DSO POWERING CHANGE

DRIVING CAPABILITIES AND DELIVERING IMPACT

SSEN DSO Submission 2026

Scottish & Southern Electricity Networks

DSO Powering Change

CONTENTS

DSO POWERING CHANGE THROUGH DELIVERY

This final year of our three-year Accelerator programme demonstrates how strong organisational leadership, clear intent and sustained focus has turned our ambition for a smarter, more flexible network into tangible, real-world impact. From the outset, we've listened to customers and stakeholders, learned through delivery, and backed our teams to move decisively from early capability building to action at scale.

Year 3 has been about delivery and operational excellence. We've embedded the capabilities developed earlier in ED2 into business as usual, ensuring our DSO now operates with maturity, consistency and impact. This is evident across data, flexibility, options assessment, operational coordination and long term efficient planning - underpinned by Strategic Development Plans that provide a clear, trusted direction of travel for our regions.

Over the past year, we've materially strengthened the depth of insight and trust in our network data, giving customers, developers and partners greater confidence to plan, invest and participate.

We've expanded our flexibility operation by focusing market access where it drives the greatest opportunity and action, strengthening whole-system coordination with NESO and embedding flexibility as a core operational tool to accelerate connections and optimise reinforcement.

This submission evidences how we've delivered fully against our Year 3 DSO Action Plan commitments, releasing additional network capacity and strengthening system resilience. We recognise there is more to do, and we're ambitious to go further – building on this progress to continue leading delivery for customers and communities.

Chris Burchell,
Managing Director, SSEN

We've moved from capability to impact – unlocking trusted data, scaling flexibility, strengthening governance and accelerating connections for communities and the energy system. Within this submission you'll see how this year we've delivered:

Open, trusted data powering confident whole-system decisions ···→ p.9-14

We set the benchmark for transparent, automated and decision-ready data—unlocking investment, accelerating connections and enabling smarter planning at scale.

- **308 datasets** published openly (tripling the catalogue), supported by **556+** methodologies, maps, dictionaries and insight reports
- **3.23 billion** smart-meter data points published, making us the only DSO providing daily-updated, street-level half-hourly data via open API
- **Over 90% short-term forecasting accuracy,** enabled through machine-learning integration using NeRDA and third-party analytics
- **65 datasets fully accessible via API,** supporting automated decision-making and third-party system integration at scale
- **50% of datasets independently Icebreaker One Level-1 assured –** the only DSO with this accreditation

Flexibility at scale: simple to access, proven in operation ···→ p.15-19

We operate the UK's most mature and accessible flexibility markets—delivering faster connections, lower costs and real whole-system value.

- Nearly **1 GW** of flexibility procured, a **37% increase** since 2024/25
- **1,335 MWh** of flexibility dispatched in 2025/26, a significant increase in growth, demonstrating operational rather than theoretical use
- **82.5%** bid acceptance rate and **73% utilisation,** showing procurement discipline and value-based dispatch, not volume-driven markets
- **Second DSO in GB to launch Day-Ahead markets,** enabling participation within 24 hours, including domestic and microbusiness flexibility
- **2,000+ domestic MPANs** enabled for flexibility, securing 12.1 MW of domestic load-diversity capability during RTS transition

Independent, transparent decisions that build trust and deliver value ···→ p.20-26

We lead the sector in conflict-free, evidence-based decision-making—ensuring every option is assessed fairly in the whole-system interest.

- **37 Strategic Development Plans** published, covering the entire licence area, with digitised outputs, one-page summaries and stakeholder-consulted methodologies
- **10-year DNOA horizon** introduced (first-of-kind depth), extending visibility into ED3 and ED4 investment decisions
- **95 DSO Advisory Board recommendations** actioned, demonstrating independent challenge translating directly into delivery
- **Central, publishable Conflicts-of-Interest Register** established, with quarterly independent assurance and sector-leading transparency

Coordinated, automated dispatch for a smarter, more resilient grid ···→ p.27-30

We've moved from visibility to action—delivering transparent, scalable DER dispatch aligned across DSOs and NESO.

- **512 MWh** of DER participation in NESO markets, with company participation doubling and **54,500** bids processed through the Local Constraint Market
- **64 operational signals per second** shared with NESO via ICCP, delivering real-time visibility of MW flows, ANM system health and primacy coordination
- **Over 2,000** potential DSO–NESO conflicts identified and mitigated through enhanced Risk-of-Conflict reporting in live operations
- **Systems for Flexibility implemented,** enabling automated scheduling and dispatch with merit-order logic fully embedded into control-room decision-making

Building enduring value and benefit for our communities

How our Three-Year Accelerator has driven our DSO performance

Y1 In Year 1:

We laid strong foundations, establishing credible DSO capability and early delivery across our core roles

We launched our DSO Data Portal with NeRDA, providing unprecedented visibility from EHV to LV networks and improving customer confidence through published LV load models and MWh/hour curtailment reporting.

We mobilised our Whole-Systems team introducing LENZA tools for local authorities, providing digital support for Local Area Energy Planning and responding directly to stakeholder demand.

We reduced barriers to entry, improving market consistency for flexibility participants, and demonstrated operational use of flex to manage constraints and reduce carbon-intensive solutions.

We established our DSO Advisory Board (DSOAB) and consulted on, and published, ODM and DNOA frameworks, ensuring transparency, independence and trust from the outset of DSO delivery.

ODI alignment: ✓Transparency ✓Capability establishment ✓Early delivery of consumer/system benefits — Good

Y2 In Year 2:

We demonstrated scaled, assured and embedded DSO delivery with measurable impact

We were the first DSO to publish SDPs and scaled award-winning LAEP support for local authorities. We embedded local energy planning into network development, enabling confident, investable local decarbonisation.

We delivered a step-change in data transparency, enhancing our open Data Portal, publishing increased volumes of data, and launching Network Insights webinars to enable proactive identification of capacity, constraints and opportunities.

We scaled flexibility markets through a new platform and 1-to-1 expert support, cutting contracts from four to one and driving sustained growth in participation and volumes.

We embedded assured, transparent operations by publishing our ODM and delivering sector-leading coordination and data exchanges with NESO, improving whole-system outcomes.

ODI alignment: ✓Demonstrable outcomes ✓Stakeholder satisfaction ✓Independent assurance ✓Learning and improvement — Good → Strong/Excellent

Y3 This year

We've moved from delivery to maturity and best practice, embedding and automating our DSO services and strengthening whole-system coordination in line with the ambitions that we set out in our DSO Accelerator at the start of ED2

Demonstrated sector-leading maturity in DSO delivery, with core services fully embedded and increasingly automated, shifting from time-limited initiatives to business-as-usual capability and delivering demonstrably improved whole-system coordination.

Delivered a sustained step-change in data transparency and quality, enhancing our open Data Portal, launching the Centralised Network View, and embedding robust, transparent data-quality standards and scoring — enabling confident, proactive stakeholder decision-making at scale.

Scaled and coordinated flexibility markets beyond peers, launching GB's second **day-ahead market**, expanding domestic flexibility to **2,000 domestic heating systems**, supporting Radio Teleswitching Service (RTS) transition via Load Managed Areas (LMAs), and acting as first-mover in piloting **Data Sharing Infrastructure (DSI)** with NESO to unlock whole-system benefits.

Embedded mature, assured planning and governance at licence scale, delivering sector-leading Strategic Development Plans across all areas, applying consistent and transparent options assessment, strengthening conflicts-of-interest mitigation, and aligning closely with RESP to support efficient, future-ready investment decisions.

ODI alignment: ✓Whole-system coordination ✓Automation and maturity ✓Scalable benefits ✓Evidence-based prioritisation — Excellent

Y4/5 Next year and onwards

In Years 4 and 5 of ED2, we will build readiness to deliver expanded, enhanced DSO capabilities in ED3

Developing the enabling models and digital capabilities needed for ED3, strengthening how we forecast, plan and operate our networks — including early work on losses, voltage management and whole-system data requirements.

Deepening our engagement with communities and local energy partners, expanding our support for place-based planning, community energy, and emerging local energy system needs.

Building foundational improvements in flexibility markets and operations, enhancing processes, tools and customer journeys to support more automated, transparent and scalable flexibility services.

Advancing digital DSO operations and whole-system planning, improving how we coordinate with regional and national system partners while preparing for future ED3 roles in network visibility, optimisation and market facilitation.

Delivery of DSO benefits

£131.44m
Net benefits* realised in Y3

£288.26m
Net benefits realised in ED2 to date

Gross benefits realised in ED2*

Stakeholder	How we delivered value	Y1	Y2	Y3
Domestic and commercial customers	We reduce costs for our customers through reinforcement deferral and efficiency improvements.	**£0.12m**	**£0.19m**	**£1.12m**
DERs and FSPs	We accelerate connections for DERs and contract services from FSPs.	**£18.49m**	**£19.83m**	**£37.85m**
Local Authorities and wider society	We support local authorities with data and tools for developing LAEPs and we accelerate connections for affordable housing that is greatly needed in West London.	**-**	**£0.27m**	**£0.22m**
Whole-system and NESO	We lower whole-system costs by accelerating connection of renewable generation, which displaces higher cost fossil fuel sources, and by supporting NESO with enhanced visibility of our network and available asset capacity.	**£67.15m**	**£72.43m**	**£103.57m**
Total		**£85.76m**	**£92.72m**	**£142.76m**

* All benefits are Gross unless specified otherwise and reported in 2020/21 prices. Please note that 2025/2026 costs are currently estimates to be updated with actuals in July 2026.

In 2025/26, we've delivered **£131.44m** of net benefits for our customers and stakeholders, an increase of 60% from 2024/25 which brings our total realised net benefits over the first three years of RIIO-ED2 to **£288m**.

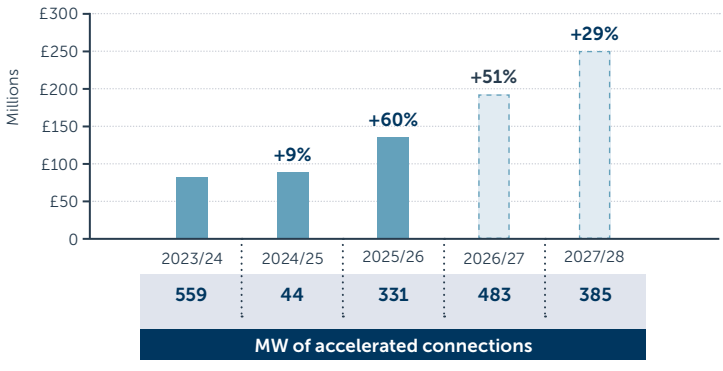
- We've accelerated **331MW** of connections in Year 3 through our wide array of Early Access solutions, a seven-fold increase from last year, bringing our total realised gross benefits from this activity to **£140.82m**.
- We've continued to use flexibility to manage distribution network constraints and make more efficient use of existing and planned infrastructure, reducing the need for immediate reinforcement. This year we've dispatched **1,335MWh** of flexibility, a significant increase from last year. We have **deferred over £354m** of planned investment across ED2, significantly exceeding our £32m ED2 reinforcement deferral target, releasing capacity in our network and enabling faster connections.
- This year we're also reporting on the **reduced whole-system costs from our accelerated connections by £103.05m**, driven by the large amount of renewable capacity that has been able to connect without delays from network reinforcement. We've also applied this retrospectively to our Year 1 and Year 2 realised benefits calculations.

How our performance aligns with our ambition and targets

The benefits we've delivered this year reflect a culmination of actions we've taken to deliver our ambition and strategy set out in our three-year DSO Accelerator Programme. Year 1 focused on getting core processes and systems in place to realise benefits for customers and stakeholders. We continued progress in Year 2, unlocking broader enablers and new capabilities. In Year 3, we've leveraged our embedded capability to deliver benefits at scale, while tailoring our activities to the needs of our different stakeholder groups and regions.

A large portion of our DSO benefits is driven by our work accelerating connections for customers, which otherwise would face delays due to both distribution and transmission constraints. Predicted connections demand during RIIO-ED2 has declined, largely due to delays with Connections Reform and fewer projects progressing beyond Gate 2. Despite these challenges, we project a steady increase in our benefits driven by an increase in capacity connected ahead of network constraints. We estimate over **868MW** to connect in the last two years of RIIO-ED2 from work carried out to date, 97% of which is renewable generation which will not only benefit those connecting, but the wider system as a whole as we enable more low-carbon generation into the grid.

Net benefits accrued per year and forecast for rest of ED2



We've changed how we present our benefits to better align with other networks

We've made a few changes to the way we show our benefits this year to align with new standardised methods in the sector and with how other networks present their benefits. Previously, we have focused on showing benefits realised in the year when we've delivered the associated outputs. This supports our commitment to transparency – in years where we deliver less our benefits will be lower, as shown in our realised benefits reported in our Year 2 report compared with Year 1.

This year, we're adjusting how we report benefits to spread them as they accrue, which has an impact on our benefits from accelerated connections since we're now spreading them across the period of acceleration. This gives a different trajectory than what was reported previously: as the graph above shows we now have a steady increase year-on-year of benefits we have delivered, with a reduction in scale versus previous years to account for the year-per-year accrual. We'll continue to report transparently on performance from our activities each year (see table above with MW accelerated), however we believe this new approach to benefits accrual will allow for better comparison and consistency across networks and therefore consider it a positive change.

How we measure and track benefits

Our embedded approach to measuring and reporting DSO benefits has been refined throughout RIIO-ED2. We identify and plan benefits delivery using our bespoke Theory of Change methodology and measure, track and report benefits using a 3-step iterative process. This year, we've refined our framework based on stakeholder feedback, enhancing several components and adding new elements:

1. Engage and define

Agree priority outcomes and how activities deliver stakeholder value

- Identify benefits we are targeting
- Map activities to benefits
- Define success measures

DSO Advisory Board: Reviewed approach and identified targeted benefits ahead of Year 3 delivery.

Theory of Change: Updated with new and refined activities delivering new benefits.

KPIs: Improved KPI definition and tracking system with 5 new KPIs.

2. Measure and review

Quantify delivery and assess realised impact

- Track outputs and benefits
- Identify data requirements
- Review performance and evidence

Standardisation: Aligned our approach for common benefits across DSOs.

Quantification: Applied robust, best practice methods for economic appraisal including Ofgem CBA, CEM, Social return on investment (SROI), HMT Greenbook.

Assurance: All reported benefits independently assured by Sia.

