



DSO IN ACTION AUTUMN SERIES: FLEXIBILITY SERVICES



15th September 2025



Scottish & Southern
Electricity Networks

DSO Powering Change



HOUSEKEEPING

- We're using Slido today to capture some of your thoughts and feedback
- Please feel free to ask questions throughout the session via the Teams Q&A function
- Today's session will be recorded and will be made available after the event. The recording will stop for the QA session



Video/webcams off



Mics on mute
Please stay on mute
unless you are asking
a question



Technical queries
If you have any
technical questions
let us know



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AGENDA

11:00 - 11:10

Welcome & Introduction



Paul Fitzgerald

DSO System Co-ordination
Manager

11:10 - 11:30

Flexibility Products



Ronke Ajadi

Flexibility Agreement
Manager

11:30 - 11:45

*ODM & Future Opportunities



Gavin Stewart

Flexibility Services
Manager

*ODM : Operational Decision Making



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Exploring The Future of
Flexibility Webinar

Flexibility Services

FLEXIBILITY OVERVIEW

Paul Fitzgerald

DSO System Coordination Manager



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SSEN DISTRIBUTION

WHO WE ARE

We're Scottish and Southern Electricity Networks (SSEN) Distribution. We're the Distribution Network Operator (DNO) responsible for delivering power to almost 4 million homes and businesses across central southern England and the north of Scotland.

We serve some of the UK's most remote communities - and some of the most densely populated. Our two networks cover the greatest land mass of any UK DNO, covering 72 local authority areas and 75,000km² of extremely diverse terrain.

We're also at the forefront of delivering the decarbonised electricity system of the future, connecting new low-carbon technologies to the network. Through this, we're helping support sustainable economic growth for decades to come.

SSEN DISTRIBUTION NETWORK AT A GLANCE

Nearly **4 million** homes and businesses

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

Over **460km** of subsea cables powering our island communities

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

North of Scotland
SSEH/SHEPD LICENCE AREA



Central Southern England
SSES/SEPD LICENCE AREA



OUR ROLE AS A DISTRIBUTION SYSTEM OPERATOR (DSO)

A SUCCESSFUL TRANSITION TO NET ZERO REQUIRES

- ✓ Greater utilisation of **flexible energy resources**, across electricity, heat and transport.
- ✓ A clear understanding of **the value flexible resources can provide** at any one time; and
- ✓ Greater **real-time coordination in energy system operation** to ensure that flexible resources can be 'optimised' across the energy system as a whole.

These services are being provided through functions within the Distribution Network Operators called Distribution System Operators (DSOs), which have three core areas:



Our DSO Toolkit



Strategic Investment

- Provide the capacity on the network to deliver net zero by 2050.
- Ensure that we're making appropriate use of flexibility services to deliver efficient whole-system solutions at the optimum time.

Flexibility services

- Mid-term solutions that enable us to use our existing network efficiently
- Acts as an investment signal for Strategic Investment
- Provides an interim solution if there are long lead times for Strategic Investment

Access products

- Connecting customers now, but with some level of compromise.
- Complemented by flexibility services or strategic investment to meet customers full needs as soon as possible.



WHO CAN PROVIDE FLEXIBILITY SERVICES?

Anyone capable of shifting or adjusting the amount of electricity they consume / generate





BENEFITS OF FLEXIBILITY



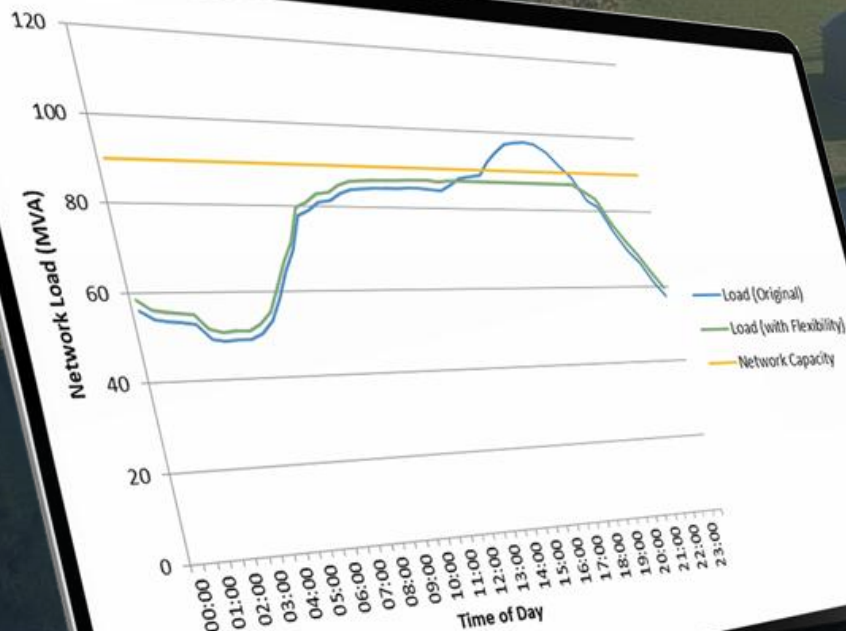
Traditional solutions to increase network capacity such as building network reinforcement can be deferred to reduce costs.



