the likelihood of network overloading and the potential impact on the network. There are a range of risk mitigation options that we can use to manage the flexibility shortfall risk, and we will select the most appropriate mitigation action, or combination of mitigation actions based on the results of the risk assessment. The potential risk mitigation actions include but are not limited to: procuring additional services, accelerating construction, utilising mobile diesel generation, adding thermal protection and network reconfiguration.

If a shortfall occurs during a service dispatch period in real time, e.g. FSPs fail to deliver the requested services, we may take a short-term mitigation method by reconfiguring the impacted network. Our control room engineers will transfer load from the constrained network area to the adjacent network area. Post-event the FSPs reliability score will be updated to reflect their failure to deliver the dispatched service in real time.

# 2B.8.4 Decision Principles

Figure 6 shows the decision principles and the hierarchy of these principles that we apply. Where there is a choice between FSPs (i.e. where the procured capacity is greater than the required capacity for a particular day), FSPs are assessed and dispatched based on a calculated weighting. The current process followed is:

1. Each zone-provider-service is scored on the following criteria:

<sup>28</sup> operational-decision-making-framework---november-2024-update.pdf

<sup>29</sup> ssen-dso-odm-framework-update-march-25.pdf

- a. Price compared to other services.
- b. CO<sub>2</sub> emissions.
- c. Prior delivery performance (on first use this is set to 100%).
- 2. A starting assumption of availability is made based on the contracted capacity:
  - a. Where an FSP's contracted capacity exceeds the monthly requirement, the starting assumption is set to the required capacity.
- 3. Each FSP's assumed capacity is then adjusted based on the relative scores of FSPs in the CMZ.
- 4. The required capacity is divided pro-rata, based on the adjusted capacities.

The score assigned in step 1 is determined by weighted scores assigned to cost (50%), reliability (25%) and carbon impact (25%). The resulting weighting factor is a single number ranging from 0-1. Where there is more than one FSP available to dispatch, the weighted score is used to determine the proportion of dispatch across all FSPs. The cost score is based on a ratio between the FSPs price, and the highest price contracted for the specific location. The reliability score is reviewed annually for each FSP and is a ratio of the requested utilisation vs delivered utilisation (any over-delivery is capped at 1). If the dispatch of the FSP results in a reduction in carbon it is scored 1, if it increases carbon, it scores 0.

# 2B.8.5 Future Improvements to Dispatch Decision-Making

In 2025/26, we plan to develop an automatic decision-making algorithm to determine a merit order stack used for availability acceptance and utilisation dispatch decisions. These decisions are needed where there is more capacity on offer than is required. The new merit order stack will be calculated for each service period in the requirements, and will be based on the following scoring criteria:

- 1. Reliability.
- 2. Diversity (maximising the number of different FSPs to de-risk failure to deliver).
- 3. Lowest price.

The highest-scoring dispatch group will be dispatched first, continuing until our predefined requirements are met. The merit order stack algorithm is planned to be implemented in Flexible Power to automate the decision-making process on availability acceptance and utilisation dispatch. This process will allow the maximum number of FSPs to be dispatched and will ensure that FSPs with dominance in a certain area do not control the price in a CMZ. It also reduces the risk of single FSP failure and spreads the benefits of Flexibility Services, thereby supporting a liquid market. Additionally, the automated decision-making algorithm could support flexibility market in scaling, enabling us to make operational decisions within a short timeframe. Once the new algorithm is completed, it will

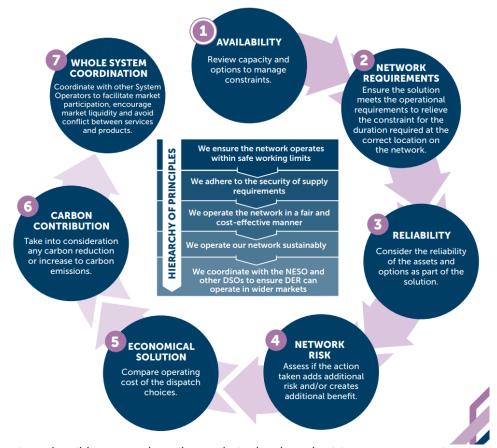
replace the existing scoring methodology. The detailed information about the upcoming auto-decision approach will be included into the latest ODM document<sup>31</sup>.

Figure 6: Operational principles from our ODM<sup>30</sup>.

<sup>30</sup> ssen-dso-odm-framework-update-march-25.pdf

<sup>31</sup>ssen-dso-odm-framework-update-march-25.pdf





We will continue to review this approach as the markets develop, short-term procurement matures, new services product, and more FSPs enter the market. This review will form part of our review, consultation, and development of the dispatch framework, in accordance with the guiding principles of network security, cost effectiveness, and market support.

# 3 TENDERING PROCESS

This section details the process we follow for procuring Flexibility Services. It explains how potential FSPs can participate in our tendering process. This section also includes developments and changes that we anticipate in our processes over the coming year, particularly with implementation of the standardisation recommendations from new market facilitator, Elexon, and the continuous development of our new market platform. There is finally a section covering the approach to pricing in Flexibility Services.

This process has been used successfully throughout 2024/25 for all our Flexibility Services procurement, and in response to positive FSP feedback on our processes we will be continuing to use these mechanisms for the majority of our Flexibility Services going forwards. However, there may be occasions to deviate from these processes for the procurement of non-standard services where the existing procurement processes cannot be used due to not meeting the technical or contractual requirements for these non-standard services. Examples such as the Demand Diversification Service, stability services, and LEMA are described in Section 2B.7. The procurement approach and platform for these are advertised and communicated on initiating procurement.

### 3.1 Flexibility Processes

Section 2A and 5 outline the process for how requirements for Flexibility Services are identified and a decision made to procure flexibility. Following this there are a series of procurement and dispatch processes that are performed using specific systems. This section outlines our current flexibility procurement process. This process will continue to evolve as elements of our new market platform develop.

Mini-competitions and bidding rounds will be advertised online on our Flexibility Services website<sup>32</sup> and communicated to all those registered on ElectronConnect. Social media, the DSO Newsletter, and webinars will continue to be used to advertise procurement. All eligible FSPs with existing overarching agreements will be contacted directly via phone call and email prior to any bidding rounds.

Appendix 4 shows the calendar of events until March 2026.

#### 3.1.1 Procurement Process

SSEN Distribution considers the procurement of Flexibility Services to be regulated under the Utilities Contract Regulations 2016 / Utilities Contract (Scotland) Regulations 2016 and, as such, procurement is directly managed by SSEN's procurement team to ensure compliance, non-discrimination, fairness, and transparency. Since introducing overarching agreements, we have separated the contract award and pricing activity, allowing contracting to be completed only once.