3. Communicate and refine

Use learning to maximise value and demonstrate accountability

- Adjust plans based on impact
- Embed learnings in decisions
- Report outcomes transparently

Methodology: Published our refined DSO benefits methodology and assumptions.

Governance and KPI reporting: Tracked KPIs monthly at DSO Sub Committee and reviewed yearly with input from our DSO Advisory Board. KPIs published externally every quarter on our website.

This year, we worked with other DSOs through the ENA Collaboration Forum to further standardise benefits measurement for shared outcomes. All figures are reported on a consistent basis, with historic data re-baselined to enable robust year-on-year comparison. Our updated methodologies reflect these changes, including:

- Reporting all benefits in 2020/21 prices and on an undiscounted basis within RIIO-ED2.
- Applying consistent values to quantify carbon impacts, using HMT Greenbook data and methods.
- Presenting aggregate benefit figures in net terms, including appropriate costs for our DSO activity.
- We've aligned with the standardisation guidance for three common outcomes: Accelerating DER connections, Deferring reinforcement and Outage management and optimisation. Standardised benefits are clearly signposted in our ToC table on page 5.
- As agreed across DSOs, we continue to report a small number of non-standardised benefits reflecting network- or region-specific value. All are quantified using HMT Green Book-compliant methods and independently assured against ENA Collaboration Forum principles.
- We've included these non-standardised benefits in our reported totals, except for indirect societal benefits (such as affordable housing acceleration and LAEP-related outcomes), which are reported separately as unlocked benefits and excluded from realised totals.

Using Key Performance Indicators (KPIs) to drive benefits for stakeholder and customers

We track our performance on a quarterly basis and publish the results on our website.

KPIs	Y3	Performance
The number of projects in LENZA	344	NEW
Number of Strategic Development Plans Published	37	↗
Number of Distribution Network Option Assessment (DNOA) outcomes independently assured	48	↗
Engagements held supporting industrial and commercial customers	63	NEW
Flexibility Services capacity procured in ED2 (in MW)	952.34	↗
MW of Connections Accelerated using Access Products (in MW)	735	→
Number of near real-time and half-hourly data points routinely published or shared	113,370	→
Risk of conflicts assessed	2,152	NEW
Outage curtailment instructions	1,346	NEW
% of requests meeting our new 20-day SLA	59.5%	NEW
Number of data discovery workshops, events and engagements	18	↗
% data sets published with additional insights (i.e. methodologies, guidance)	90%	→
% DSO Advisory Board Feedback actioned	86%	↗

Adapting our plans and course-correcting to increase benefits

In direct response to stakeholder feedback, we rapidly evolved our KPI framework, introducing five new KPIs this year to drive measurable and sustained performance improvements. This included the implementation of a 20-day SLA for data requests in October 2025, supported by streamlined processes, enhanced tracking, and active governance.

We onboarded data SMEs into a central tracking tool and established regular escalation forums to proactively remove barriers to data sharing. Since implementation, we have consistently met the SLA on 59.5% of requests, delivering faster access to data, greater transparency, and demonstrable improvements in stakeholder confidence and satisfaction.

DSO benefits we delivered in 2025/26

The table below outlines the Theory of Change we developed for the DSO activities we delivered this year. We've evolved our approach this year in line with the principles of the DSO Collaboration Forum. We regularly report on all our key enablers and KPIs in our quarterly Performance Reports. All values are gross benefits in 2020/2021 prices.

Year 3 activities identified	Year 3 outputs	Year 3 outcomes	Year 3 gross realised benefits (2020/21 prices)	Beneficiary	Type*	Methods
Forecasting and planning future needs						
Engagement with local authorities through LENZA and Net Zero Engagement Specialists	Supported local authorities in developing an LAEP	Better and faster development of LAEPs to deliver net zero, with reduced efforts from local authority	Avoided costs for local authorities on LAEP planning and decarbonisation initiatives **£0**	Local authorities	D	SROI
			Societal benefits from reaching net zero through LAEPs **£0** (indirect societal benefits are unlocked and don't count towards total realised)	Wider society	I	SROI
Short-term load forecasting tool	**27 pc point** reduction in mean forecasting error	**112 MWh** reduction in utilisation dispatch required to meet requirements	Utilisation dispatch expenditure saving **£0.011m**	Domestic and commercial customers	D	CBA
Developing an inclusive market						
Offer of flexibility products	**1,335 MWh** of flexibility dispatched	**£354m** deferred reinforcement in the network across ED2	Reduced consumer bills **£0.56m**	Domestic and commercial customers	D	CEM
			Revenue from participating in flex markets – FSPs **£0.07m**	Flexibility service providers	D	CEM
			Revenue from participating in flex markets – Domestic Customers **£0.44m**	Domestic and commercial customers	D	CEM
Developing network flexibility at scale						
Early access solutions	**331.4 MW** of distribution and transmission constrained generation, demand and storage connected	**275.1MW** increase in renewables and storage connected	Reduced carbon emissions **130,483** tonnes CO_2e, equal to **£34.19m** in societal benefit	Wider society	I	Green Book
			Wholesale cost saving **£103.05m**	Whole-system	D	CBA
			Avoided cost of delaying renewable and storage connection **£25.2m**			CBA
		49.9MW of generation connections accelerated	Avoided cost of delaying generation connection **£10.4m**	DER	D	CBA
		6.4 MW of demand connections accelerated	Avoided cost of delaying demand connection **£2m**	DER	D	CBA
		174 affordable houses accelerated through the West London Initiatives	Societal benefits from affordable housing accelerated **£7m** (indirect societal benefits are unlocked and don't count towards total realised)	Wider Society	I	SROI
Refined field based ANM hardware	**2** additional ANM controllers installed	Avoided additional installations for capacity changes	Savings for connecting customers **£0.01m**	DER	D	CBA
ANM Improvements	**3** standardised ANM modules installed	**212 MW** of connections with faster ANM deployment	Reduced consumer bills due to reduced network spend **£0.03m**	Domestic and commercial customers	D	CBA
PCNZ	**£0.21m** awarded to vulnerable customers	Increase in renewable generation connected	Reduced carbon emissions **£0.008m**	Wider society	I	Green Book
		Increase in LCT demand connected	Societal benefits from providing LCTs (energy savings) **£0.013m**	Wider society	D	SROI
			Societal benefits from providing LCTs (LCT value) **£0.20m**	Wider society	D	SROI
Data and insights						
LV monitoring data and access to half-hourly consumption data from smart meters	Communicated with **2.75m** smart meters and increase in LV monitoring data points	Increased demand shifting leading to lower peak demand	Lower whole-system costs **£0.51m**	Whole-system	I	SROI
		3,994 avoided site visits through the use of smart meter data	Reduced consumer bills due to reduced network spend **£0.07m**	Domestic and commercial customers	D	CBA

ENA standardised benefits*

Note: For benefits not in scope of ENA standarisation we have still applied the standardised elements and principles agreed where applicable as well as follow best practice.

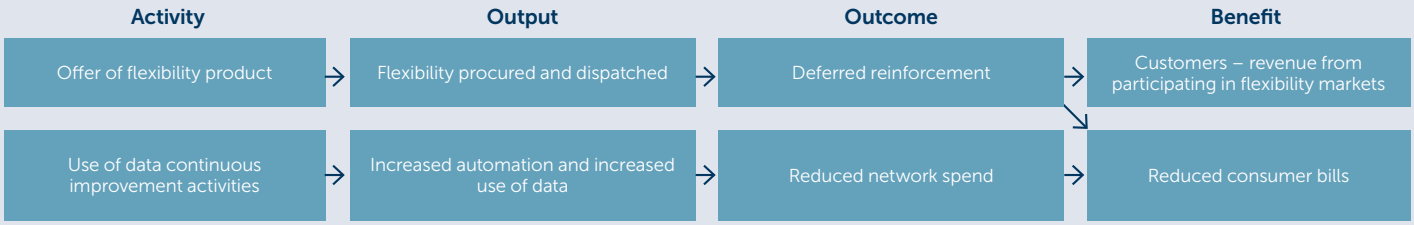
*D= Direct Benefit, I= Indirect Benefit

Benefits delivered per stakeholder group

Domestic and commercial customers

£1.12M
Benefits realised in Y3

£1.44M
Benefits realised ED2 to date



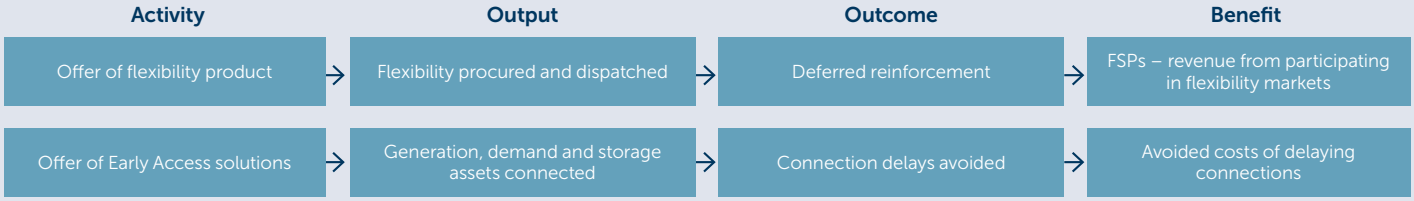
How we've delivered value

- **Consumer bills saving from reduced network spend.** We've carried out several activities that will reduce our overall network spend which will result in lower bills to our customers. This year we have increased contracted flexibility to meet **£354.94m** of reinforcement needs over the ED2 period and into ED3, reducing spend whilst enabling faster connections, resulting in realised net savings of **£669k to date**, and £13m by 2038 (these values follow an updated methodology as per standardisation established through the DSO Collaboration Forum). Expressed illustratively and adjusting for the cost of procuring these flexibility services, the time-cost value of money, and application of the Totex Incentive Mechanism (TIM), this scale is comparable to around **£7.19** of a typical annual customer bill in 2026-27 monies*. We've also continued to carry out ANM improvements which are reducing costs for connecting customers and leading to efficiencies in our network spend.
- **Revenue from participating in flexibility markets.** This year we welcomed record participation whilst increasing the contracting of flexibility in our network by 37%, with 85% of our flexibility spend this year estimated to be for our domestic customers. We're also currently developing our Smart Signal capability which will remove barriers for participation for customers with domestic LCTs who wish to participate in flex markets (see page 17).

DERs and FSPs

£37.85M
Benefits realised in Y3

£76.18M
Benefits realised ED2 to date



How we've delivered value

- **Revenue from participating in flexibility markets.** We've dispatched **160%** more flexibility this year, partly supported by our work to automate decision-making to determine a merit order stack, which allowed us to increase the number of Constraint Managed Zones (CMZs) where we dispatch flexibility. We also launched our Day-Ahead market, following feedback from providers that existing long-term markets weren't providing the level of certainty they needed and that some of their assets were more attuned to short-term markets. This launch also enables us to input requirements near real-time, allowing for operational requirements to be addressed through flexibility whilst also improving market liquidity (see page 17).
- **Avoiding delays for connecting customers.** Through our array of early access products, our DER customers are connecting to our network up to 10 years earlier than if they had to wait for asset reinforcement. This year we've accelerated **331MW** of connections, **83%** of them renewables or storage which have lower running costs and therefore will also lower whole-system costs for all GB customers.

Regional differences – delivering targeted outcomes for our licence areas

As a DSO, we're committed to delivering benefits across both of our licence areas. To do this, our teams have worked hard to understand the needs of our customers in the north and south, which can differ greatly. In Scotland, the distribution network operates at 33kV and below, resulting in fewer constraints compared to England where distribution networks include assets at 132kV and below. We also have significantly more assets and demand-heavy areas in the south than the north, so it is expected that more constrained assets occur in southern areas. For this reason, a large proportion of our activity in flexibility and acceleration of connections focuses on our SEPD licence area in central southern England.

Historically, Scotland experienced more generation constraints, but these have been actively managed since ED1 when we were the first network to implement Active Network Management (ANM). Today, most constraints in the north sit behind the transmission network rather than within distribution. To address this, we've established a working group with SHET focused on transmission boundary constraints and signal interfaces to unlock capacity and accelerate connections.

Another example of targeted action in SHEPD is the work we've done to mitigate the risks of Radio Teleswitching Service (RTS) switch off in our Load Managed Areas (LMAs), allowing us to secure over **12MW** of load-diversity capability (see page 17). This tailored, region-specific approach enables more effective outcomes by targeting solutions where they deliver the greatest value.

* Average bill analysis of £354m provided for scale only. Flexibility can be used to meet capacity requirements (for one or more years) enabling more efficient timing of investment and construction, or long-term alternative.

Local authorities and wider society

£34.42M
Benefits realised in Y3*

£84.93M
Benefits realised in ED2 to date*

£151.87M
Indirect societal benefits unlocked ED2 to date:

Activity	Output	Outcome	Benefit
Offer of access products, Technical Limits, DSR and Intertrip	Generation and demand assets connected	Reduced use of diesel generators	Reduced carbon emissions
		Affordable housing connected sooner	Wider societal benefits from affordable housing**
Engagement with local authorities and use of LENZA	Local authorities supported in developing LAEPs	Better and faster development of LAEPs to reach net zero	Avoided costs and societal benefits from net zero

How we've delivered value

- **Reduced carbon emissions from accelerating renewables.** Our work to accelerate connections has resulted in a large volume of renewables being connected sooner to our network, displacing more carbon-intensive generation sources. Though reduced carbon costs are already included in whole-system cost savings (see next section) we've calculated and monetised avoided carbon emissions separately to align with the standardised ENA methodology, while ensuring these values are not included in our totals to avoid double counting. This year we have avoided **130,483** tonnes of carbon emissions, totalling to 326,585 tonnes in ED2 to date.
- **Wider societal benefits.** We've continued to support the housing industry in West London through the use of access products by accepting earlier connections for a further 984 homes this year, 174 of which are affordable housing. This brings our total homes accelerated since the start of ED2 to **12,099**. Earlier access to affordable housing unlocks benefits such as cheaper rent and purchase costs as well as wider societal outcomes such as reduced NHS costs and lower benefit claims. We also provide support to Local Authorities through our engagement specialists and access to our LENZA tool, and we're currently working with Winchester City Council in developing the UK's first digital LAEP (see page 24). This will unlock wider benefits to society** from local decarbonisation, such as cleaner air and improved health, when the LAEPs we have supported are implemented.