Facilitates quicker connections to congested parts of the network ahead of increasing network capacity.



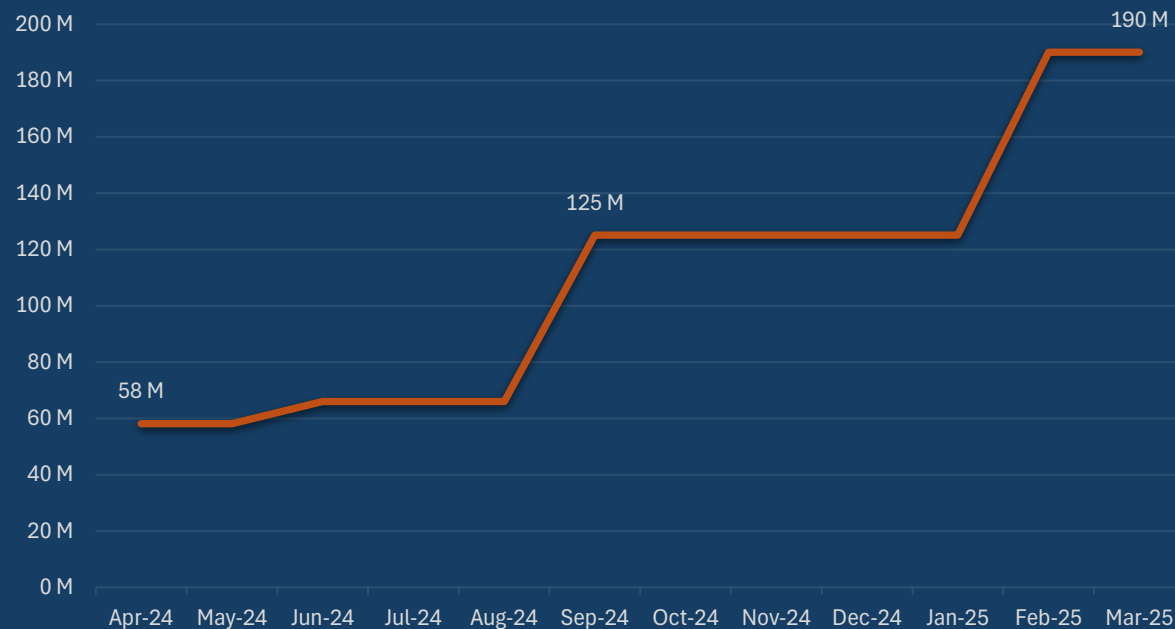
Helps maintain network supply during times of planned and unplanned outages.





FLEXIBILITY IN ACTION

Reinforcement Deferral through Flexibility



49 Signed agreements from participating Flexibility Services Providers (FSPs)



370 Market requirements published across **179** geographical zones



2.6 GW of needs tendered for, with **915 MW** being awarded

Average MWh Payments

Utilisation Payments £278 MWh - Availability Payments : £146 MWh



September Bidding Round Now Open!