Figure 7 shows the process FSPs are currently following.

<sup>32</sup> Flexibility Services Procurement - SSEN



Figure 7: Process for participating in Flexibility Services.

#### 3.1.1 Registration on ElectronConnect

Prospective FSPs should register on the ElectronConnect platform<sup>33</sup> in order to participate in our Flexibility Services. Information on eligibility prior to registration can be found on Electron's help and support pages<sup>34</sup>. To register you must provide details regarding your organisation and this information will be verified by the ElectronConnect support team before access to the platform is granted. Once registered, FSPs will receive updates on upcoming bidding rounds and mini-competitions by email. Registration is open on the ElectronConnect platform at any time, so there is no deadline for this part of the process to be completed.

#### 3.1.2 Pre-Qualification

Businesses can simply register and complete the PQQ on our ElectronConnect market platform. The PQQ has been updated in 2024 to align with the new ENA standard.

FSPs must have submitted their completed PQQ on ElectronConnect. This will then be evaluated and accepted or declined by us, in line with the ENA standard PQQ guidance and within 10 working days. Pre-qualification is always open on the platform, however, FSPs are encouraged to submit their PQQ at least 10 working days before mini-competition opens to allow time for us to assess their responses. Submission in shorter timescales before a mini-competition will be reviewed on a best endeavors basis. Any FSP who submits a PQQ that is declined will be provided with feedback on their submission and is free to resubmit at any time.

#### 3.1.3 Contracting

The contracting phase is also known as a mini-competition and is held on the ElectronConnect market platform. During a mini-competition, the FSP must respond and confirm acceptance of the overarching agreement Terms

<sup>33</sup> ElectronConnect

<sup>34</sup> Electron Public - Eligibility



and Conditions and highlight any concerns over the Service Terms. The overarching agreement used is the V3 standard contract agreed upon by the ENA. Over the last year we have signed 16 companies with no deviations to these standards. We will continue to work with providers over the next year to allow them to sign the contract and gather their feedback for improvements to feed into the Market Facilitator for improvements. The service terms include details on all the services we use, so FSPs only need to sign the Overarching Agreement once for all services.

Following the mini-competition the overarching agreement is issued for signature. Once the overarching agreement is signed, an FSP can participate in any future bidding round.

#### 3.1.4 Bidding rounds

Bidding rounds for both long-term and short-term Flexibility Services are now opened and operated through our market platform, ElectronConnect. The bidding round is the point at which the FSP can submit pricing and volume information in response to our request for a specific service in a specific CMZ, at a certain time. The timeline showing when we will be holding bidding rounds over the next year is in Appendix 4 and the intended requirements for each bidding round at the time of writing are presented in Section 2B.

The requirements for the bidding rounds are published on the ElectronConnect platform and on our website before bidding commences. They provide details about the CMZs where we have constraints, the product(s) we want to procure, the capacity that we want to procure, and the seasons and year that the capacity is required. We also provide some pricing information as detailed in Section 3.4.

#### 3.1.5 Bid Evaluation

Once a bidding round has ended, the responses are evaluated and successful FSPs will then be notified by the ElectronConnect platform. FSPs will also receive a 'call off result notification letter' by email. This will detail all accepted bids, and all rejected bids with a rejection reason code (this can be rejected cost, insufficient capacity, or not technical viability). All FSPs will also receive an anonymised summary of accepted bids from all providers which will contain the maximum bid price accepted for each market.

The bid evaluation is based on pricing alone, since all other criteria will be met by the FSP during the standardised PQQ. Bids are priced stacked, for utilisation services this is a very simple 'sort' process where bids are rejected if above the accepted price or if the volume has been met. For services with an Availability and Utilisation fee these are combined to create a comparator price that is used for stacking. This comparator price is defined as:

Compartor Price  $(\pounds/MWh) = Availabilty Price (\pounds/MWh) + (Utilisation Price \times Utilisation Weighting Factor)$ 

The complete bid evaluation process is published on our website to allow FSPs to refer to this at any point in the submission process<sup>35</sup>. More detail on the response evaluation criteria is given in Section 5.2, and more information on the decision-making process after bid acceptance (i.e. scheduling and dispatch) is given in Section 2B.8.

### 3.2 Tender Timetable

A timetable of our procurement activities can be found in Figure 8. This is a subset of the information given in Appendix 4 which is a full schedule of all flexibility activities including stakeholder engagement and publications.

<sup>35</sup> SSEN Word Document Template (Public)

There will be mini-competitions held in April, July, and December. These precede our long-term and season-ahead bidding rounds starting in May, September, and January. We aim to publish results from long-term and season-ahead bidding rounds within 30 days, and for short-term bidding rounds the results would normally be published the day after the bidding round ends. In both cases, some circumstances may arise where more complicated bid decisions may be required or where delays arise with the market platform, in which case the bidding round results may be delayed. The timetable of mini-competitions and bidding rounds is shown in Figure 8.



Figure 8: Timetable of mini-competitions and bidding rounds in 2025/26. For full Flexibility Services activity schedule please see Appendix 4.

### 3.3 Changes to Flexibility Processes

We look to continually improve our processes based on FSP feedback, and some examples of this are captured in Section 4.3. There are several areas we are particularly focused on developing over the next year, in particular market liquidity through increasing the numbers of FSPs, and developing our markets to ensure we meet the needs of our networks. To achieve both these aims, our flexibility processes need to continue to be streamlined, to facilitate maximum engagement from FSPs and to enable us to procure across greatly increased numbers of CMZs.

There are several changes we need to enable to achieve this, many of which we have already started. In parallel to this we want to continue to increase market liquidity, and we are continuing to support the ENA's existing standardisation processes to do this while also contributing to the development of Elexon's market facilitator role for future standardisation and collaboration.

#### 3.3.1 Changes to SSEN Processes

In last year's procurement statement, we committed to several changes to our flexibility procurement processes, including the introduction of our new market platform, the extension of our DNOA process to local flexibility, and the inclusion of a new standard product, SU. We have achieved all this in 2024/25, and also exceeded our commitments by also furthering Flexibility Services in other areas such as the Highlands and Islands RFI, stability services, and the Demand Diversification Service. These changes have enabled short-term bidding rounds, and will enable scaling as we increase the number of CMZs and FSPs. This will support our work to extend the number of CMZs FSPs have opportunities to participate in, and increase substantially the volume of flexibility we are procuring in line with our flexibility procurement requirements.