*Includes monetised benefits from carbon emissions avoided, which have not been added to totals in p.5 to avoid double counting.

**Indirect societal benefits are not part of standardised benefits through ENA methodology. Given the indirect nature of these benefits and current uncertainty regarding the timing when they will be realised, we have chosen at this stage to only report these as "benefits unlocked".

Whole-system and NESO

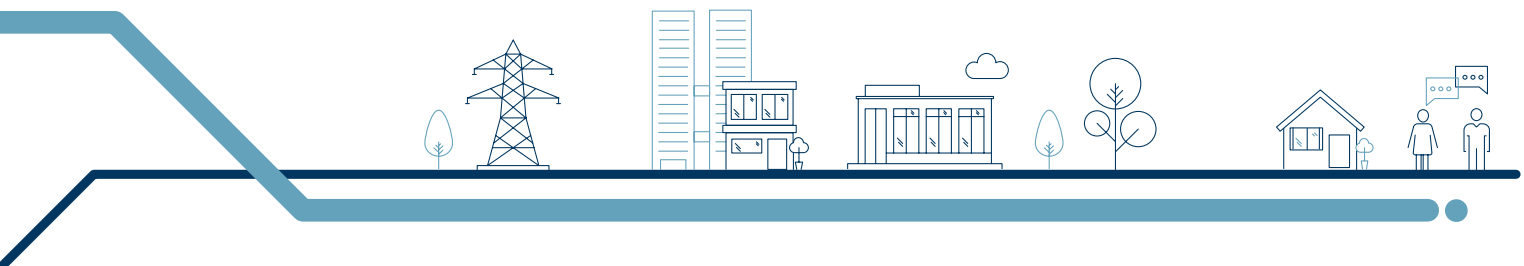
£103.57M
Benefits realised in Y3

£243.16M
Benefits realised in ED2 to date

Activity	Output	Outcome	Benefit
Offer of Early Access solutions	Generation, demand and storage assets connected	Connection delays avoided	Reduced whole-system costs
LV monitoring and access to smart meter data	Communicated with smart meters and increased LV monitoring points	Increased demand shifting leading to lower peak demand	

How we've delivered value

- **Reduced whole-system costs from accelerating renewable generation and storage connections.** This year we've included a new benefit to our calculations to align with the standardised ENA methodology, which shows the value we deliver to the whole electricity system when accelerating renewable generation and storage connections. These generators alongside battery storage, are cheaper to run and have lower carbon costs than if fossil-fuel alternatives were to provide that generation to the network, savings which will pass on to all customers in GB. This benefit is significant and amounts to **£103m** this year, showing how our work to accelerate connections not only benefits our own connecting customers across our network, but also ensures the system is cheaper for all customers.
- **Contributing to NESO benefits across GB.** We've continued to contribute to NESO activities which benefit GB customers, including:
  - Our network visibility strategy continues to rely on our smart metering data, LV monitoring and our load model. We've increased the number of meters we communicate with to **2.75m** and our LV monitoring devices have increased by 38% in the past year reaching over **7,500**.
  - We've made **2,142MW** of asset headroom available to NESO through our participation in the Local Constraint Market and **492MW** has been contracted, an increase of **120%** compared to last year.
  - Though progress through Technical Limits has stalled due to Connections Reform, we continue to connect customers ahead of transmission constraints through our access products – this year we have connected **311 MW** of capacity with acceleration periods between 5 and 10 years.



Regional cross vector investment planning and interfacing with local actors to drive benefits

In 2025/26, we expanded our Strategic Development Plan (SDP) engagement to involve a broader range of stakeholders across GB energy networks, government, community, infrastructure, and energy market participants. While many of these activities have not yet delivered fully quantifiable benefits, they are critical for building cross-sector collaboration and informing future investment and whole-system planning decisions. Our SDP engagement directly links to Local Area Energy Plans (LAEPs) by providing local authorities and regional actors with insights on current and future energy system needs, helping to align local planning, growth, and decarbonisation initiatives with network development.

To further support local decarbonisation efforts, we've co-developed and trialled a local authority 'Common Ask Template' this year with two other DNOs and gas networks to simplify the process for our local authorities that are served by more than one distribution network. This will benefit around two-thirds of our local authorities, reducing effort by at least 50% (see more details on page 26).

We've further evidenced the impact of this proactive cross-sector and local engagement in the table on page 25. Examples include:

Cross-sector investment planning: Infrastructure Impact Conference, Glasgow

We convened the Infrastructure Impact Conference in Glasgow with ScottishPower, Scottish Water and Openreach, bringing together senior leaders across energy, water, telecommunications, ports and ferry operations to address the shared challenge of delivering Scotland's infrastructure pipeline in a more coordinated, people-focused way. The conference used practical cross-sector case studies to explore how earlier collaboration and joint optioneering can reduce delivery risk, duplication and disruption, and support more joined-up planning within Strategic Development Plans (SDPs).

Outcomes:

- Supported more coordinated planning around Scotland's c.£46 billion infrastructure investment pipeline to 2030, which is expected to support around 27,500 jobs, highlighting the importance of cross-sector coordination to maximise economic and societal value while managing cumulative delivery impacts.
- Used real-world case studies to enable earlier electrification planning for ferries in remote regions, improving alignment between network development and transport decarbonisation timelines and reducing the risk of mis-timed or duplicative investment.

Our work to decarbonise distilleries

Speyside hosts over 50 whisky distilleries – making up one third of all distilleries in Scotland. Most distilleries rely on fossil fuels to generate the high-temperature heat required in distillation. The Scotch Whisky Association (SWA) has set a target to achieve net zero emissions by 2040.

We worked with the SWA to deliver a workshop with Speyside-based distilleries to inform our long-term electricity network planning and the area's Strategic Development Plan (SDP). We shared how industrial electricity demand forecasts contribute to infrastructure planning and provided guidance for how distilleries can input into the process.

Outcomes:

- 15 distilleries submitted future electrical needs in Speyside.
- Our preliminary findings suggest that the additional load from whisky decarbonisation could be significant – the 15 distilleries have a current peak demand of 12MVA, rising to a forecasted 143MVA by 2050.
- Data integrated into our strategic planning and factored into our analysis so we've signposted potential schemes to meet this increased demand requirement in the future.
- Strengthened engagement with a key industrial cluster in our Northern region.

Delivering additional outputs for customers by deploying innovation into business-as-usual

HOMEflex boosts trust in flexibility as it's embedded into a new GB-wide scheme

We played a leading convening and design role in establishing HOMEflex, shaping the UK's first sector-wide framework for fair, transparent and trusted domestic flexibility. In line with the recommendations set out in the HOMEflex Final Report (May 2025), a new GB-wide compliance scheme was launched in December 2025 to support the growth of domestic and microbusiness flexibility.

Working in partnership with Flex Assure (our partners on HOMEflex) we launched the Domestic and Microbusiness Compliance Scheme – the first independent assurance framework designed to protect households and microbusinesses engaging with flexibility service providers (FSPs). The scheme has been developed to fill the gap ahead of the Government's future licensing regime, expected by mid-2027, bringing greater consistency, accountability and consumer protection to the market.

It sets out robust requirements for how FSPs communicate with customers, onboard participants, handle and share data, and design fair and transparent reward structures. The scheme builds directly on the outputs of the HOMEflex project, which established a Code of Conduct and defined minimum consumer protections for domestic and microbusiness flexibility services.

The scheme has been supported financially and strategically by all DSOs, alongside the National Energy System Operator's Power Responsive programme. Flex Assure is also engaging closely with Ofgem to ensure alignment with future regulatory requirements and to support the market ahead of formal licensing.

Outcomes:

- First GB-wide independent compliance scheme setting the 'rules of the road' for domestic flexibility, accelerated market maturity, and laying the foundations for a trusted, inclusive flexibility market that networks, service providers and consumers can engage with confidently.
- HOMEflex Code of Conduct translated into a practical, enforceable assurance framework and an independent dispute resolution service introduced which strengthens consumer protection.
- Strong cross-sector backing secured, including all DSOs and NESO.
- Improved trust, consistency and readiness in the flexibility market ahead of regulation in 2027.

"Working on the HOMEFlex project with SSEN has been a genuinely positive experience. Their commitment to making a positive difference for customers is clear in their collaborative approach and focus on raising standards across the market. Our work together and their support in incorporating the Code into the Compliance Scheme, has been key to successful business as usual."

Charlotte Roniger, Flex Assure

SETTING NEW STANDARDS FOR DATA INTEGRITY

We lead the sector by opening up high-quality, trusted data—sharing not just outputs, but the insight and methodologies behind them

Over the past year, we've significantly strengthened our role as a data-driven, insight-led organisation by materially expanding access to high-quality, usable network data. We now publish **308 datasets**, including access via APIs where appropriate, making it easier for stakeholders to integrate our information directly into their own tools, analysis and decision-making processes. This has been complemented by the **iterative, stakeholder-informed development of a new industry-leading geospatial tool**, ensuring our data is not only available but genuinely usable and shaped by user need.

We've also improved confidence in our information through the introduction of a **data quality dashboard**, with accuracy now at around **90%**, giving stakeholders clear visibility of data performance and assurance of reliability. To support better whole-system coordination, we are providing data in **CIM and network model formats**, enabling closer alignment across planning, operations and market activities. Alongside this, we've **refreshed our ED2 Data Strategy**, using stakeholder feedback to sharpen priorities and clearly set out the key data developments that will be delivered across the remainder of the period.

Together, these improvements mean stakeholders can access richer datasets, trust the quality of the information provided, and use it in formats that actively support planning, collaboration and innovation—demonstrating strong performance against the Good and Excellent expectations for data and information provision.

Data benefits for customers and stakeholders

£1.55m in benefits

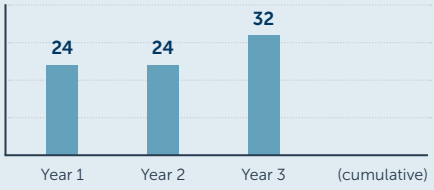
From using smart meter data and AI-driven forecasting to shift demand to reduce peak loads, avoiding unnecessary site visits, lowering network costs, and delivering direct bill savings for customers. (Gross benefit excluding monetised carbon savings to 20/21 price base)

Our stakeholders are constantly driving improvement

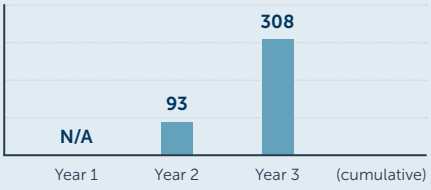
They said	We did
"We need more accurate and unbiased data to make informed decisions."	Improved assurance processes and enhanced data quality steps to mitigate bias and ensure published data is trusted and accurate.
"Data formats vary and are hard to work with; can you provide consistent and accessible formats?"	Ensured data is provided in accessible, common formats and made available in logical, easy-to-find location.
"We want easier ways to automate data access and integrate it into our system."	Expanded the consistent use of APIs to allow stakeholders to automate data collection.

Our accelerator in numbers

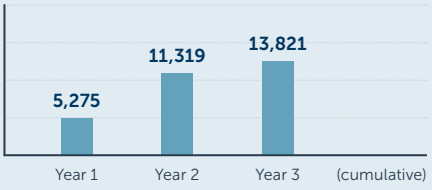
Data assets published on the Data Portal



Data sets published on the Data Portal

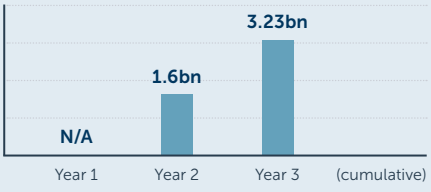


Users on the Data Portal

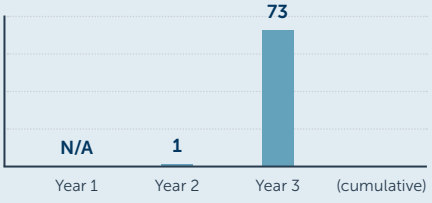


Datasets that are now Icebreaker One level 1 assured

Smart meter data points published daily



Number of data sets accessible via API



Year 3 accelerator progress

Every year during our 3-year accelerator we've shared an action plan with stakeholders where we made commitments on progress. Below you can see what we've achieved in the area of data and data accessibility in year 3.

Action plan commitments	Outcome
Publish methodologies for all available datasets, and updated insights and showcases to share learning across the sector	✓
Provide all machine-readable data sets via API, increasing their accessibility	✓
Publish the LTDS in CIM format, alongside other network models to increase transparency of network asset and capacity information	✓
Develop a consolidated geospatial insights tool to allow users to configure and tailor all capacity related asset data to their needs	✓

Leading the sector with comprehensive data provision and innovative use of third-party data

Open Data Portal

We're going beyond baseline data provision to deliver accessible, standardised and insight-led information that stakeholders can readily use and trust

Our open Data Portal remains the single, authoritative source for all openly published SSEN Distribution data. This year we significantly expanded its reach and capability, reinforcing our commitment to comprehensive, transparent data provision across planning, operational and market roles.

We've tripled our open-data catalogue to **308 datasets; this includes both current and historic datasets**. We also increased supporting materials to **556**, including methodologies, maps, data dictionaries and reports, ensuring clarity, context, and completeness.

We've strengthened underlying data quality through enhanced internal modelling reviews, improved asset annotation standards and systematic network-wide data clean-up.

These improvements increased dataset accuracy, granularity and representation, supporting stronger alignment with DSO Baseline Expectations and enabling robust planning, operational visibility and market facilitation.

We've implemented new automations between DSO reports, the publications library and the open Data Portal, ensuring a consistent and aligned view of information across the network.

As portal usage continues to grow, we introduced **a 20-day service level agreement** to provide timely updates on stakeholder requests.

By developing and maintaining our own Data Portal software, we continue to not only drive agile service improvements but also save substantial costs, unlike off-the-shelf solutions that quickly become expensive as needs grow.

We continue to build our own capability and growth by delivering these services in-house.