Timeline

- Auction Opens: 1st September
- Auction Closes: 26th September

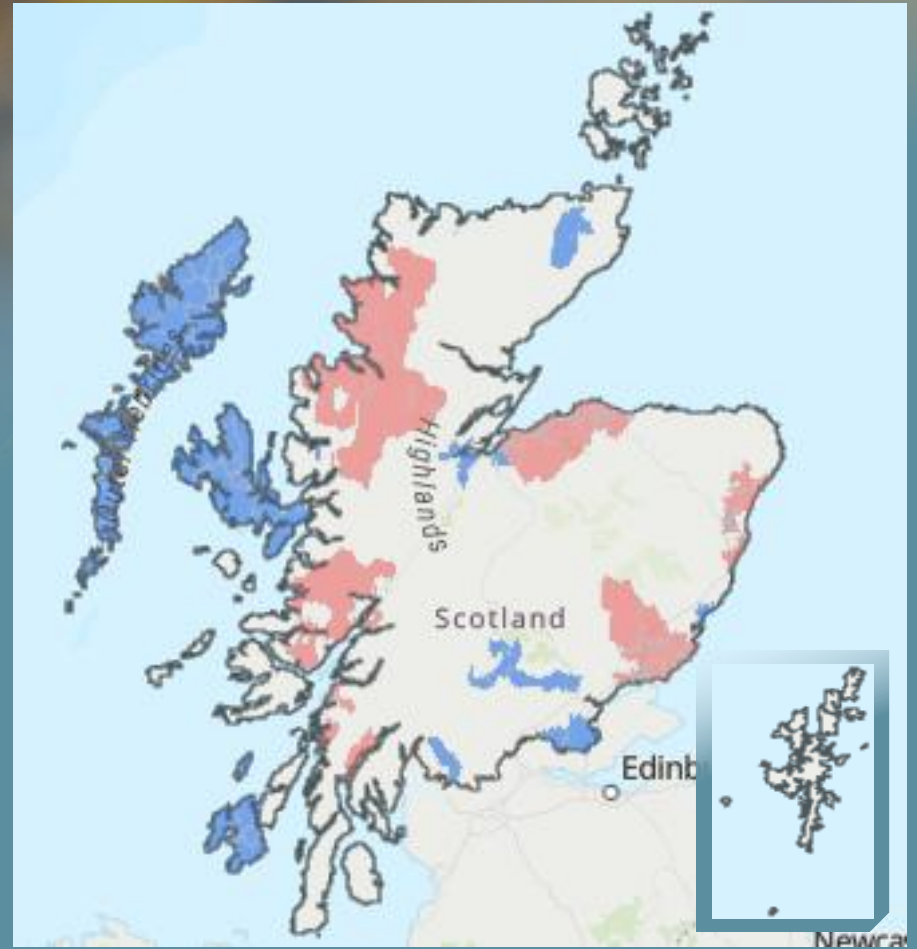
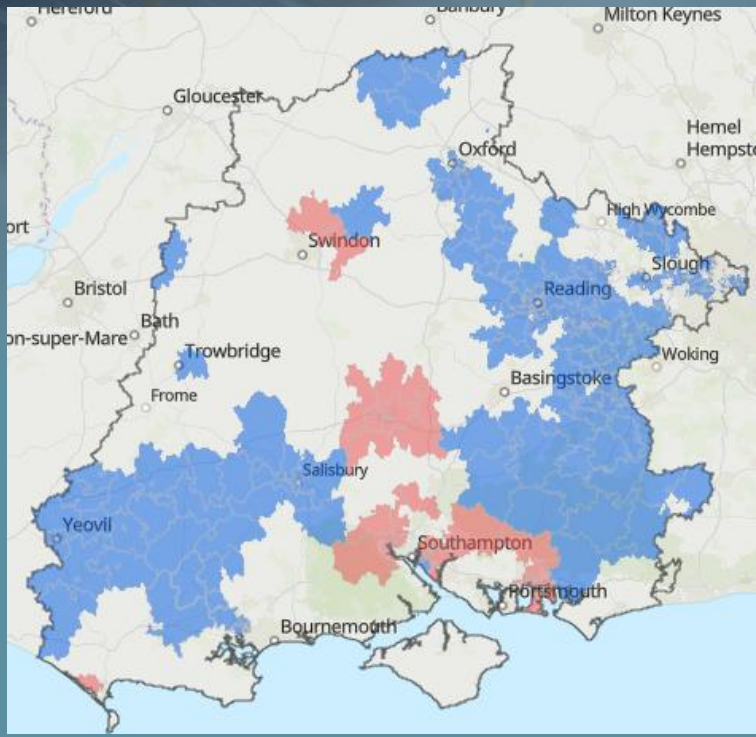


Offerings

- Volume Available: 91 MW
- Maximum Budget: £2.4 million



WHERE WE HAVE PROCURED FLEXIBILITY BEFORE





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FLEXIBILITY PRODUCTS OVERVIEW