We expect further changes to our processes as we continue to refine our market platform to meet our ongoing requirements. These changes will be focused on streamlining usability of the platform and processes, in response to stakeholder feedback, to facilitate extension of the number of CMZs and FSPs. Additionally, a significant change we expect to make to our procurement processes this year is the inclusion of day-ahead service procurement, as detailed in Section 2B. Finally, building on the feedback from the RFI and our collaboration with LEMA, we are



looking at how we can provide more confidence on multi-year requirements to encourage investment in areas where there are currently limited technologies to deliver flexibility.

Any changes to our market platform and flexibility procurement processes will be communicated via the platform itself and publicised on our website.

#### 3.3.2 Implementation of ENA Standards

We believe that standardisation will reduce barriers to entry, particularly for participants whose assets span multiple DSOs. In 2024/25 we engaged with ENA working groups including stacking, CEM tool, baselining, and have led on the settlements working group. We have supported and implemented all standardisation arising through these groups, such as using the standard PQQ, standard FSA, and the new CEM tool.

In 2025/26, many of the ENAs workstreams will be handed over to Elexon as the new market facilitator appointed by Ofgem. Until then we will continue to actively participate in ENA working groups, and are already actively engaging with Elexon in the development of their role as market facilitator and will continue to do so throughout 2025/26 in order to ensure alignment and standardisation for all the represented network companies.

Standardisation	Implementation Date	Notes
PQQ	April 2024	-
V3 FSA	May 2024	No deviations accepted
Settlements	Nov 2024	-
V3 CEM Tool	Nov 2024	-

Table 10: Implementation of ENA standardisations in 2024/25.

### 3.4 Pricing

The prices of existing contracts are published on our website<sup>36</sup> as a guide for bidders. In the past, ceiling prices have been used to provide clear insight into the maximum price acceptable, but since 2023/24 we have moved away from this approach to enable more competitive markets in response to an increase in volumes and numbers of participants. Where price ceilings exist, participants consistently bid at the price ceiling, which precludes any insight into the value of flexibility in a particular area and removes the ability of participants to weight their availability and utilisation prices according to asset type and/or risk appetite.

We will continue to review the use of the price ceiling and use them where we are expecting particularly low market liquidity and insufficient competition. There is no particular trend we can see in the pricing between providers, for example there is not an increase in prices in rural areas compared with urban ones. So, the pricing information available to us has not allowed understanding of the cost of delivering flexibility services in different areas to become visible.

We have had mixed feedback from FSPs on this approach with some requesting additional guide price information in place of ceiling prices. In response to this feedback, we now provide forecast utilisation and an expected flexibility spend for each market. The expected flexibility spend is determine by the outputs from the CEM tool. We will continue to look at additional data we can provide to support FSPs pricing analysis.

<sup>36</sup> Flexibility Services Document Library - SSEN



# 4 STAKEHOLDER ENGAGEMENT

## 4.1 Summary of our Stakeholder Engagement

The following section outlines our plans for stakeholder engagement in the next financial year. This includes FSPs, DNOs, as well as other industry stakeholders. It also highlights areas where we are actively working on improvements to our processes and communications based on prior stakeholder feedback. A timetable showing planned stakeholder engagement activities can be found in Appendix 4.

The section is separated into the following four sub-sections:

- Engagement During the Procurement Process.
- · Wider Advertisement of our Services.
- Development of Additional Service Requirements.
- Engagement with other DNOs, Elexon, and NESO.

Additional information is accessible to both current and prospective market participants on our website: Flexibility Services - SSEN

Alternatively, the team can be contacted at <a href="mailto:flexibilityprocurement@sse.com">flexibilityprocurement@sse.com</a>.

You can also sign up to the DSO Newsletter and Mailing List <a href="mailto:here">here</a>.

# 4.2 Engagement During Procurement Processes

In 2024/25, the procurement of Flexibility Services moved from Delta to ElectronConnect<sup>37</sup>. This has been a phased change which began in August 2024 when the first long-term bidding round was held on the ElectronConnect platform. We then moved the pre-qualification to the new market platform in advance of the first mini-competition in October 2024. The mini-competitions were held on Delta until May 2024.

The current procurement process is covered in detail in Section 3. From an FSPs perspective, the steps can be summarised as follows:

- FSPs must pre-qualify.
- FSPs must then complete a mini-competition to sign our overarching agreement.
- FSPs can then bid into markets in which they have an eligible asset.

If their bids are accepted, they must then respond to any availability and utilisation instructions.

We are constantly looking for ways to improve our processes. In this section we discuss some of the process improvements that have been implemented this year. We also discuss our plans to build on these improvements in the upcoming year. The improvements have been separated into two sub-sections. The recruitment of new FSPs will cover the first few steps of our procurement process. Then the second section – Encouraging Participation in Bidding Rounds – will cover the last steps in our procurement process.

<sup>37</sup> SSEN's new Flexibility Market Platform goes live as latest flex auction opens - SSEN



We are always looking at how we can improve and encourage stakeholders to email us (<u>flexibilityprocurement@sse.com</u>) with any feedback they have.

#### 4.2.1 Recruitment of New FSPs

We have successfully signed overarching agreements with 17 different FSPs in 2024/25<sup>38</sup>. The standardised PQQ<sup>39</sup> template has now been implemented in ElectronConnect.

We have been working closely with FSPs to help them get set up on the new market platform. This transition has been successful and well received from our stakeholders. We have already implemented a lot of functionality in the new market platform – including the ability to pre-qualify and accept the Terms and Conditions of our overarching agreement (this is the first step of the mini-competition).

Currently we are working on updating our service terms based on feedback from FSPs. This will be issued in time for our first mini-competition in 2025/26. Part of this process will involve negotiating with each FSP, with whom we hold an existing active overarching contract, to facilitate their review and approval.

As per our procurement schedule outlined in Section 3.2, we will be organising a communication strategy ahead of each of the mini-competitions planned in 2025/26. Last year this was done by a combination of webinars and one-to-one follow-ups. These webinars shared information on pre-qualification, procurement processes, and the deadlines for that tender round. For the first mini-competition in 2025/26 we will be trying a new approach combining one to one engagement with pre-recorded videos to allow stakeholders to access the key content at their own pace. Following this we will reach out to stakeholders and understand what approach was most useful and then adjust our approach for the rest of the year. This will give all our stakeholders an opportunity to engage with us, ask any questions and raise additional feedback.

Mini-competitions are advertised using press releases, social media channels, our events platform, and via email.

For requirements in remote locations where only certain DERs could possibly provide services competition, the owners/operators may be contacted directly and encouraged to participate in the process.