3x bigger open-data catalogue

New Data Portal features	How it's helping stakeholders
Share Ideas and Examples	Users can share and view ideas and examples on how to generate value from our data.
View Real Time Outage Banner	Users can stay up to date on any outages on our network by viewing our alert notifications.
Monitor Data Portal newsfeed	Users can quickly identify the most recent updates to the Data Portal.
Create maps and charts	Users can generate bespoke visualisations to improve their understanding of our data.
Track SSEN data events	Users can view upcoming event notifications; as well as download recordings and related materials.
View SSEN Reports and Documents	Users can put our data in context by viewing historic SSEN reports and documents, shared on the company website.
View the SSEN Centralised Network View	Users can access a single, centralised view of our electricity network through a user-friendly mapping solution.
Receive Data Asset Notifications	Users can follow data assets to receive notifications when any updates have occurred.
View Data Quality insights	Users can view insights on the quality of the data that we share to help inform their decision making around data usage.

Driving network intelligence through third-party data and smart meter visibility

We're exceeding expectations on data provision by unlocking high-resolution visibility and trusted third-party intelligence

Utilising smart meter data and insights

We're harnessing third-party data, particularly granular smart meter insights, to underpin a more digital, transparent and coordinated energy system. As both a producer and a user of digital energy data, we're pioneering an interconnected approach that strengthens planning, operational decision-making and market facilitation.

We've significantly expanded our use of external datasets, with smart meter visibility at the core. We now safely receive and publish **3.23 billion** street-level smart meter data points across our network. This is an industry-leading step that democratises real-time visibility of demand and generation patterns. This level of granularity enables us to accurately assess voltage performance, loading, and behavioural trends, directly enhancing our network models, forecasting tools and scenario analyses.

For instance, through our Smart Energy Data Repository and Digital Twin Energy Grids partnerships, aggregated smart meter data now underpins voltage analysis, demand forecasting and long-term planning – supporting nationally applicable, GDPR-compliant insights for net zero delivery.

3.23 billion
street-level smart meter data points

Third-party data assets

Third-party intelligence is integral to our long-term planning. Our DFES is built using authoritative external sources including NESO's FES, local authority planning inputs such as LAEPs and LHEES, and MCS installation data, combined with our own engineering expertise. In addition, our LENZA platform has **almost 70 third-party datasets**, with **over 50%** of them updated in the last year including DNO boundaries, NESTA datasets and EPC ratings. The result is a robust, publicly available view of future energy needs that supports whole-system planning across regions and sectors.

Open data also strengthens our ability to adopt best-in-class external tools. Through our open API for NeRDA, we've integrated advanced machine-learning services from specialist providers, achieving short-term forecasting accuracy exceeding **90%** – critical for flexible, responsive network operations. We remain the only DSO offering street-level real-time monitoring and half-hourly smart meter data, now enhanced by instant meter health diagnostics through our PowerTrack service.

Our commitment to interoperable data exchange is why we became the first DSO to pilot the Data Sharing Infrastructure (DSI). This proved how trusted, machine-readable, standards-based data flows, supported by scheme validation, clear handling rules and secure sharing principles, are essential to enabling whole-system coordination and safely incorporating third-party insights at scale.

Ensuring accessible, logical data availability through comprehensive network models and automated API integration

We're turning open data into usable insight through logical design, standardised APIs and automated, reliable data refresh

Selection of shared datasets and supporting materials

Name	Type	Benefit to customers	API	Methodology, enhanced insights or supporting materials
Embedded Capacity Register	Datasets	See where generation and storage can connect to target investment with confidence.	✓	✓
Technical Limits	Datasets	Understand import and export limits upfront to make quicker, better-informed connection decisions.	✓	
Low Carbon Technology Connections	Datasets	Track the scale and location of LCT uptake to identify growth opportunities.	✓	
Orkney Smart Meter Volumes	Datasets	Access historic LV usage data to analyse demand patterns and constraints.	✓	✓
Bressay Aggregated Electricity Demand (30-minute intervals)	Datasets	Use granular historic demand data to support local planning and modelling.	✓	✓
NaFIRS LV Faults	Datasets	Analyse planned and unplanned outages to assess local network reliability.	✓	
Headroom Dashboard Data	Datasets	Quickly identify available network headroom to streamline connections and planning.	✓	✓
NeRDA Opengrid Dashboard	Platform	Access all ANM and flexibility data in one place to support operational and investment decisions.	✓	✓
Centralised Network View	Tool	Explore how the network fits together to understand constraints and opportunities end-to-end.		✓
Data Quality Insights	Tool	Check dataset quality at a glance to build confidence in data-driven decisions.		✓
SEPD and SHEPD Long Term Development Statements (LTDS)	Datasets	Understand long-term EHV constraints and opportunities to target viable schemes.		✓
Day-Ahead, Short-Term and Long-Term Bidding	Datasets	Find where and when you can bid for flexibility with clear eligibility criteria.		✓
Flexibility Dispatch Data	Datasets	See when flexibility is used to assess future revenue opportunities.	✓	✓

Publishing high-quality, standards-based network models

Our robust, CIM-compliant network models set the benchmark for accuracy, accessibility and interoperability in data provision

Long-Term Development Statements

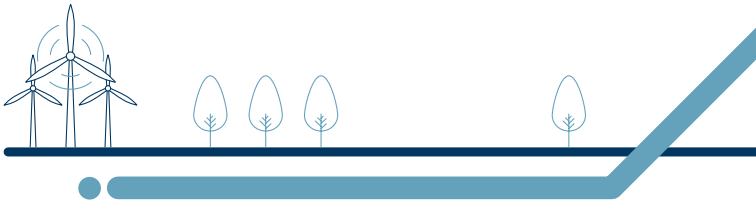
We provide detailed and robust network model information through our Data Portal, where our **Long Term Development Statements (LTDS)** are published in accessible, consistently structured formats. These provide stakeholders, particularly those connecting at EHV and HV, clear insight into current and future network capability.

Our LTDS sets out network configuration, forecast developments, planned reinforcements, and areas approaching capacity, and now includes summary and detailed sections available for all licence areas across central southern England and northern Scotland.

This year we've strengthened accessibility and interoperability by publishing the LTDS dataset using the latest **ENA aligned version of the Common Information Model (CIM 61970/61968 series)**. Our **LTDS EQ Profile** provides a complete, machine readable representation of the physical network—from 132kV (or EHV in Scotland) to primary substations—covering busbars, connectivity nodes, line segments with impedance and thermal ratings, transformers with tap changer data, generation and storage assets, aggregated loads, and compensators.

The dataset also includes voltage level hierarchy, substation containment, and equivalent network reductions. By adhering to recognised CIM profiles, we enable cross DNO model exchange and underpin future LTDS SC, GL and SSH profiles, supporting consistent planning and analysis across the sector.

Through our **Network Visibility and Model Management (NVMM)** programme, we're further improving accuracy and consistency by developing an automatically updated digital master model. Integrating data from network management, asset, geospatial, smart metering and monitoring. These enhanced, standardised models are already underpinning customer facing tools such as our low-voltage self-serve connections platform, delivering tangible value to users.



Adapting and enhancing data provision to meet our stakeholders' needs

Our continuous stakeholder engagement drives rapid feature deployment and measurable user impact – ensuring our data provision evolves at pace and delivers real, practical value

Open Data Portal Vision

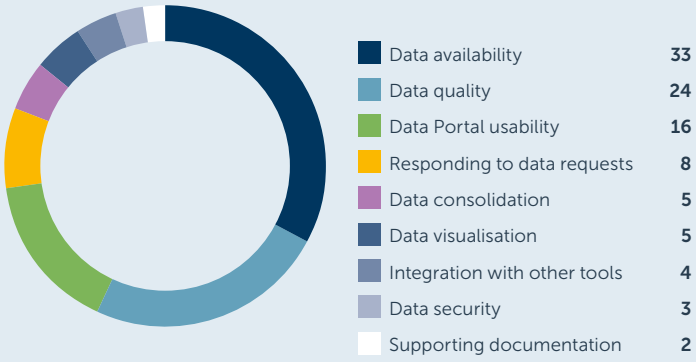
In **November 2025** we launched our Open Data Portal Vision and Strategy; shaped by the needs of our stakeholders throughout the year. We've drawn on feedback from 5 data surgeries, events from our autumn and spring series and issued a user feedback survey. From this, we've identified which stakeholder priorities are integral to keeping our Data Portal relevant and accessible to users.(see diagram below).

Data Availability
Stakeholders want to see an increase in volume and visibility of data available through the portal with clearer signposting of what data is held, shared or available on request. You can see a selection of the datasets and assets we've made available on pages 10 and 11.

Data Quality
Stakeholders highlighted ways in which we can improve confidence in data by increasing accuracy, completeness and overall data quality, along with alignment to other DSOs. You can view the steps we've taken to improve data quality on the next page.

Data Portal Usability
Stakeholders gave us clear insight into future features for the portal including improving search functions, clearer data set descriptions and more self service functions. You can read about the improvements we implemented off the back of this feedback below.

Data Portal user feedback survey: What is important to our stakeholders?
%



Co-designing with stakeholders, delivering best in class tools to meet their needs

Our deep stakeholder co-design and rapid iteration deliver best-in-class tools with clear, demonstrable impact on real-world feasibility and investment decisions

Shaping our Centralised Network View with stakeholders

We're excited to have launched new consolidated geospatial insights tool, combining frequently combined datasets into a single tool, enabling users to layer datasets and view dashboards for specific use cases. We've called this our **Centralised Network View**.

We identified an opportunity to improve the efficiency and accessibility of our geospatial data by developing a user-friendly solution shaped by stakeholder needs. In response, we developed a proof-of-concept tool bringing together demand and generation headroom data, the Embedded Capacity Register and Strategic Development Plans. We then hosted a stakeholder webinar to showcase the tool, gather initial feedback and inform the next phase of development.

At our DSO Autumn Series events, developers fed back that access to capacity and headroom data via our Data Portal is critical to informing investment decisions and feasibility assessments. These stakeholders are technically proficient and routinely use third-party tools to combine network and planning datasets, so they highlighted opportunities to improve the accessibility and functionality of our data. In particular, **65%** said a more consolidated view would deliver significant additional value and materially improve their user experience.

Over **90** stakeholders participated in this initial review, with **72%** of users using this data to assess project feasibility and stating data quality and refresh frequency as priority areas. Feedback on the tool itself led to the removal of some graphics and simplifying the controls to be more intuitive; incorporating Local Authority polygons and flexibility opportunities and; developing a RAG status for both demand and generation headroom to improve accessibility when identifying feasibility opportunities.

After incorporating this initial feedback, we invited a smaller group of stakeholders, primarily developers, to a 2-hour closed session to undertake detailed user acceptance testing. This additional refinement allowed us to tailor the tool to their needs, enhancing the value they get from our data and providing assurance on core use cases that they use our data to inform.

The new insights tool is now live on our Data Portal, and we held a webinar in February to demonstrate its key functionality and showcase the automated dashboard views we've created for quicker access to the specific use cases identified through user testing. We're continuing to capture feedback now the tool is live to inform further developments in future and are reporting on the quality of the data within the tool in our new Data Quality Dashboard.

Use Cases

Example stakeholder	Features on our Centralised Network View	Outcome/benefit
Local Authority looking to install 2MVA of EV Chargers where supplying substation is unknown	Search by address postcode, view substation area polygon, and review headroom data in asset data summary.	The local authority can view the level of demand headroom available to determine whether there is sufficient capacity.
A landowner looking to assess the potential for a 20MW PV farm where the supplying substation is known	Search by substation, select the GSP icon to show polygon area, view the demand RAG status in the Asset Data Summary.	The landowner can view RAG status data to determine whether there is sufficient capacity for their project.
A large developer assessing opportunities for a 10MW battery connection at a flexible location	Select GSP area layer, view the RAG status of all GSPs, select a GSP that is showing as green, select the BSP for additional data.	The Developer can view the status of all GSPs on the network to determine which one has the appropriate capacity for their requirements.

Ensuring quality and accuracy through automation and assurance

We're using automation, independent assurance and real-time quality monitoring to deliver trusted, high-accuracy data that stakeholders can rely on with confidence

We've acted on stakeholder feedback to fix data anomalies and deliver a step change in data accuracy.

Icebreaker One

We continue to work with Icebreaker One, the industry standard for data assurance. This year, 50% of our datasets achieved Level 1 assurance, independently validating data quality, governance and transparency. We remain the only DSO with this accreditation.

Data quality reports

We've enhanced our Open Data Portal with AI-driven data quality insights, giving users clear visibility of completeness, quality flags and key metrics to support confident modelling and decision-making.

Data publishing processes

We've automated data flows directly from source systems to our Data Portal, giving users immediate access to the same data we use. Data is validated in our Data Lake against defined rules, with quality issues flagged, logged and tracked through to resolution.

Our data quality processes

This year we focused on two priorities: assessment and reporting to improve visibility and trust.

We've introduced data quality profiling across our platform, assessing **1,617 tables and 66 billion data points** to give clear visibility of data quality at scale.

We also implemented a fully auditable data quality issues process, enabling any staff member to log issues, supported by a new automated dashboard providing real-time oversight. These issues are being actively triaged and resolved.

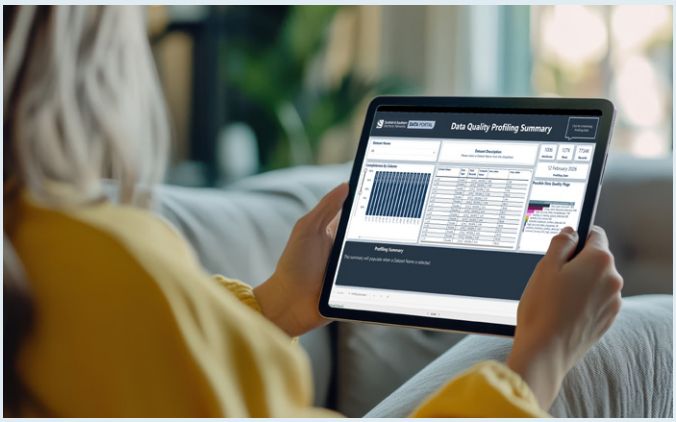
All activity aligns with Ofgem's Best Data Practice Principle 7, prioritising data quality improvement based on user needs.

Our Data Quality Engine applies **600+ rules** using a governed methodology aligned to SSE's data quality dimensions, executing standardised SQL to detect, score and log data quality issues and anomalies.

Custom data quality profiling

Our new data quality profiling is a recognised focus area for our customers and a growing strength for our organisation. This year, we introduced a new, industry-leading data quality profiling summary that provides complete transparency on the health, coverage and reliability of our datasets.