Ronke Ajadi

Flexibility Agreement Manager



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STANDARD SERVICES OVERVIEW

	Scheduled Utilisation (SU)	Operational Utilisation (OU)	Variable Availability + Operational Utilisation Day Ahead (VAOU DA)	Variable Availability + Operational Utilisation Week Ahead (VAOU WA)	Scheduled Availability + Operational Utilisation Day Ahead (SAOU DA)
 Availability Refinement Timescale	Not Applicable	Not Applicable	Week Ahead	Month Ahead	Availability windows confirmed at trade
 Utilisation Instruction Timescale	At Trade	2 minutes	Day Ahead	Week Ahead	Day Ahead
 Payment	Utilisation (£/MWh)	Utilisation (£/MWh)	Availability (£/MW/h) Utilisation (£/MWh)	Availability (£/MW/h) Utilisation (£/MWh)	Availability (£/MW/h) Utilisation (£/MWh)



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BIDDING OPPORTUNITIES



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MARKET OPPORTUNITIES



	Apr 25	May 25	Jun 25	Jul 25	Aug 25	Sep 25	Oct 25	Nov 25	Dec 25	Jan 26	Feb 26	Mar 26
Mini Competition	PQQ Contract Sign			PQQ Contract Sign				PQQ Contract Sign				
Long-term Bidding		VAOU (WA) SU (MA) OU				VAOU (WA) SU (MA) OU					VAOU (WA) SU (MA) OU	
Short-term Bidding						SAOU (DA)	SAOU (DA)	SAOU (DA)	SAOU (DA)	SAOU (DA)	SAOU (DA)	SAOU (DA)
Day Ahead Bidding								Trial SU (DA)	TBC	TBC	TBC	TBC



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END TO END PROCUREMENT

Onboarding, bidding and settlement

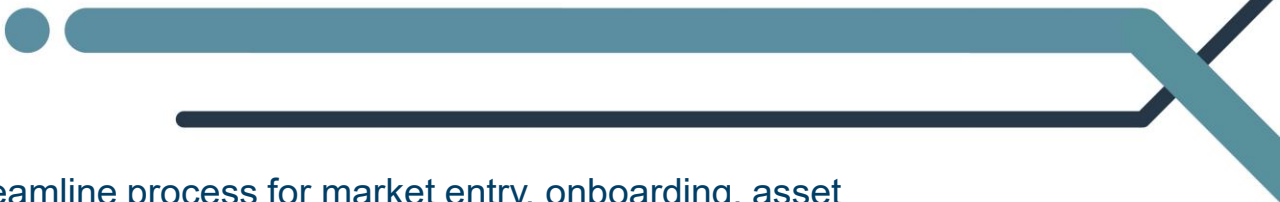


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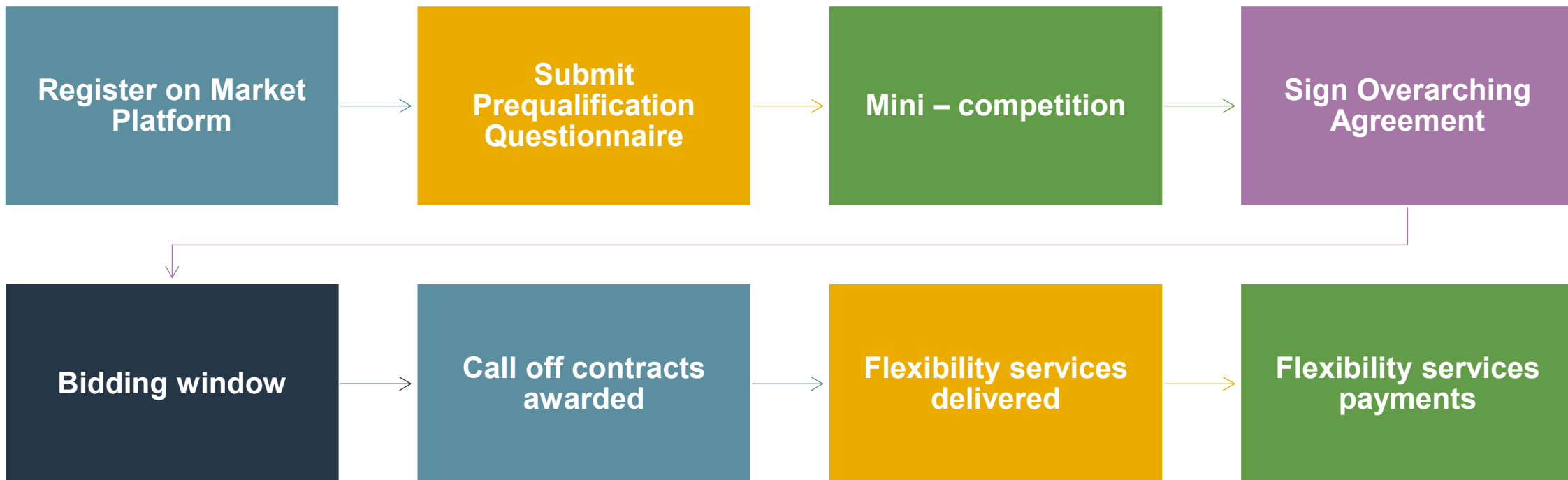
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ONBOARDING