#### 4.2.2 Encouraging Participation in Bidding Rounds

Our market requirements are published on our website and on the market platform<sup>40</sup>. Previously all participants with an active overarching agreement were emailed a copy of the market requirements and a bidding response form. In 2024/25 we moved the bidding rounds – including the advertisement of the different markets and the bidding process – to the new market platform.

As part of our commitment to act on stakeholder feedback, we have been engaging with any flexibility service FSPs that did not participant in bidding rounds they had eligible assets in. This feedback has informed some of the improvements we have already made this year, as well as the plan for additional improvements set out in this

<sup>38 &</sup>lt;u>flexibility-services-contract-register-v2.7.xlsx</u>

<sup>39</sup> ENA ON Flexibility Service Pre-qualification Standard Template (Mar 2024) - Energy Networks Association (ENA)

<sup>40</sup> Flexibility Services Document Library - SSEN



sub-section. As our markets continue to grow, we would like to formalise the process for gathering feedback and explore the use of additional forms (e.g. Anonymous Microsoft forms) to increase the feedback provided.

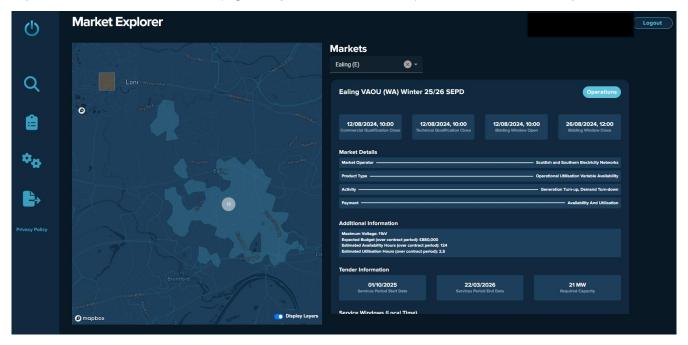


Figure 9: Screenshot of the ElectronConnect Market Platform.

The new market platform provides the CMZ overlayed on a map of our licence area. Any eligible assets are shown on the map. It also provides the following information for each market requirement as seen in Figure 9 above:

- Deadline for commercial qualification (i.e. contract signature).
- Bidding window open and close dates.
- Product type.
- Payment mechanism
- Additional information such as estimated availability and utilisation hours, as well as the budget for that requirement.

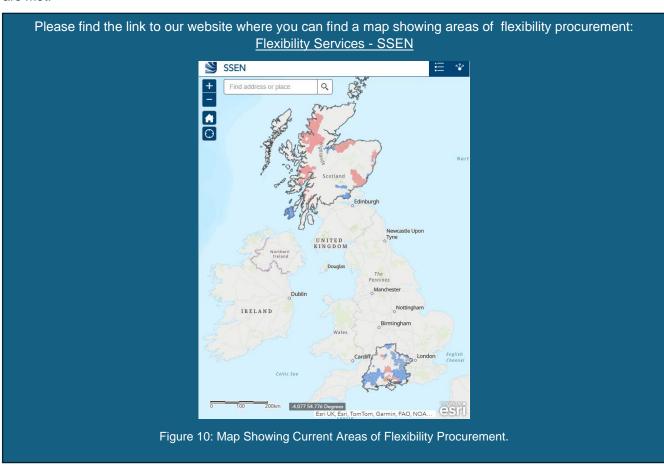
The future development of our market platform will be driven by stakeholder feedback and process improvements. A user group for the market platform, used to assist with these developments, is being considered. To deploy new functionality, we must test it first in a sandbox environment before it is deployed into the production environment used by FSPs. This process takes time but ensures that there is minimal risk of disruption for these stakeholders.

In 2025/26, we will begin to develop additional APIs which will allow FSPs to register assets and submit bids on the new market platform. The aim is to make the participation in the bidding rounds easier for our participants. We will also formalise the management of grouped flexibility assets including their geographical data. This will reduce the complexity for FSPs with grouped flexibility assets. Finally, we will be introducing more standard email notifications from the market platform across all procurement activities to ensure our communications are more consistent and informative.

In the last year we have increased the accessibility of our data. The data in the SSEN data portal<sup>41</sup> is now accessible via an API. We have also increased the availability of geospatial data. As well as ElectronConnect

<sup>41</sup> SSEN Distribution Data Portal

showing the markets on a map of our licence area, we have also produced a map for our website<sup>42</sup> so that wider stakeholders can access this information. Going forward we would like to increase our data transparency when publishing our bidding results. We will also be looking at different ways we can communicate some of our key data to encourage participation – for example simple visuals that emphasise the total budget and utilisation hours in each bidding round. Increasing data transparency and accessibility ensures the different needs of our stakeholders are met.



#### 4.2.3 Wider Advertisement of our Services

The procurement of standard Flexibility Services is also advertised in our DNOA reports<sup>43</sup>. There is more detail on the DNOA reports in Section 2A.2. The DNOA reports are reviewed and updated bi-annually. We contribute to this review process to ensure the flexibility information within the reports is accurate and representative of our current plans.

In 2025/26 we would like to develop the advertisement of our services and explore the use of alternative methods to capture the attention of other industries. This could include the use of targeted social media campaigns and adverts in other industrial publications. We have started this in 2024/25 by our collaboration with the Association for Decentralised Energy, Scottish Power and NESO's Power Responsive team with an industry event in Glasgow focused on industrial and commercial participants.

<sup>42</sup> Flexibility Services - SSEN

<sup>43</sup> Publications & Reports - SSEN



In addition to advertising our procurement of standardised flexibility products, we have inputted into other key industry discussions this year. In November, Utility Week held a joint event with SSEN on voltage management plans on the Distribution network<sup>44</sup>. As part of this event, we discussed the use of voltage-derived Flexibility Services, as well as voltage support for NESO services.

We have also offered support at the SSEN Connections Conference<sup>45</sup> that was held in Reading last year.

In 2025/26, we will continue to showcase our work in various in-person events including the Utility Week Flexibility Forum, the Distributed Energy Show<sup>46</sup> and Utility Week Live<sup>47</sup>.

### 4.3 Development of Additional Service Requirements.

This year we launched two new standardised flexibility products: SU and SAOU – day-ahead. This includes the use of SU to procure flexibility to defer reinforcement on the HV and LV networks for the first time. Moving forward, we will be consolidating the use of these services.

Within the next financial year, we will also be developing the use of Flexibility Services in a selection of island communities in Scotland; a stability services in the Western Isles and a standby service in Shetland; the use of flexibility products to manage LMAs; and the use of energy efficiency services. There is more detail on each of these in the sub-sections below.