Designed bespoke and in-house by our data teams, these profiles go beyond compliance reporting to deliver genuinely useful insight. They combine clear, standardised metrics with narrative interpretation (supported by an AI-generated profiling summary for each dataset) to help users quickly understand quality, limitations and appropriate use. This approach builds trust, supports better decision-making and reflects our commitment to leading on data quality, not simply publishing data but actively enabling confidence, action and investment across the market.



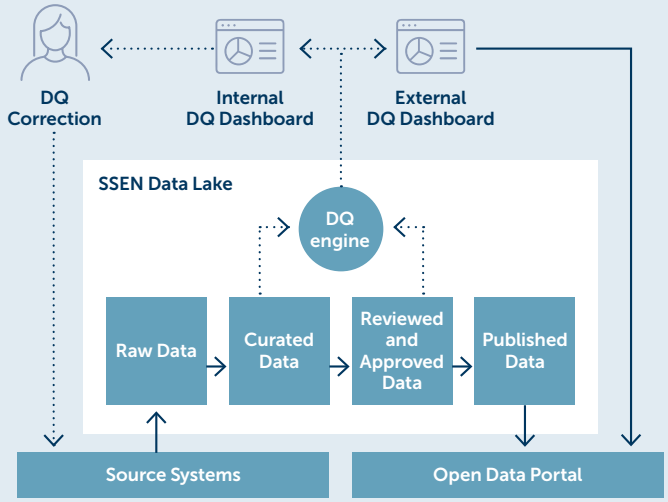
Data Governance Steering Group

Director led accountability underpins our automated, trusted and scalable data publication.

Our DSO Director has put in place clear senior-level ownership through the Data Governance Steering Group (DGSG), ensuring operational resource is prioritised and data quality is non-negotiable. This senior forum sets and enforces the control framework datasets must meet before publication, translating strategic intent into disciplined delivery.

We operate a standardised, automated onboarding process from ingestion to publication, with data quality assurance applied by default. Rules are executed automatically and reused consistently across datasets, enabling checks to scale efficiently as volumes and refresh frequency increase. This platform-led approach reduces manual handling, accelerates delivery and maintains strong governance at pace.

The result is sector-leading confidence in the accuracy, consistency and reliability of our data. Customers and stakeholders benefit from faster access to trusted, decision-ready information that supports connection planning, flexibility participation and whole-system outcomes. DGSG oversight ensures our approach remains aligned with stakeholder needs, regulatory expectations and DSO priorities – proving that we can scale ambition without compromising quality or control.



Delivering whole-system data interconnection

Our data, digital and operational capabilities link planning, operations and markets to deliver whole-system coordination and measurable value

We've connected planning, real-time operations and flexibility markets through a joined-up digital architecture, enabling third parties to move seamlessly from insight to action. For example, our planning data and network models now directly inform operational constraint management and flexibility dispatch, reducing uncertainty between forecast need and real-world delivery.

We've invested in enhanced network visibility, forecasting and modelling capabilities to support open, secure data exchange that directly underpinned operational and commercial decisions. These capabilities enable system operators to anticipate constraints earlier, flexibility service providers to target viable locations, and network planners to test whole-system options rather than asset-only reinforcement.

Through our open Data Portal, secure market interfaces and API access, we've given system operators, retailers, flexibility providers and local stakeholders timely, trusted information they can act on with confidence. Examples include; LV connectivity data to support connection design, forecast constraint information to guide flexibility bids, and clear network signals to inform local energy planning.

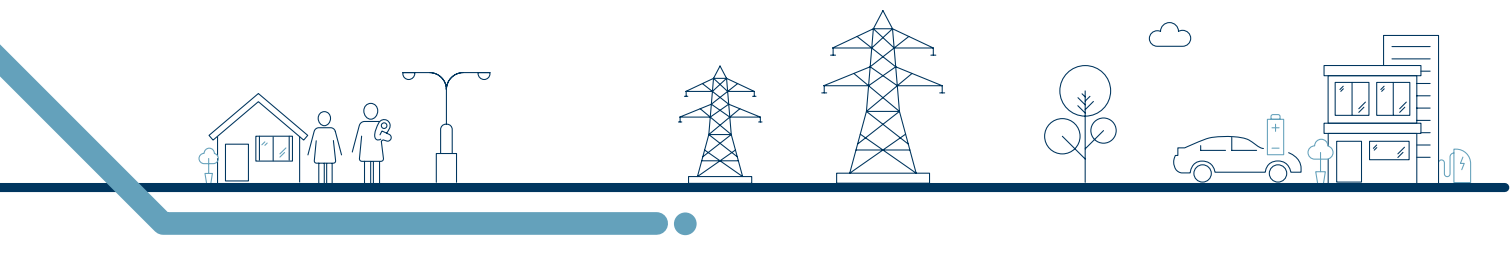
We've strengthened core operational capabilities including LV connectivity and forecasting datasets, real-time operational interfaces and our Network Model Manager. This has directly improved decision-making internally and externally, supporting; connections, more accurate constraint forecasting, and clearer signals to the flexibility market and local authorities.

We've ensured that data shared through open portals and secure infrastructure is accurate, timely and actionable, underpinned by improved assurance, governance and consistency. This reduces friction for third parties, lowers barriers to entry for new market participants and increases confidence in our data as a basis for investment and operational decisions.

As a result, we've unlocked tangible system value from greater coordination and interconnection. This improves resilience through better anticipatory planning, widening participation in flexibility markets, and enabling new entrants, local authorities and community energy groups to engage confidently in a smarter, more flexible energy system.

Whole-system data interconnection in action

Name	Type	Benefit to customers	API
Planning	**Network Model Manager (NMM)** embedded as the single source of truth, strengthening model completeness, consistency and governance. **Enhanced LV representation, connectivity and forecasting datasets** to reflect emerging demand and generation.	**Open data:** Publishing richer, spatially granular planning datasets (DFES, DNOA, SDPs) via the SSEN Data Portal. **Shared systems:** Preparing planning data for interoperability through DSI-aligned standards where full openness is not appropriate. **Engagement:** Direct collaboration with local authorities using **LENZA and LAEP+** to integrate local and regional planning with national system needs.	Improves planning confidence, reduces misalignment between local and national plans, and enables **earlier, better-informed investment decisions** across the whole system.
Operations	**LV and HV visibility systems** embedded into operations, combining real-time monitoring, smart-meter data and operational data pipelines to deliver consistent near-real-time network views.	**Open data:** Publishing network availability maps and operational insights through the Data Portal. **Shared systems:** Establishing secure operational data links via DSI pilots and ICCP interfaces to coordinate directly with NESO and other operators. **Engagement:** Sharing live operational insights with suppliers and service providers to improve forecasting and coordination.	Increases resilience, enables **faster cross-system coordination**, and reduces operational risk under both normal and stressed system conditions.
Markets	**Flexibility market platforms** embedded across forecasting, procurement and dispatch, underpinned by improved network models and LV data to support smarter signals and implicit flexibility use cases.	**Open data:** Publishing flexibility opportunity maps, tender outcomes and constraint data to lower barriers to entry. **Shared systems:** Using secure exchanges to support forecasting, dispatch and settlement where bilateral sharing is required. **Engagement:** Active collaboration with **energy retailers and FSPs** to co-design products, share forecasts and support new entrants.	Improves market access and confidence, **widens participation**, and supports scalable commercial models for flexibility that deliver whole-system benefit.



ENHANCING FLEXIBILITY PRODUCT DESIGN AND SYSTEM COORDINATION

We're demonstrating robust, scalable and stakeholder-driven improvements that strengthen flexibility product design, open access and whole-system coordination

Over the past year, we've accelerated the maturity of our flexibility markets, making them more open, consistent and valuable for providers and the wider system.

We strengthened product design, streamlined contracts and simplified qualification and onboarding, giving participants clearer expectations and reducing friction across the market journey. These improvements have increased participation, improved utilisation and ensured flexibility is deployed where it delivers real operational and economic benefit.

We've enhanced transparency through clearer pricing, improved dispatch logic and stronger links between procurement decisions, network needs and real-time operations. Technical capability has also advanced, with automated processes, richer data visibility and maintaining alignment with Open Networks and the transition to Market Facilitator supporting more reliable, scalable market performance.

Stakeholder feedback has shaped this progress. Providers called for greater certainty, simpler digital processes and more predictable routes to market—driving new product choices, upgraded platform functionality and a more frequent procurement cadence. Stronger NESO coordination and a more scalable platform also helps deliver tangible, system-wide benefits as the market continues to mature.

Flexibility benefits for customers and stakeholders

£1.54m in benefits

From lowering consumer bills by deferring reinforcement and enabling both flexibility service providers and domestic customers to earn new revenues from participation in flexibility markets. (Gross benefit excluding monetised carbon savings to 20/21 price base)

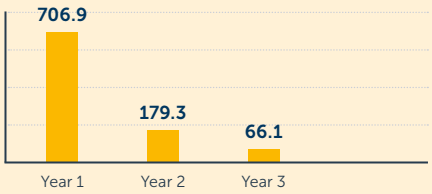
Our stakeholders are constantly driving improvement

They said	We did
"We want more automation and real-time visibility to make decision-making easier."	Implemented API and Realtime visibility across all market bidding to reduce manual decision-making time and increase transparency.
"We want more confidence on market revenue and more opportunities."	We became the second DSO to implement Day-Ahead, both seeking and sharing insight with other DSO to consistency.
"We want simpler digital processes when procuring flexibility."	Upgraded our platform functionality to streamline processes and make procurement more straightforward.

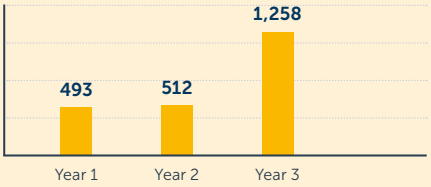
Flexibility is now operating as a trusted, transparent tool that reduces constraints, enables earlier connections and supports more efficient network management.

Our accelerator in numbers

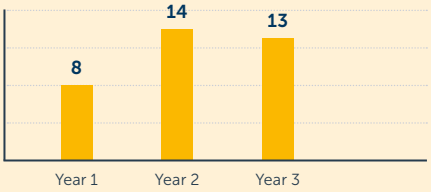
Annual capacity that's been bought (MW)



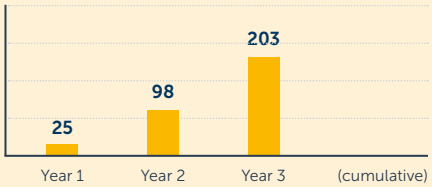
Annual volume of dispatch (MWh)



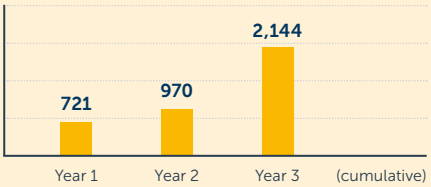
Annual number of FSPs signed up



Number of Constraint Managed Zones (CMZs)



Capacity available for local constraint markets (MW)



Year 3 accelerator progress

Every year during our 3-year accelerator we've shared an action plan with stakeholders where we made commitments on progress. Below you can see what we've achieved in the area of flexibility market development in year 3.

Action plan commitments	Outcome
Integrate API functionality across the ElectronConnect platform	✓
Launch Day-Ahead auctions alongside longer term tenders to meet system needs	✓
Issue tenders for stability services and conduct further trials in Load Managed Areas	✓
Deliver improvements to our internal data processing capabilities, developing new systems and automating activities where possible	✓

Offering the broadest range of markets to meet the needs of our customers and communities

Our use of standardised products, contracts, and criteria that meets the requirements of the Market Facilitator and responds to stakeholder feedback

Increasing participation

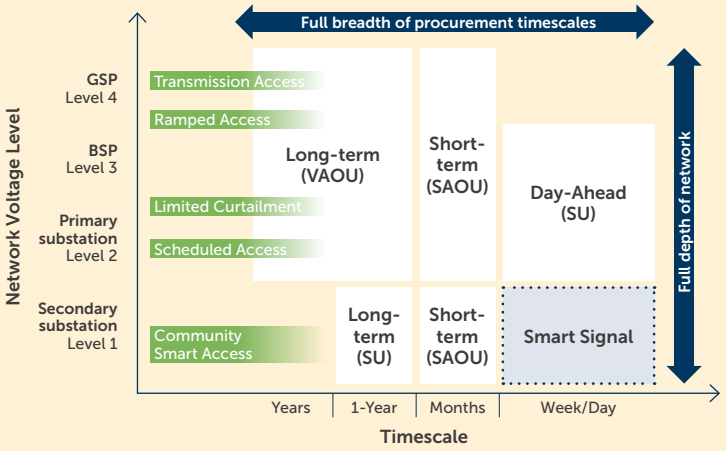
We've delivered record participation with **35 active contracts** and increased flexibility use by **37%**, meeting **almost 1 GW** of network need. We've lifted **FSP bid acceptance to 82.5%** — a **25.5%** increase — driven by stronger engagement and market maturity.

Offering new routes to market

We offer the **broadest routes to market in GB**, providing long-term, monthly and daily options, plus innovative markets tailored to our network such as **North of Scotland load management and Island stability**.

Flexibly with breadth and depth

- Broadest distribution flexibility market, with long-term, short-term and day-ahead procurement
- Whole-network depth, from GSP to Secondary, using granular, location-specific signals
- Layered market options, combining long-term investment certainty with near-term operational optimisation and stacking across DSO, NESO and wholesale markets
- Connections-aligned flexibility, enabling earlier access to capacity and faster customer connections
- Low-friction, coordinated participation, through technology-neutral products, standardised contracts and alignment with national and neighbouring DSO markets



Our flexibility services products are shaped by stakeholders

Our services reflect key market developments and industry-leading products, contracts and processes

Proactive engagement

We've engaged extensively across the sector to keep our flexibility markets, valuable and accessible for all participants – from suppliers and businesses to heat pumps, batteries, wind, solar and EV charging.

We've used every stage of our procurement process – mini-competitions, long and short-term tenders, Day-Ahead and LMA markets to gather targeted insights from new and existing FSPs.

We've reinforced this with transparent publications (31E, Flexibility Roadmap, pricing statements, DNOA and ODM methodologies) and ongoing 1:1s, newsletters, and our Spring and Autumn DSO Series.

We heard clearly that participation costs must be matched by clear value, and we updated our 'value over volume' approach so we only procure where flexibility delivers benefit and we dispatch what we procure.

We've improved utilisation, strengthened FSP confidence, and supported efficient whole-system operation.