SSEs Flex Market Platform through ElectronConnect enables a streamline process for market entry, onboarding, asset registration and participating in our flexibility auctions. Since Go Live in July-24 Electron and SSE continue to develop the platform from stakeholder feedback.





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STAKEHOLDER LED ENHANCEMENTS



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RECENT DEVELOPMENT



Following stakeholder feedback, we have implemented improvements to the Market Platform to streamline the experience for FSPs.

Improved Market Filtering

Enhanced FSP Notifications
(Specifically for SSEN's Commercial qualification process)

Offer Acceptance Workflows: Email notification & Improved Visibility of offer Outcomes

Group Asset registration and management

ElectronConnect API access for FSPs

Scheduled Utilisation Day Ahead Markets)



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FLEXIBILITY DISPATCH

Gavin Stewart

Flexible Solutions Manager



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SYSTEMS FOR FLEXIBILITY

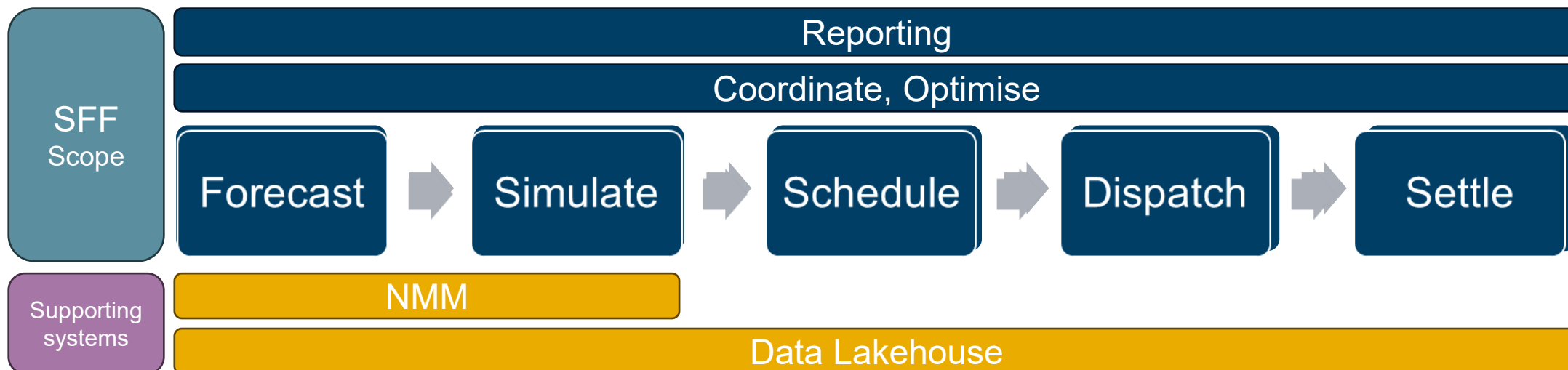


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DELIVER THE E2E TECHNOLOGY FOR FLEXIBLE SERVICES AND ACCESS PRODUCTS



Function	Description
Forecasting	Very Short-Term Forecasting – Ability to forecast day ahead to the following 10 days
Simulate	Combine load forecasts with network models to simulate the behaviour of the network (Power flow analysis) and identify constrained assets.
Procure	Contract and buy flex
Schedule (and availability)	Combining forecasting, simulation, optimisation and availability to create a utilisation schedule over various services periods. Availability - Requesting/receiving availability declarations (capacity against a forecast baseline) and scheduling availability.
Dispatch	Sending a utilisation schedule or individual event instruction to FSPs or to curtailable connection customers.
Settle	Calculating how much we owe suppliers (self-billing), generating statements/invoices on their behalf, raising purchase orders and paying.
Coordination and Optimisation	Third party Data exchange and logic (i.e. ODM and commercial benefits etc.)
Report	Publish data internally or externally. Collect service delivery data at different granularity and determine performance against instructions.