#### 4.3.1 Flexibility on Scotland's Islands

The key aim of the RFI is to reduce the reliance on diesel generation in our island regions. We released the RFI in August 2024<sup>48</sup> to identify potential FSPs in the island regions of our Scottish licence area. SSEN has since directly engaged with twelve organisations.

As well as hosting our own webinar alongside the RFI, we held a joint webinar with the Highlands & Islands Enterprise to aid their members' understanding of flexibility and how they could help their clients participate.

We have also published a document detailing the feedback<sup>49</sup> we received from the potential FSPs during the process. Going forward, we will work to address this feedback where possible and procure the Flexibility Services from eligible FSPs that have completed the necessary procurement process.

#### 4.3.2 Load Managed Areas (LMAs)

As mentioned in Section 2A.3.2 and 2B.7, we have two separate initiatives ongoing to support the continued evolution of LMAs. The first is the interim payment, that we will continue to work with suppliers on to achieve the desired outcomes.

We will also be running field trials from March 2025 until August 2025 for the two Demand Diversification Services that we have identified as potential commercial mechanisms to replace our existing LMA schemes, as described in Section 2B.7.1 and 2B.7.2. This builds upon the virtual trials run in development with Energy Systems Catapult in 2024/25. We will continue to work with potential providers of these services to gather their feedback on the

<sup>44</sup> Voltage management takes the spotlight - Utility Week

<sup>45</sup> Event Details | SSEN Connections Customers Conference - south \*\*EVENT NOW FULLY BOOKED\*\*

<sup>46</sup> Home- The Distributed Energy Show 12th & 13th March 2025

<sup>47</sup> Utility Week Live 2025, the UK's only pan-utility exhibition

<sup>48</sup> request-for-information---flexibility-services-in-scotlands-islands.pdf

<sup>49</sup> feedback-from-flexibility-service-providers-on-scotlands-islands-rfi\_external.pdf



service designs and the output of the trials through a combination of development workshops, webinars, and one-to-one meetings.

#### 4.3.3 Energy Efficiency Services

Through the LMA trials and the Islands RFI we have identified that there is appetite for a longer-duration service that can be used to justify investment in new solutions. There is particular interest in this to assist with investment into energy efficiency interventions. Our partnership with LEMA aims to allow us to develop a new type of energy efficiency service, in line with the standard Flexibility Products, to increase uptake of energy efficiency solutions. We will be working on this with LEMA through collaborative workshops to develop ideas, with the aim of finalising a service design in 2025/26.

# 4.4 Engagement with other DNOs, Elexon, and NESO

Last year we have been actively engaging with the ENA, through their Open Network working groups, as well as building a relationship with the new market facilitator – Elexon. We have worked with other DSOs to collaborate on various projects including the new Regulatory Reporting Evidence and the Operational Dispatch Methodology. We have also been working with NESO on the Local Constraint Markets and CrowdFlex. This section sets out how we will build on this engagement in 2025/26.

#### 4.4.1 HomeFlex Co-Ordination

Our HomeFlex code of conduct scheme innovation project, closed in March 2025, focused on how we ensure our more vulnerable customers are receiving clear and transparent information. This innovation project was developed in partnership with the FlexAssure scheme and developed this concept further into domestic Flexibility Services. The collaboration has resulted in significant learnings about the challenges of domestic Flexibility Services<sup>50</sup>.

Throughout the project the learnings have been disseminated across the industry, with the Smart Secure Electricity Systems Programme run by the Department for Energy Security and Net Zero referencing this in their consultation about local control licence<sup>51</sup>. Over the next year will continue to feed into the Smart Secure Electricity Systems Programme, particularly highlighting the impact of the decisions on Flexibility Services and our more vulnerable customers.

#### 4.4.2 Engagement with the ENA and Elexon

In the last year, the ENA has been working with all DNOs to update the standardised FSA <sup>52</sup> based on stakeholder feedback. FSPs were concerned that the liabilities clause was uncapped. A cap has since been introduced this year. Other topics addressed include: domestic and non-domestic DER site access; the registration of the same asset by multiple FSPs for the same requirement; the anti-corruption and bribery legislation; and the alignment of the service terms.

In the next year we expect the ENA to publish the outputs of the baselining working group. The primacy working group will be focusing on understanding the functionality required to share data needed by the operator with primacy, NESO or a given DNO, when there are conflicting requirements. The OpenADR working group have recently awarded a contract to CGI to develop a standard for an API that can be used for all flexibility dispatch. We will continue to support this development, as well as the standard in 2025/26.

 $<sup>50\ \</sup>underline{\text{https://ssen-innovation.co.uk/wp-content/uploads/2023/02/HOMEflex-Research-Report\ Jan2023.pdf}$ 

<sup>51</sup> Smart Secure Electricity Systems Programme: Licensing regime

<sup>52</sup> Standard Agreement for Flexibility Services Ver 3.0 (Apr 2024) - Energy Networks Association (ENA)



Since the appointment of Elexon as the Market Facilitator this year, we have been responding to the consultations and building a relationship with them. Ahead of Elexon starting their market facilitator operations in early 2026, we expect them to contribute to these ENA working groups alongside the other DNOs.

#### 4.4.3 Engagement with Other DSOs

In 2024, we co-led on the development of the Flexibility Deferral Metric<sup>53</sup>, for the Regulatory Reporting Pack, metric (RRP7) with SP Energy Networks. This is currently out for consultation. We will assist with implementing any feedback from the consultation ahead of the deployment in the next financial year.

We also published our Operational Dispatch Methodology<sup>54</sup> in February 2024. This has since been adopted by National Grid Electricity Distribution.

We will be working with Electricity North West Limited, who share our new market platform provider, to work on shared developments where possible. This has evolved into monthly collaboration meetings where we share learnings and approaches to increase standardisation.

We will be publishing our DSO key performance indicators quarterly.

In the last year we have worked alongside NGED and NPG to develop Flexible Power – our dispatch platform. This includes the latest version of the billing mechanisms, and dispatch API, to support the new standardised flexibility products. Future development includes the ability for FSPs to self-declare availability and the automation of decision making for availability scheduling.

#### 4.4.4 Engagement with NESO

SSEN has been working alongside NESO, with Scottish Power Energy Networks, on the Local Constraint Market 55. The Local Constraint Market is the constraint between the B4 and B6 transmission boundaries. More information on the location of these boundaries can be found on NESOs website 56. NESO requires granular data on our available asset headroom every month. This year, all parties are looking at the automation of the data sharing. Specifically, a new platform, agnostic with multiple data sharing purposes, is due to be developed. The platform will allow SSEN to share our data with NESO and for our control rooms to see what flexibility NESO is using from our licence areas.