We've coordinated closely with retailers and NESO to set an industry-leading benchmark for transparent, responsive and economically credible flexibility products and processes.

"SSEN have been a highly responsive and collaborative partner throughout our participation in their flexibility services. They actively seek feedback and are always open to improvement. The mix of products and services on offer creates meaningful opportunities for innovation, and the long-term tender process was clear, well-structured, and user-friendly."

Ohme
The Intelligent EV Charger

Our goal is simple: flexibility should be a fair and attractive opportunity for everyone who can shift or adjust demand or generation.

What providers told us	How we adjusted
They wanted clearer certainty and simpler processes – some manual processes were burdensome and not scalable.	We've introduced self-declaration for availability and simplified processes, reducing email exchanges.
They wanted transparency in pricing and dispatch logic – providers value clarity on pricing methods and consistent indicative pricing.	We've implemented a merit-order dispatch engine based on objective scoring criteria for transparency and fairness.
They wanted products aligned to operational models – FSPs asked for more certainty within-year and clearer product structures.	We've shifted to monthly SAOU products within-year to give availability certainty at point of trade and restore provider confidence.
They demanded a better digital experience – feedback requested unified logins, APIs, clearer bid visibility, and easier onboarding.	We've delivered upgrades including API integrations, unified login, enhanced notifications, improved UI, and real-time bid tracking.
They wanted more routes to market and increased market cadence – providers want more frequent procurement opportunities and greater participation options.	We've expanded long-term, month-ahead, and day-ahead markets; increased dispatch volumes and participation options.
They wanted integrated forecasting and operational tools – FSPs want operational decisions that reflect real-world conditions and allow greater utilisation.	We've integrated forecasting, dispatch and reporting processes to support quicker, more accurate operational decisions.

Using flexibility for efficient, reliable and coordinated operations

We're unlocking flexibility in nascent areas and enable trading of obligations

Flexibility is now a well-established, high-value tool across SSEN, used to ensure we deliver capacity efficiently and at the right time.

Flexibility accelerates new connections by enabling customers to connect ahead of reinforcement in constrained areas. Our ground-breaking work with **NERA** demonstrates how flexibility can unlock connection capacity more quickly and at lower whole-system cost. This research underpins our **Smart Community Access Product** and informs our work on local energy and long-term flexibility service design.

We're applying Day-Ahead flexibility to improve operational resilience, using near-real-time markets to reduce the risk of outages during planned and unplanned works and maintain customer supply.

In Chichester, we used **flexibility to enable early demand access** and cut curtailment risk, giving customers earlier connections without unnecessary interruption.

Our operational experience is shaping GB-wide market innovation, supporting NESO's development of **Demand for Constraint** and exploring how this interacts with ANM systems.

We're also evaluating how our **capacity trading** capability could support secondary trading of curtailment rights in support of NESO demand turn-up for whole-system coordination.

"SSEN's Day-Ahead flex markets are a game-changer for domestic flexibility. By dramatically cutting the time between a household signing up and actually participating in DSO markets, we can make flex feel real and immediate for consumers."

axle

Day-Ahead

We've adopted Day-Ahead as the second DSO in GB, responding to stakeholder feedback for more frequent, accessible routes to market.

We've launched Day-Ahead in small volumes to stress-test systems and operational readiness, while helping FSPs adopt the product confidently.

Working with our platform provider, we've co-developed Day-Ahead capability in ElectronConnect, making it available to other DSOs including ENWL, SPEN and international users.

Day-Ahead is now used to manage outage risks, providing operational value the control room could not achieve through long-term markets, enabling three-day turnaround for outage-driven needs aligned to near-time decision-making.

We've coordinated with UKPN to standardise design and align gate-closure times, supporting cross-DSO coherence and avoiding unintended conflict with other GB markets. We've also shared learning with NGED to accelerate GB-wide adoption.

For FSPs, Day-Ahead provides 24-hour registration and rapid participation, improving agility for domestic and commercial assets and reinforcing our position as offering the broadest set of proven, credible routes to market.

Learning from Crowdflex

Our **business-as-usual flexibility and system coordination** teams were closely involved throughout Crowdflex, shaping trials, supporting operations, enabling data exchange and analysing network impacts to remove barriers.

Working directly with trial partners gave the team clearer insight into **domestic, consumer-led flexibility**, including realistic demand-shift levels and the conditions that drive household response to signals.

Analysis of **headroom visibility, LV feeder behaviour and modelling limitations** strengthened our operational approach to street-level flexibility and helped target future trial areas, growing confidence and insight.

We've learnt that **high-quality data exchange** is essential: accurate headroom visibility, reliable modelling and shared operational context significantly improve provider confidence and network outcomes.

Crowdflex also highlighted the importance of **coordination across retailers, aggregators, NESO and DSOs**, reinforcing our role as enablers of a wider ecosystem that supports scalable domestic participation.

These insights have directly shaped our **market development**, improving the design of domestic-ready products, data standards and participation pathways.

Supporting flexibility during the RTS transition

We've introduced the **LMA Interim Payment service** to protect an essential source of domestic flexibility as the **Radio Teleswitching Service (RTS)** is phased out.

Critically this flexibility is achieved through the operation of clean domestic space and hot water heating. With legacy RTS winding down, we faced a risk of losing the **load-diversity capability** that has long supported secure operation in our Load Managed Areas.

The service provides a **transition incentive** for suppliers to upgrade households and provide essential flexibility at rates significantly lower than GB's capacity market.

Upgrading to **correctly configured smart infrastructure** ensuring customers can continue to follow LMA schedules and, crucially, adapt to market driven flexibility as this expands.

This service has already delivered strong results: **over 2,000 MPANs** are now able to provide domestic flexibility, with **1,590 eligible in the first quarter alone**, securing **12.1 MW** of load-diversity capability.

Smart Signal

Our emerging implicit flexibility capability, **Smart Signal**, is **a simple, location-specific, time-of-day network signal** that guides EVs, heat pumps and domestic batteries without complex bidding or baselining. It provides **feeder-level, half-hourly nudges** published ahead of time, offering a **practical, predictable** way to influence behaviour while drawing on our **near real-time street-level visibility** (NeRDA, smart-meter LV data).

We're adopting it because **LCTs naturally follow price**, and supplier tariffs can unintentionally create local clustering. Smart Signal offers a **targeted, transparent way to coordinate** behaviour where capacity is tight.

It is useful because it aligns with **existing signals**, enables low-cost, low-friction participation, and includes a **wider range of households and devices**.

Smart Signal is in Business-as-Usual development, with **strong engagement from suppliers, aggregators and technology providers**.

Making flexibility markets simpler and easier to join

We're enabling simple and cost-efficient third-party participation without exclusivity, provide open market and platform support services, and demonstrate the avoidance of proprietary systems

Flexibility has become a fully embedded, high-value system operations tool, now meeting almost **1 GW of network need** and delivering efficiencies in construction planning, supply-chain mobilisation and resource deployment.

This year saw a **37% increase in procured capacity** and **35** total active contracts, onboarding the highest number of FSPs this year, signalling strong market confidence and demonstrating how our operational readiness and accessible commercial frameworks are widening participation.

We've driven improvements in market arrangements: participating Market Facilitator working groups in full compliance with the emerging standardised arrangements. This work directly simplifies participation and reduces friction for third parties by ensuring consistent, non-proprietary processes across DSO markets.

Significant progress has been made delivering new **Systems for Flexibility**, aligned with the Flexibility Roadmap. These enhancements enable automated dispatch, raise short-term forecasting accuracy to **90%**, and integrate core internal systems – strengthening data quality, reporting capability and analytical insight.

We've advanced platform functionality through **API integrations, bulk asset registration** and improved real-time visibility of market participation. These improvements reflect direct stakeholder feedback, reducing manual processes and enhancing the provider experience.

Throughout the year, we've **adjusted course** based on user and market feedback: simplifying onboarding steps, improving data visualization, and bridging gaps between procurement and dispatch to create a more accessible and efficient participation pathway for third-party providers.

Improving access at the local level

We're working closely with the **Local Energy Market Alliance (LEMA)** to improve market access and create open, low-cost participation pathways that support LCT adoption. Through early and ongoing engagement, we've helped shape LEMA's focus on scalable market arrangements that enable third-party flexibility, domestic participation, and fair access across technologies and providers. LEMA's role includes supporting improvements to wider market arrangements, including those of a DSO operating through Market Facilitator-led standard processes without exclusivity, ensuring solutions remain interoperable and open to all.

A key joint initiative is **Community Smart Access**, which applies Dynamic Load Averaging to unlock faster, lower-carbon housing connections. With the first deployment under review near Bicester, offering a replicable model to defer reinforcement while enabling new LCT-ready developments. We're now applying learning from this project to understand how flexibility services can similarly support LCT adoption within existing housing stock, creating additional market opportunities for third-party service providers.

Our work with LEMA is directly improving interoperability, widening participation, and reducing the commercial and technical burden on suppliers, aggregators and community groups.

Case Study

Working closely with suppliers to increase flexibility opportunities

The national Radio Teleswitch (RTS) replacement programme requires customers to move onto modern alternatives. This presents a system challenge in some remote areas of our network, where thousands of customers moving to standard time-of-use tariffs could unintentionally create new, sharper consumption peaks, placing additional stress on the local network.

To proactively manage the impact of this replacement programme, we led a collaborative and data driven initiative with Ovo undertaking detailed modelling of local consumption patterns in Shetland. Using our granular modelling data to identify the effect on the distribution networks of customers responding to standard tariff signals we forecasted the future impact across the region.

Collaboratively with Ovo, we then developed three staggered Smart tariff variants that are designed to distribute demand throughout the day and avoid unintentionally creating a new constraint. These new tariffs and meters were rolled out to customers across Shetland, and we continued to monitor network loading in the area during and after the rollout to validate assumptions and ensure network stability. Across Shetland, Ovo customers have now been moved onto these Smart tariffs, which also enable them to now participate with both SSEN's distribution flexibility opportunities, and in wider system flexibility services such as through **Ovo's 'Power Move'** service.

Additional regions in our network that are due to go through for the RTS replacement programme have been identified and we've been working closely with Ovo to replicate the success of the Shetland programme across these areas. Through this initiative we've facilitated wider customer participation in flexibility opportunities, and a scalable approach to flexibility that supports innovative alternatives to reinforcement and wider system optimisation.

Our flexibility technology stack combines **ElectronConnect** for market access, **Flexible Power** for dispatch, and **ZIV ANM** for network control, under an open architecture guided by our **Flexibility Roadmap**, all avoiding proprietary lock-ins through standardised, interoperable platforms.

Coordinating with NESO to deliver flexibility throughout the network

Evidencing our whole-system coordination: practical operational data sharing, DER commercial arrangements, and flexibility that supports system-wide optimisation

Strengthening operational data exchange and visibility

We've expanded ICCP data sharing with NESO to provide **64 signals per second**, giving real-time visibility of MW flows, ANM system health and forward/reverse power parameters across the distribution system. The first SEPD ICCP link is now fully live and the second SHEPD link will complete in 2026, creating converged GSP-level visibility across both licence areas.

We've supported the Transmission Owner by strengthening its ICCP arrangements and reorganising the North of Scotland architecture to improve the consistency and resilience of operational signals.

We're now preparing a further **300–400 ICCP and DERMS signals**, including primacy and system-health indicators, to automate DNO–SO primacy rules and deepen NESO's operational insight.

Providing visibility to avoid service conflicts

Weekly conflict-risk reporting now improves alignment between DER dispatch, outage plans and technical limits, reducing the likelihood of conflicting instructions.

This year over **2,000** potential conflicts-of-interest with NESO were identified and mitigated.

We've published full outage validation information and provided **2,142MW** of headroom visibility, enabling NESO to make more efficient use of its local constraint market.

As the first DSO to sign the data sharing for enhanced risk of conflict reporting with NESO, whole-system conflict-avoidance principles are now embedded in daily operations. Our System Operability Reports routinely track, and report publicly, resolved and mitigated. See the DER Dispatch and Decision Making section (pp.27-30) for further detail.

Commercial arrangements with DER enabling NESO coordination

New Bilateral Connection Agreement (BCA) variations and data-exchange processes have been implemented to support emerging schemes in SHEPD, designed for reuse by other DNOs and NESO.

These arrangements have strengthened DER participation in NESO markets, with **492MW** dispatched, company participation doubling, and **54,500** DER bids processed through LCM.

Enabling flexibility for system optimisation

We jointly coordinated the Shetland Whole Island solution with NESO, the Transmission Owner and DER/BESS operators, ensuring fair access and optimal dispatch under highly constrained conditions.

We've supported NESO's development of the Demand for Constraint product to help relieve transmission constraints and increase renewable utilisation.

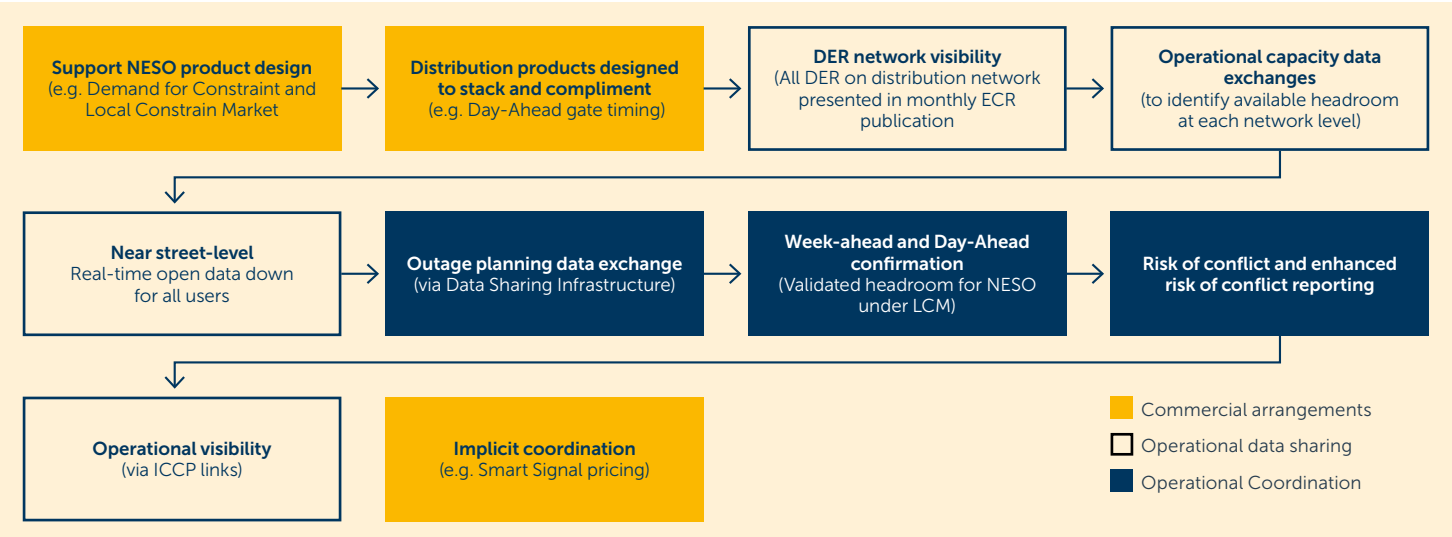
Whole-system optimisation has scaled significantly through the use of Technical Limits, enabling the acceptance of **740MW** of early access for predominantly renewable generation.