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INTRODUCING OUR DAY AHEAD MARKET



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DELIVERING FLEXIBILITY SERVICES

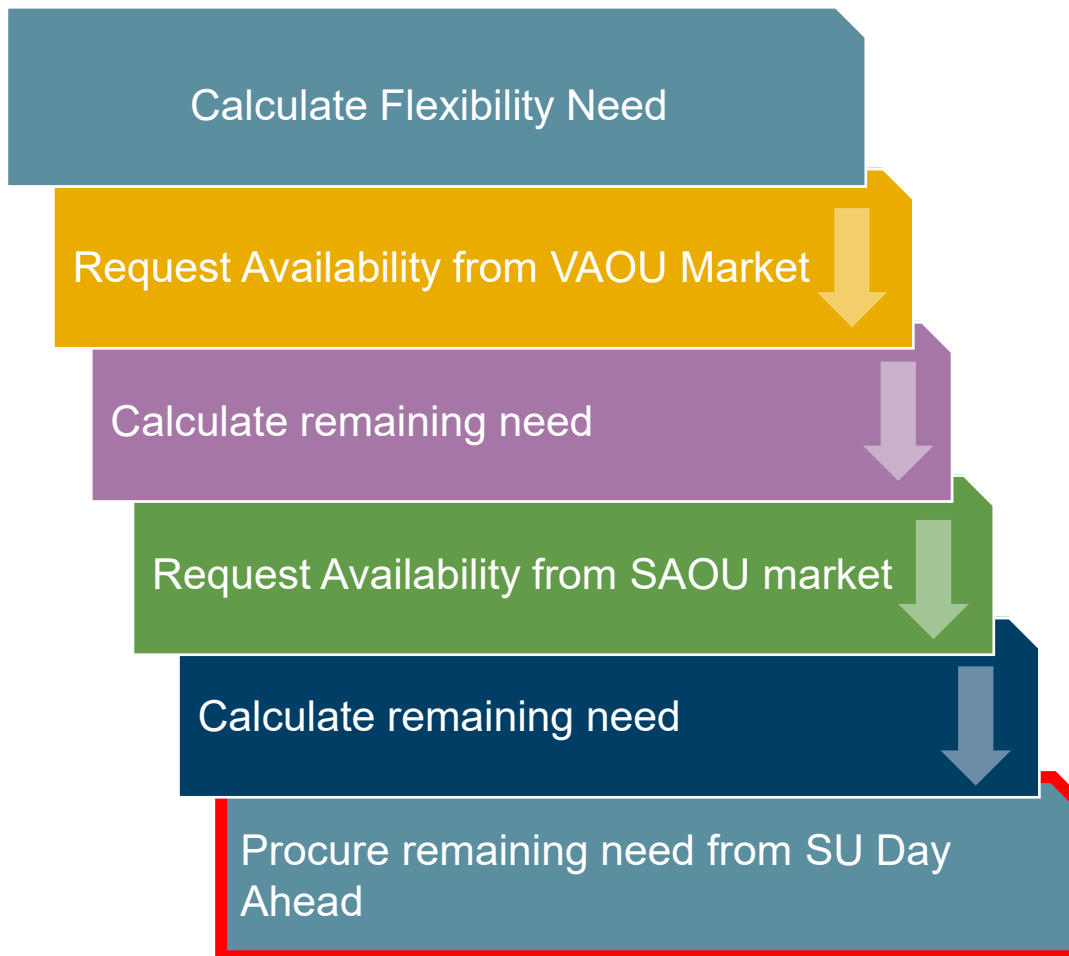
We operate across both long-term and short-term markets.

As shown in the flow, we can use other markets to meet any remaining need.

Our intention is to trial a SU Day-Ahead.

This means we will open and clear the market the day before a service is needed.

Initially, this will support any remaining need on our network but also unlocks more opportunities.