We are also supplying data to NESO as part of the CrowdFlex trials. NESO need to understand where on our network it is safe for them to run their domestic flexibility trials to keep our network safe. In addition to the trials run last year, there is a final set of summer trials due in 2025/26. Following this NESO will refine their models and publish their findings.

<sup>53</sup> Changes to electricity Distribution System Operation incentive governance document and Regulatory Instructions and Guidance (RIGS) annex: (RIIO-ED2) | Ofgem

<sup>54</sup> SSEN Operational Decision Making ODM

<sup>55</sup> Local Constraint Market | National Energy System Operator

<sup>56</sup> Scottish boundaries | National Energy System Operator



# 5 DETAILED QUANTITATIVE ASSESSMENT

This section aims to provide additional insight on how we quantify and assess the benefit of Flexibility Services, this supports the commentary in Section 2A on the process for identifying constraints but is specifically focused on the cost benefit analysis.

## 5.1 Requirements and Benefits Analysis

The constrained parts of the network are identified by:

- Long-range network planning forecasts that indicate risks of thermal, voltage or frequency limits being reached, either in normal operation or under outage conditions.
- General fault mitigation plans for parts of the network that cannot be easily reconfigured and therefore are subject to higher supply restoration times.
- The requirement to carry out work on the network as identified by our outage planning teams.

Source	How Requirements are Identified	Business Case	
System Planning	Annual long-range load forecasting from DFES.	<ul> <li>Positive Net Present Value (NPV) for deferral.</li> </ul>	
		"Hedging" – Optionality value of deferral.	
		Managing deliverability of reinforcements.	
		Risk reduction (reinforcement delay risks).	
		Acceleration of connections.	
Outage Planning	Annual assessment by Outage Planning of planned works, parts of the network with single circuit risk, or poorly-served areas which could be supported by Flexibility Services.	parts of the network with diesel generation or use of SSEN owned sk, or poorly-served areas generators (on Scottish Islands). A cost	

Table 11: Sources of identification of CMZs.

Opportunities to procure Flexibility Services to defer or avoid reinforcement are identified by reviewing all reinforcement proposals to establish if flexibility would be a technically viable alternative. The DFES scenarios are analysed against the constrained asset capacity to identify the service windows and volume of flexibility required. The conditions under which the exceedance could occur are used to estimate the utilisation and determine the best fit service.

We use the CEM tool developed by Open Networks to carry out a cost benefit analysis by comparing the Net Present Value (NPV) of discounted cashflows of each solution to determine if there is an economic benefit of reinforcement deferral. We use existing data on flexibility prices from different types of FSPs, alongside estimates



on the make-up of FSP types in a specific area to estimate flexibility prices for a given constraint. These prices are then used by the CEM tool to calculate the NPV of the deferral with flexibility, which is then compared against the NPV of the reinforcement solution. The difference between the NPV of the network reinforcement versus the NPV of the deferred reinforcement with flexibility represents the benefit of deferring with flexibility, and the duration of the deferral is selected as the duration that maximises this benefit. Figure 11 is a simplified schematic demonstrating this calculation considering a one- or two-year deferral.

			*	
	NPV	Year 1	Year 2	Year 3
Baseline	NPV (Baseline)	Reinforcement cost		
Deferral (1 year)	NPV (Deferral 1 yr)	Flexibility cost	Reinforcement cost	
Deferral (2 year)	NPV (Deferral 2 yr)	Flexibility cost	Flexibility cost	Reinforcement cost
Benefit	= NPV (Deferral) – NPV (Baseline)	Optimal deferral duration = duration with greatest NPV		on with greatest

Figure 11: Schematic to show how the benefit of Flexibility Services can be determined based on reinforcement deferral.

Other business drivers and economic benefits for the use of flexibility are also considered at this stage:

- Optionality value, where load forecasts are very uncertain, and more time is needed to establish if reinforcement is justified.
- Where reinforcement cannot be delivered in time to ensure security of supply compliance.
- Where we identify the need to further support and facilitating connections to our networks.

Flexibility Services requirements based on network studies can be determined for general fault contingency planning, or as part of specific planned works where the alternative would have been diesel generation to support unplanned or planned outages. The economic benefits in these cases are based on customer interruption costs and potential CO<sub>2</sub> savings that are calculated by comparing the emissions of diesel generation against the bidder's assets.

This assessment process forms a core part of our DNOA methodology, which is described in Section 2A.2. Links to all the documents and methodologies involved in the decision-making process can be found in Appendix 2.

## 5.2 Response Evaluation Criteria

As part of the tender evaluation process, we have previously scored FSPs per CMZ and service based on quality and price criteria, however this year we have transitioned away from using quality scoring and instead focused on ensuring that all participants meet any quality requirements using the ENA standard commercial and technical PQQ.

In our new procurement processes, hosted on our new market platform ElectronConnect, FSPs must pre-qualify using the PQQ before they are eligible to participate in a mini-competition. A mini-competition is an opportunity for an FSP to sign an over-arching agreement which enables them to then participate in long-term and short-term bidding rounds. At the mini-competition stage, FSPs must only agree to sign the overarching agreement, bids are not assessed on any other criteria once the FSP has met the pre-qualification requirements.



Qualified FSPs who hold overarching agreements are then eligible to participate in bidding rounds. At this stage, bids are assessed on their price alone, and we accept and reject bids based on which bids give us the more cost-effective options for managing our network.

In 2024/25 tenders, all volume requested was either under-procured or all bids could be accepted, and the ODM dispatch process could be followed in shorter timescales. Where over-procurement occurred, FSPs were alerted to this. Where volume offered does not match volume requested, we accept all bids where the price offered is still economically viable. In some instances, where responses to bidding rounds have not met the requirement of that round, it is still possible for bids to be rejected where they are so expensive that they would render the use of flexibility service un-economic for our network.

One of SSEN's requirements in procuring our flexibility market platform was that it would also be possible for bids to be considered based on 'sensitivity' i.e. the impact of dispatch of a given asset at the actual point of constraint based on its network location and measured data. While we do not currently have the quantity of data available to enact this bid evaluation criteria, we continue to assess this and reserve the right to include this factor in our decision-making processes in future.