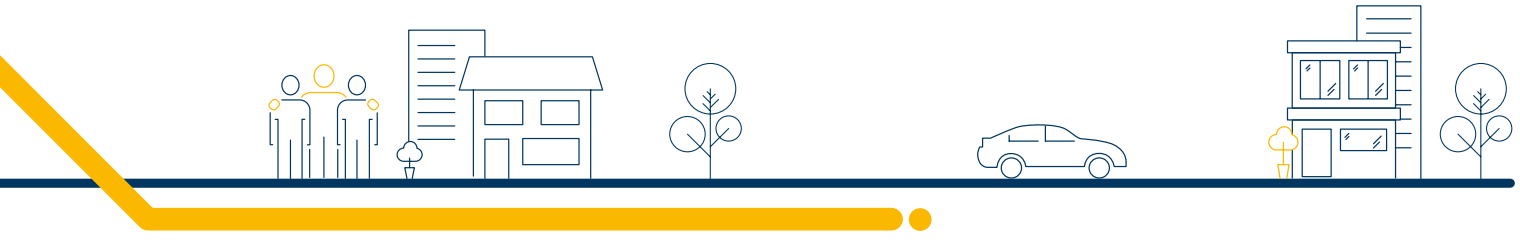
Ongoing strategic coordination

Regular structured engagement with NESO's Flexibility and Electricity Market Development team now covers operational coordination, implicit flexibility, connections reform and long-term system planning.

This collaboration has improved visibility, reduced conflict risks, aligned ANM and DfC logic, supported accelerated connections (**including 5–15MVA ramping**), and strengthened evidence for RESP and ED3.

54,500
DER bids processed through LCM





CLEAR, CONSISTENT AND TRANSPARENT DECISION-MAKING

Our clear methodologies, extensive cross-sector engagement and strengthened governance deliver confident, conflict-free investment decisions

Over the past year, we've strengthened the transparency and independence of our decision-making by embedding clearer, more consistent processes for identifying network needs and evaluating all viable options.

Our mature methodologies (DNOA, SDP, COI) now provide earlier visibility of constraints, apply standardised assessments across reinforcement, flexibility and efficiency solutions, and give stakeholders a clearer line of sight on how choices are made.

We've reinforced confidence in impartiality through stronger conflict-mitigation arrangements; introducing clearer definitions, firmer controls and more transparent documentation. These improvements ensure actual and perceived conflicts are identified and addressed early, supporting fair and evidence-based decisions across all DSO activities.

Stakeholder challenge has directly shaped these changes. Enhanced engagement with market participants, local authorities, communities and system partners (supported by active scrutiny from our DSO Advisory Board) has ensured our governance and assessment processes remain practical, trusted and grounded in real-world needs.

Together, these developments demonstrate a mature, open and accountable DSO that addresses potential conflicts and makes transparent, well-evidenced decisions that deliver long-term value for customers and the wider energy system.

Options assessments benefits for customers and stakeholders

£242.28m in benefits

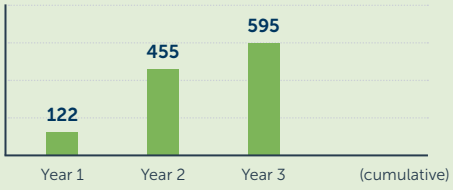
From interventions that cut costs for local authorities and the wider energy system, accelerated low-carbon connections ahead of network constraints and supported community initiatives and delivered tangible financial and societal benefits. (Gross benefit excluding monetised carbon savings to 20/21 price base)

Our stakeholders are constantly driving improvement

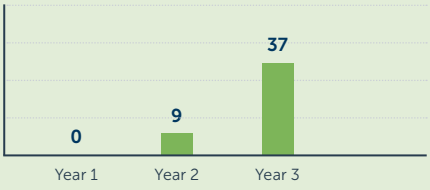
They said	We did
"We need a clear understanding of how SSEN makes decisions."	Published a transparent, fully defined options assessment methodology.
"We want earlier visibility of network needs and opportunities."	Shared constraint forecasts, flexibility needs and capacity maps earlier.
"We want fair treatment of non-traditional solutions."	Applied consistent valuation for flexibility, efficiency and reinforcement options.

Our accelerator in numbers

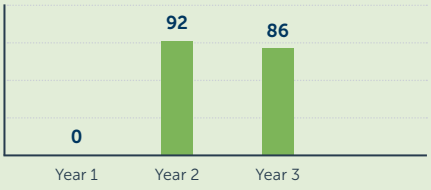
Active users on LENZA



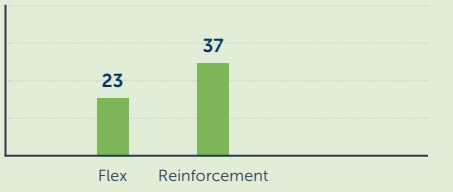
Annual Strategic Development Plans published across our licence area



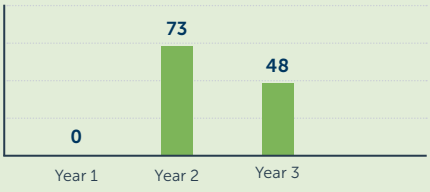
Annual percentage of DSOAB feedback actioned (%)



Annual DNOA outcomes split – Flex Vs Reinforcement



Annual DNOA outcomes independently assured



Year 3 accelerator progress

Every year during our 3-year accelerator we've shared an action plan with stakeholders where we made commitments on progress. Below you can see what we've achieved in the area of conflicts mitigation and options assessment in year 3.

Action plan commitments	Outcome
Consult on and update the Distribution Network Options Assessment (DNOA) methodology	✓
Enhance our DNOA methodology to include HV and LV outcomes, incorporating Energy Efficiency and updated flexibility valuations	✓
Publish all actual and perceived conflicts-of-interest and ensure compliance with the DGIF	✓
Increase publications of DSO Advisory Board activities	✓
Publish updated DSO Benefits Methodology and Theory of Change with quarterly updates	✓

Operating with strong governance and transparency

Our clear conflict definitions, strong controls, and independent challenge drive impartiality

Our robust DSO governance arrangements remain fully effective and firmly in place, as set out in the **DSO Service Statement**. Executive accountability is maintained on the Executive Committee, with ongoing board-level visibility via the DSO Steering Committee. Clear, separate and published decision-making frameworks (including DNOA and Operational Decision-Making) continue to be independently scrutinised by the DSO Advisory Board, delivering trusted assurance without creating unnecessary burden.

Transparent decision-making

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

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

We use targeted and intentional engagement that best meet our **stakeholder's** needs. We seek independent assurance. We communicate our decisions and outcomes and **publish** key operational and performance indicators.

Functional separation with independent challenge

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

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

Functional accountability and responsibility to manage conflict

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

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

Expanding on our definitions of Conflicts-of-Interest (COI)

This year we've delivered a significant, stakeholder led update to our approach to conflicts-of-interest in response to emerging energy policy, sector consultation and ED3 considerations. Recognising that we navigate competing priorities at local, regional and national levels, and across the wider energy system, stakeholders asked for greater transparency and consistency in how potential conflicts are identified and managed beyond traditional DNO/DSO boundaries. Following extensive internal and external engagement (see Network Rail case study below), we have refreshed our definitions of conflicts-of-interest and strengthened our risk management and assurance approach. Our DSO COI definition now clearly captures situations where competing priorities between DSO services and other parties (whether perceived or actual, internal or external) could lead to sub-optimal outcomes, all managed through our DSO COI Risk Management Standard.

Case Study

Network Rail Engagement

Learning from Network Rail, we now treat conflicts-of-interest as competing priorities rather than narrow compliance issues, recognising that perceived conflicts can be as damaging as actual ones. Their emphasis on transparency, senior accountability and governance, over reliance on structural separation alone, directly informed our approach. We have adopted a centrally owned, actively managed and publishable conflicts register that drives action, supported by clear decision rights, escalation routes and narrative explanation of trade-offs. This best practice learning underpins our step change in DSO conflict identification, assurance and transparency, strengthening trust and demonstrating how conflicts are proactively identified, managed and resolved in the whole system interest.

Implementing new internal processes and external reviews.

Building on this new understanding we've delivered a step-change in conflicts-of-interest governance through a new COI management standard that provides clear definitions, consistent risk assessment and stronger assurance. Using standardised PEAR scoring, structured interest cards and a central COI register, we now proactively identify, track and audit higher-risk conflicts. The approach is embedded through formal assurance and mandatory training across the DSO directorate, strengthening transparency, impartial decision-making and regulator confidence.

Our **DSO Interests Report** is published quarterly on our website to invite wider engagement and understanding. It clearly sets out the key risks from competing priorities related to our three DSO roles and is scrutinised each quarter by our DSOAB. Each risk is assessed with key controls, performance indicators and pre-post mitigation scoring to ensure consistency.

Risk of Conflict	Risk	Planning	Operations	Flexibility
Connections Pipeline	→	●	●	●
Transmission Congestion	→	●	●	●
National Infrastructure	→	●	●	
Local Transition at pace	→	●	●	
DSO-Supplier Coordination	→		●	●
Data Exchange	→	●	●	
Distribution Investment Optimisation	→	●	●	●
Distribution System Optimisation	→		●	●
DSO-NESO Coordination	→		●	●
Innovation Portfolio	→	●	●	●

In Action

Surfacing stakeholder priorities to manage real-world conflict

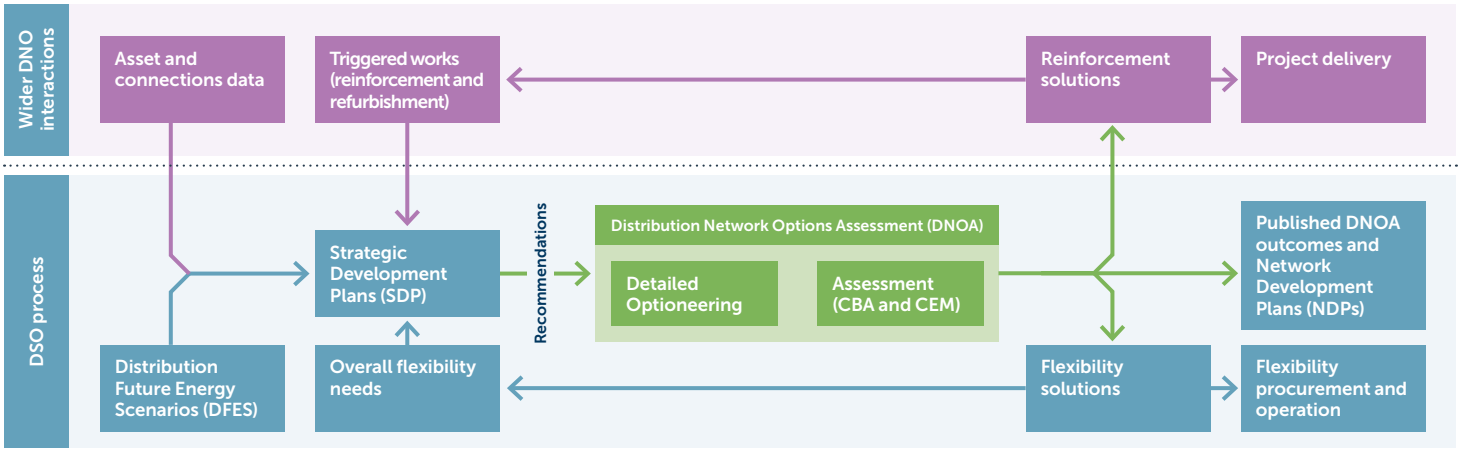
Our Conflicts-of-Interest (COI) register enables proactive identification and management of wider industry conflicts, leading to earlier and more effective mitigation. For example, the Shetland Whole Island Energy Solution addressed competing access priorities between transmission and distribution customers, and differing operating objectives across network operators, the system operator and on island storage (COI risk 5). Once identified, these conflicts were mitigated through agreed dispatch logic and data-sharing arrangements (page 29). Similarly, when a supplier introduced a new customer tariff, our focus on COIs surfaced potential network congestion impacts (COI risk 6), which were mitigated through collaborative design aligned to network capability (page 19). Finally, the risk that DNO construction pipelines overlook flexibility options (COI risk 7) is managed through transparent SDP, DNOA and DGIF governance processes (page 23).

Leading the way with consistent evaluation methodologies

Our clearly defined and accessible evaluation methodology applies a consistent, transparent, stakeholder-backed approach which values the full range of options

Distribution Network Options Assessments

Our mature Distribution Network Options Assessment (DNOA) and methodologies considers flexibility, energy efficiency and network reinforcement to efficiently meet network needs over the long term. We've developed our methodology with stakeholders to ensure accessibility and confidence in our methods. Our methodologies are published here and the diagram below showcases how we consider DNO/DSO interactions throughout this process.



We've evolved our SDPs to meet growing system needs

Leading the way

We continue to set the direction on strategic network development and planning, and it has been great to see this acknowledged in Ofgem's SSMC.

Our Strategic Development Plans (SDPs) continue to provide fully defined, transparent evaluation methodologies for assessing solutions to network needs. This year we've completed published **37** SDPs spanning **our entire licence area**.

We've held open consultation with stakeholders to ensure they clearly understand how these decisions are made what development schemes are included. Using stakeholder feedback, we have refined and updated our final SDPs and added in additional schemes when needed.

We've increased the scope

In direct response to stakeholder feedback we've increased the scope of our SDPs. We're now the only DSO providing insight down to secondary substation. We've included forecasting of these assets and how they may respond to projected DFES growth. This allows us and stakeholders to look at interventions on the low voltage network to facilitate load growth.