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OUR OPERATIONAL DECISION MAKING

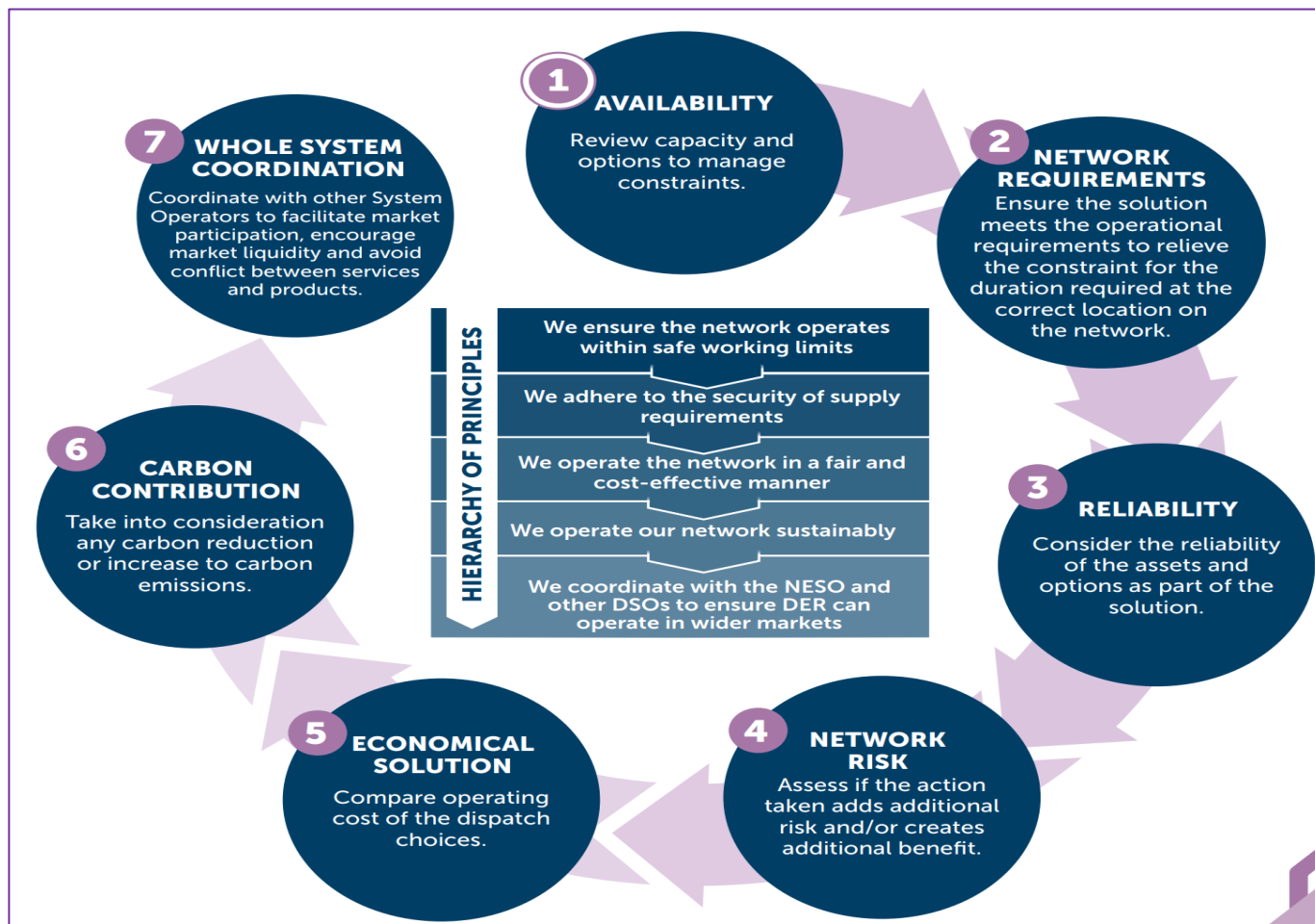


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HOW WE MAKE DISPATCH DECISIONS



We welcome your feedback!