# APPENDIX 1: SSEN DISTRIBUTION GRID SUPPLY POINTS

SHEPD Grid Supply Points					
Abernethy	Brora	Dunoon	Grudie Bridge	Nairn	Shin
Alness	Burghmuir	Dunvegan	Inverness	Persley	St Fergus Gas
Arbroath	Carradale	Dyce	Keith	Peterhead Grange	St Fillans
Ardmore	Cassley	Elgin	Killin	Peterhead Shell	Stornoway
Beauly	Ceannacroc	Fiddes	Kinlochleven	Port Ann	Strathleven
Boat Of Garten	Charleston	Fort Augustus	Kintore	Quoich	Strichen
Braco	Clachan	Fort William	Lairg	Rannoch	Tarland
Bridge Of Dun	Clayhills	Fraserburgh	Lunanhead	Redmoss	Taynuilt
Broadford	Coupar Angus	Glenagnes	Lyndhurst	Shetland	Thurso

Table 12: List of GSPs in SHEPD.



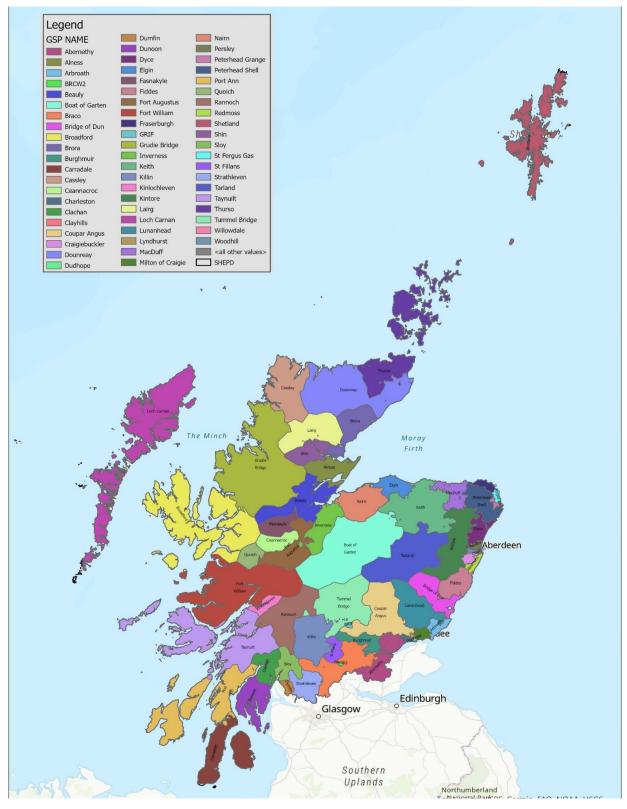


Figure 12: Map of GSPs in SHEPD.



SEPD Grid Supply Points			
Amersham	Mannington	Laleham	North Hyde
Iver	Axminster	Minety	East Claydon
Bramley (Fleet)	Chickerell	Melksham	Botley Wood
Cowley	Bramley (Ando-That)	Willesden	Nursling
Lovedean	Bramley (Basi)	Ealing	Fawley

Table 13: List of GSPs in SEPD.

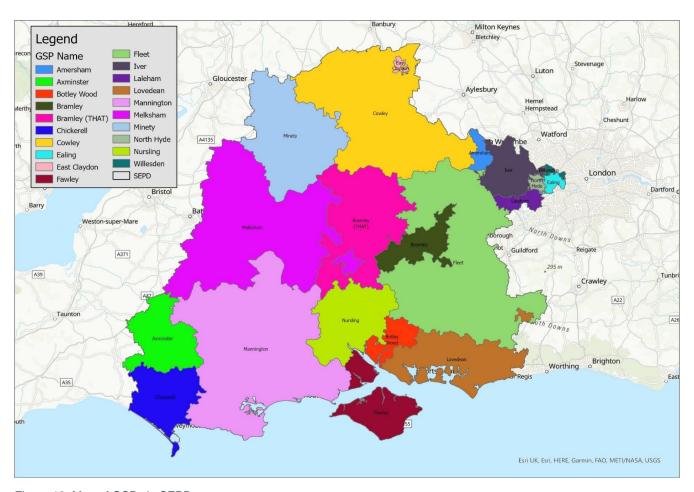


Figure 13: Map of GSPs in SEPD.

# APPENDIX 2: USEFUL LINKS TO ADDITIONAL INFORMATION

System	Description	Link
ElectronConnect Market Platform	Market platform used for advertising Flexibility Service requirements and holding bidding windows.	https://ssen.electronconnect.io/
Flexible Power Website	Dispatch platform.	https://www.flexiblepower.co.uk/locations/scottish- and-southern-electricity-networks
SSEN Website	Information on Flexibility Services and links to documentation including procurement statement, service documentation, CMZ map and tender results.	https://www.ssen.co.uk/our-services/flexible-solutions/flexibility-services/
ENA Open Networks Workstream 1A website	Information on the Open Networks Flexibility Services workstream (archived web-page).	https://www.energynetworks.org/creating- tomorrows-networks/open-networks/flexibility- services
National Energy System Operator Website	NESO and DNOs are working with stakeholders across Great Britain through Regional Development Programmes (RDPs).	https://www.nationalgrideso.com/research- publications/regional-development-programmes
SSEN Operational Decision-Making Framework March 2025	ODM sets out the way in which we dispatch DERs to meet short-term capacity needs in a fair and efficient way.	ssen-dso-odm-framework-update-march-25.pdf
SSEN Flexibility Roadmap	Document setting out our flexibility approach and how it will evolve over time.	ssen-flexibility-roadmap-2024.pdf A progress update to the flexibility roadmap is expected to be available:  Publications & Reports - SSEN



SSEN DNOA Methodology	Document describing the process we use to make decisions on how to meet the network's needs through flexibility or strategic investment.	ssen-dnoa-methodology-2025-feb-draft140225.pdf  Updated version to be made available at:  Publications & Reports - SSEN
SSEN DNOA Outcomes	Document detailing the outcomes of the DNOA process so far.	https://www.ssen.co.uk/globalassets/about- us/dso/publicationreports/q4-dnoa-outcomes- report.pdf
SSEN Strategic Development Plans	Information on how we plan our network strategically to meet our customers' future needs and links to our Strategic Development Plans for each GSP.	https://www.ssen.co.uk/about-ssen/dso/whole-system/our-strategic-network-planning-process/
Elexon Market Facilitator	Elexon will be acting as the Market Facilitator from early 2026 onwards. Their website gives information on news and updates.	https://www.elexon.com/what-we-do/what-we-manage/market-facilitator-for-distributed-flexibility/

Table 14: Table of links to useful information.



# APPENDIX 3: OPERATIONAL DECISION-MAKING PROCESS

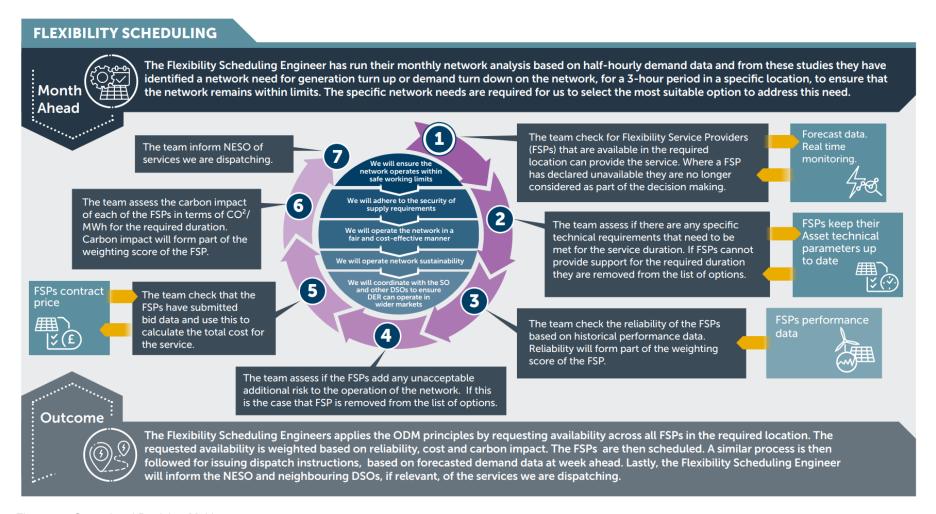


Figure 14: Operational Decision-Making process part 1.



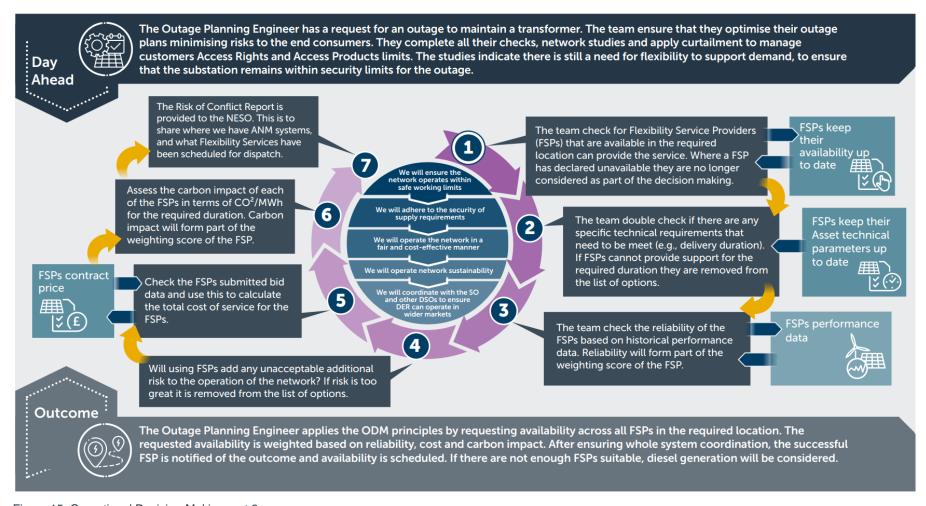


Figure 15: Operational Decision-Making part 2.



# Flexibility shortfall - risk management

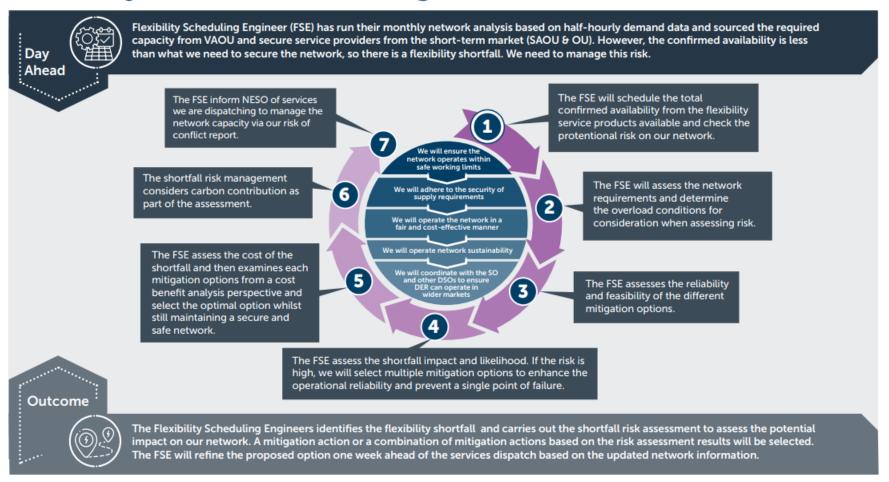


Figure 16: Flexibility shortfall risk management.

# APPENIDX 4: FLEXIBLITY PROCUREMENT TIMETABLE

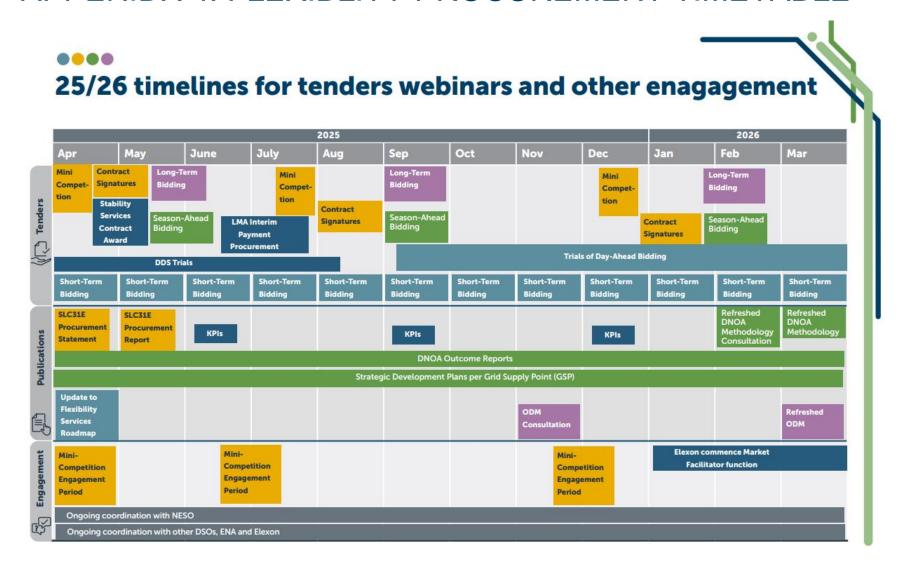


Figure 17: Flexibility procurement timetable.



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