[operation-decision-making-odm.pdf](https://www.ssn.co.uk/operation-decision-making-odm.pdf)



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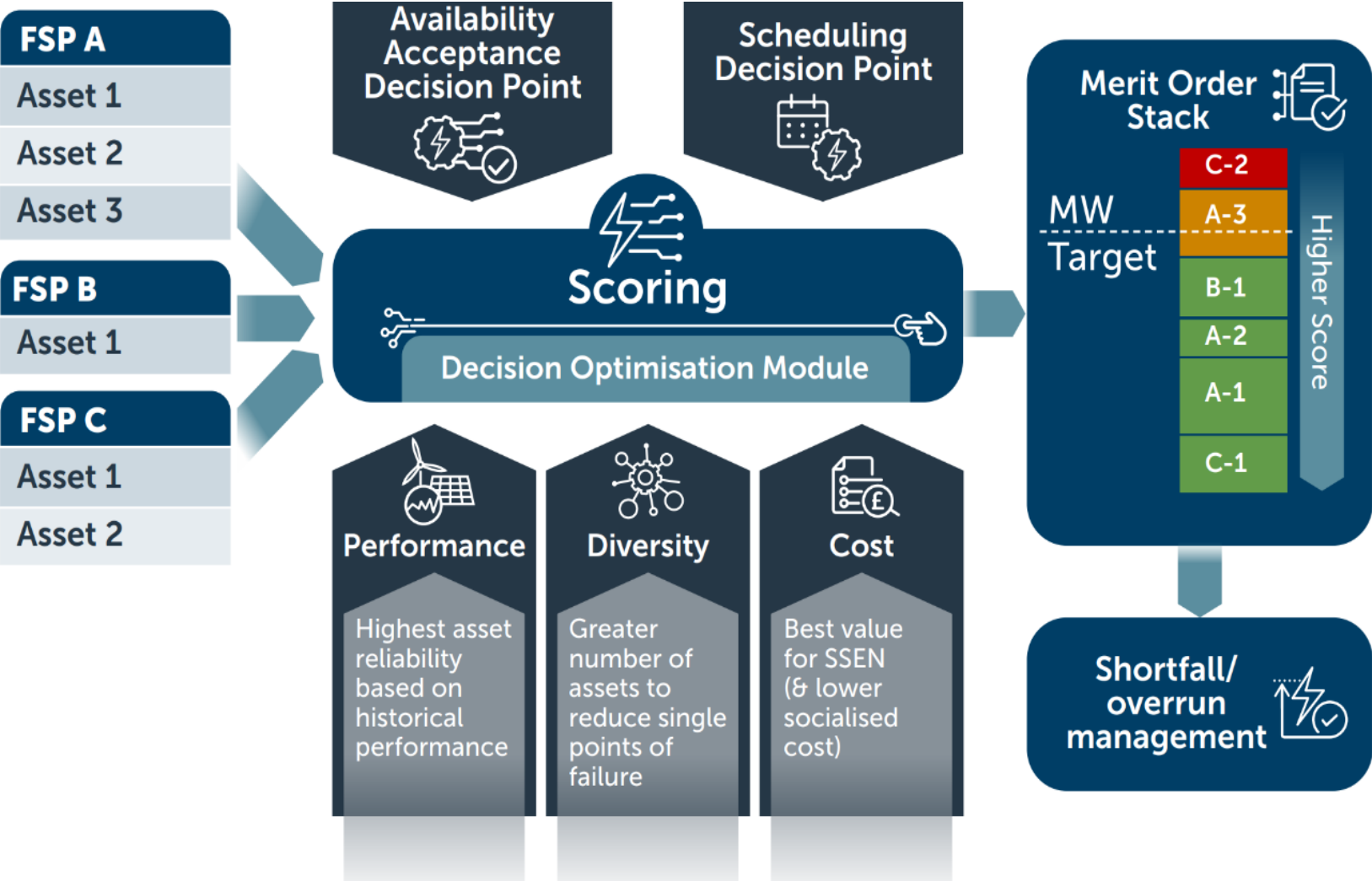
OPTIMISING PERFORMANCE AND COST

- 1

Introducing Merit Order Dispatch
- 2

How we implement changes to the ODM
- 3

Market Rules updated





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Do you feel there are any specific blockers to participating in flexibility that should be considered?

① Start presenting to display the poll results on this slide.

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**Please provide any other relevant information
that could help us improve our engagement or
flexibility services in general.**

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On a scale of 1 to 5, where 1 is strongly disagree and 5 is strongly agree, do you believe your understanding of the process and requirements of Flexibility has improved?

① Start presenting to display the poll results on this slide.

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On a scale of 1 to 5, where 1 is strongly disagree and 5 is strongly agree, how would you rate the following statement: Overall, today has proved valuable and a good use of time?

① Start presenting to display the poll results on this slide.



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THANK YOU FOR
JOINING US TODAY



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Sign up to receive our DSO Newsletter



8 – 19 September