We're now directly coordinating planned ANM schemes to mitigate the impact of T-D limits at grid supply point levels. We feel this level of information is transformational in providing insight on our decision-making on the network.

How stakeholder feedback has shaped our SDP methodology

We've introduced one-page summaries of our SDPs- making them easier to navigate, Improved accessibility by publishing one-page SDP summaries, refreshing content for clearer executive overviews, and adding a plain-English guidance document across our multiple licence areas.

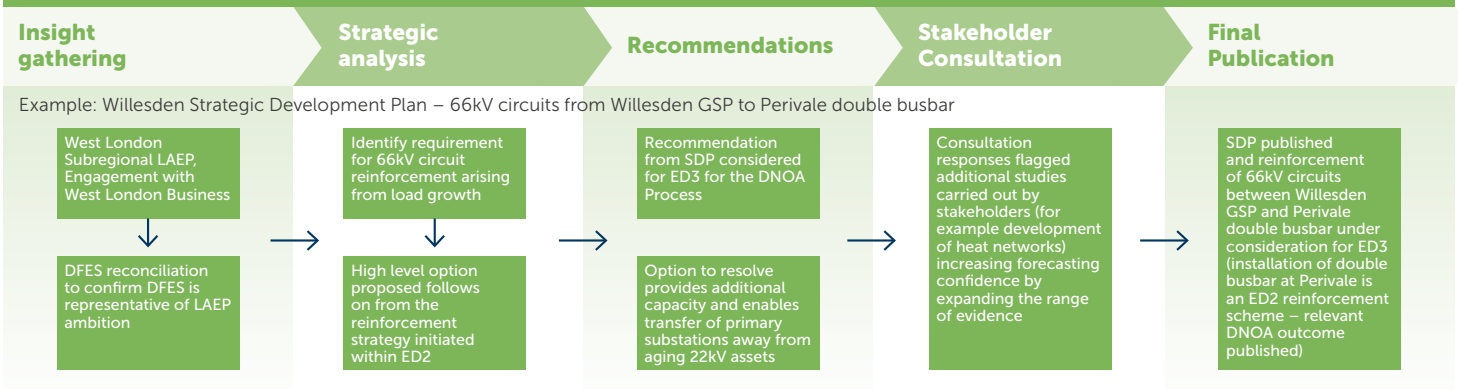
We've increased transparency on when stakeholders can influence SDPs through an indicative timeline, clearer consultation windows, and regular updates via the Whole Systems newsletter.

We've clarified alignment between SDPs and NESO's tRESP/RESP processes through new guidance explaining how insights flow into national system planning.

We've added filter and search options to our DSO Publications and Reports section in our website to make it even easier for stakeholders to find the right information for their area.

With our updated SDP methodology we've strengthened alignment with RESP, expanded coverage to include non-load needs, and accelerated the digitalisation of outputs to provide clearer, more accessible insight for stakeholders.

Our Strategic Development Plan (SDP) process



Building an efficient, future-ready network

Evidencing our economic plans, early identification of need and robust whole-system modelling

Our DNOAs continue to provide assurance that our plans are economic

We publish all our Distribution Network Options Assessments (DNOA) outcome reports on our website to ensure stakeholders have clear accessible information.

As detailed in the diagram to the right we've continued to apply a standardised approach to evaluating all options, including flexibility, energy efficiency, and conventional reinforcement. Our decisions are independently assured.

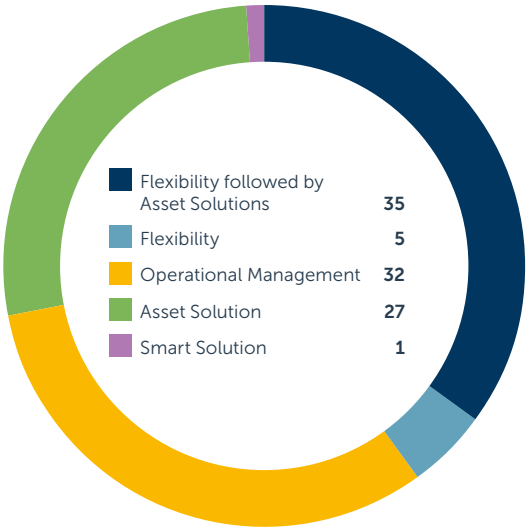
We've updated our methodology and consulted with stakeholders

This year we've expanded our DNOAs from a 5-year outlooks to 10 years, to give a never-before-seen view of our network into ED3 and ED4. This provides visibility, opportunity and market signals for potential network opportunities and allows the option value from more operational uses for flexibility to be evaluated.

Read our new DNOA methodology consultation here.

For all DNOA's produced last year, we've given updates when those schemes have changed their outlooks based on recent network activity, providing consistency and an up-to-date, consistent view across our decisions and ensuring our decisions remain economic over the long term.

DNOA Outcomes
%



A transparent, whole-system approach to LRE investment

We're delivering a credible and efficient load related expenditure (LRE) programme that considers energy efficiency and flexibility

A transparent, whole-system approach to LRE investment

Our focus, as the DSO, is on the efficient delivery of long-term whole-system needs for our communities. This year we submitted to Ofgem comprehensive strategic business plans for additional network capacity to be delivered in ED2. We shaped our submission using our DFES, DNOA and SDPs to submit an accurate, stakeholder-led view of needs across each region. This ensured our plans were underpinned by a clear, transparent and structured approach that ensured every investment considered the full range of options and delivered long-term economic and operational value.

We use market reflective, competitively tendered costs

To ensure robust cost benefit analysis, we've undertaken a process to establish competitively tendered, market reflective costs, validated through independent assurance via Threepwood consultancy. This provides a realistic understanding of actual delivery costs and ensures we only seek funding that is fully evidenced and justified.

We design capacity efficiently through a modular, forward-looking approach

All recommended interventions are designed to maintain engineering compliance and support confirmed customer connection requests. By modelling investment using our DFES consumer transformation scenario and a planning horizon out to 2050, we're avoiding piecemeal reinforcement and instead deliver solutions that remain economic and efficient over the long term.

We enable Low Carbon Technologies and Flexibility Services

Electrification of heat and transport, the integration of renewables, and enabling the green economy are core drivers of investment need. By planning reinforcements that unlock whole-system benefits from local flexibility, our programme ensures that customer-led demand growth is supported in the most efficient way, reducing future reinforcement costs.

We've received validation from Ofgem

Our approach has integrity and is grounded in strong evidence. Ofgem's written response to the strategic needs case states that it had "not identified significant areas of concern" with our methodology, confirming that our DSO investment planning is robust and aligned with regulatory expectations.

"The schemes checked were found to follow the DNOA process. All of the options proposed (flex and/or assets solutions) were determined as being correctly identified/assessed.

Good practices were common across different licensed areas and planners, including the use of a centrally managed/updated load model and cost database and considering outputs from stakeholder engagement. The outcomes from these reviews provide assurance that SSEN has followed its own processes."

Independent Assurance Report for SSEN 2025 DNOA Outcomes, (Threepwood Consulting)

Making better decisions by engaging across our communities

Our extensive collaboration drives confident, evidence-backed investment choices

Accelerating local energy planning capability – helping communities plan with confidence

Our Net Zero engagement specialists continue to proactively support local authority partners across our licence areas in local area energy planning.

This year, our collaboration with local authorities has matured. They are now working with our teams and tools on both large LAEPs and smaller projects, such as EV charger deployment and decarbonisation planning. We've responded by enhancing our tools, offering new workshops and increasing opportunities to connect at events like our local authority roadshows and "Meet the Team" breakfast events.

LENZA

Our LENZA geospatial planning tool continues to set the industry standard, with usage and impact accelerating across our licence areas. This year we've:

- added new functionality to LENZA; including improvements to the project's functions and brand-new scenario and masterplan function
- aligned our local area energy planning outputs
- provided new data sets for renewable energy potential and provided a transparent methodologies to support this

We've now supported **595 distinct users** and enabled all of our **local authorities** to actively engage with the platform, helping them drive forward robust Local Area Energy Plans.

Momentum is building fast: total user logins have surged past **6,000**, datasets downloaded have climbed to over **17,000**, and local authorities have created **344 projects** to date – all clear signs that LENZA is becoming an essential part of the energy-planning toolkit.

Additional Training and Support

Community Energy schemes have consistently told us they value access to LENZA to help with planning and designing schemes. By fostering relationships with local authorities, we've enabled wider roll out of LENZA and encouraged even more local area energy collaboration.

Case Study

UK's first digital LAEP

With our support Winchester City Council has developed the UK's first digital Local Area Energy Plan (LAEP) to accelerate its journey toward district-wide decarbonisation. The digital LAEP uses detailed local data, scenario modelling and extensive stakeholder engagement to map a cost-effective, evidence-based pathway to net zero. We've played a central enabling role by working alongside the council and supplying LENZA, our advanced spatial modelling and digital planning platform, which underpins the creation of the digital LAEP and allows complex energy, technology and infrastructure options to be visualised and tested at scale. The result is a pioneering, fully interactive plan that gives Winchester a clearer understanding of current energy use, future system needs, and priority projects – while also supporting a linked Community-Led Energy Plan pilot that empowers residents to shape local energy solutions.

Winchester City Council

Backing community energy to build faster: support, skills and a streamlined path to connect

In keeping with industry standards and the needs of our stakeholders, we've taken a more proactive role in supporting community energy schemes looking to design and connect to our network. This year we've:

- created and published a Community Energy roadmap looking out to 2028 for consultation
- created a single point of contact for community energy schemes, streamlining their end-to-end journey through our DSO services
- provided tailored support to understand our DSO products and services
- engaged with other networks to share best practice and agree shared priorities going into ED3
- created professional learning opportunities for community energy workers and volunteers through workshops in partnership with SPEN with the Community Learning and Development (CLD) Standards Council for Scotland

"Lochbroom Community Renewables is committed to growing community energy in the Highlands. Building on our community-owned hydro scheme, we're now exploring new local generation to power local homes. SSEN's DSO team has been invaluable—offering one-to-one support, access to planning tools, and connections across the sector. This help is giving us a clearer view of the opportunities and challenges ahead, and equipping us with the tools we need to assess future projects, secure funding, and navigate the technical steps to make our vision real. We're grateful for the support so far and look forward to continuing to work with the DSO team."

Matthew Holmes, company secretary, Broom Power

Bringing together the right people to make the right decisions

Our proactive cross-network engagement and broad stakeholder buy-in are driving collaborative solutions to network needs

Enabling regional coordination – facilitating whole-system decisions

This year we've continued to invest heavily in engagement across the whole-system, working closely with local partners through LAEPs and our industrial and commercial stakeholders, while also contributing actively at the national level through RESP, GB Energy, the Market Facilitator and emerging Warm Homes initiatives.

Through these forums we share insight and respond to consultations but also provide the detailed network information that underpins robust decision-making.

This work is often complex and resource-intensive, and we're proud of the constructive role we play in bringing stakeholders together. This means our partners can navigate competing priorities and it enables coordinated progress across the system.

This level of engagement takes significant effort, and the following case study illustrates just how intricate these processes can be and how proactively we approach them.

We publish all engagements in our Whole Systems Register.

Sector/vector	Region	Focus of collaboration	How it's shaped our delivery
Transmission NGED, SHET		• Strategic planning workshops focusing on West London	• Expanded ICCP link and T–D boundary signal sharing • Delivered new GSP ANM systems supporting Technical Limits • Enabled earlier DER connections ahead of reinforcement.
System Operator NESO		• SEP and RESP coordination workshops. • Regular tRESP SEN operational alignment meetings.	• Enhanced Risk of Conflict (ROC) reporting and automated identification processes.
Cross-DNO collaboration NGED, NPG, UKPN, SPEN and SPENW, ENA		• Leading ENA technical working group on heat decarbonisation • Joint ANM Working Group improving coordination and interoperability standards. • Chair of ENA working group on standardising real-time outage data.	• Co-developed Dispatcher module logic for consistent flexibility dispatch. • Common template for local authorities to input to LAEP+ • Co-authored published book on DSO and Flexibility Services
Industrial (large demand/generation) Scottish Whisky Association, BMW, Heathrow, Ardersier		• Working with the SWA to understand future demand in locations e.g.Islay • Large demand users (e.g. BMW, Heathrow) – understanding future development needs to progress via t-RESP • Working with local stakeholders in Ardersier and Tornagrain to understand future energy needs and build them into our strategic plans	• Liaised with tRESP to reflect future development needs. • Adjusted Strategic Development Plans in key regions to reflect
Community energy/ LCT uptake GBE, Community Energy Scotland, Community Energy England		• Bilateral roundtables on community energy participation and data needs. • Strengthened engagement on flexibility participation and local energy planning generating new solutions.	• Advocating for code mod P441 (Complex Sites) • Building management systems added to Powering Customers to Net Zero Funds • Community Energy 2026 Commitments in consultation
International DSO New Zealand, Poland and Thailand DSOs.		• Shared operational learning on DERM controls, primacy rules and unwinding prevention.	• Sharing our learning and raising standards internationally.
Regional and national energy Local authorities, port authorities, GB Energy, Scottish Government, DESNZ		• SEN/RESP data alignment and local planning coordination. • Partnering with the GLA on future strategic needs • Providing support to ferry companies in Scotland on electrification schedules	• Strengthened links to national/local energy frameworks. • Working with Oxford Growth Commission on capacity in Bicester
Other vectors Water, broadband		• Infrastructure Impact Conference in Glasgow, organised alongside ScottishPower, Scottish Water and Openreach.	• Highlighting the economic opportunities and benefits our collective infrastructure brings to Scotland, **highlighting a combined investment figure of £46 billion in Scotland from 2025-2030**.
Electricity flexibility SMS Metis, Eon, Market Facilitator		• Co-designed products and processes, using feedback from tenders, 1:1 engagement and DSO Series events to shape SAOU adoption, simplify qualification and improve digital platforms—building clear provider confidence	• Improved participation and trust through simpler access (APIs, unified login), clearer dispatch logic and higher procurement/utilisation, directly reflecting FSP requests for value, certainty and operational alignment.
Trade bodies ADE, BEAMA, Energy UK, REA, BHA		• Worked on flexibility market access, DER/CER visibility and dispatch coordination, connections and planning reform, and whole-system governance, using real-world evidence to shape our policy and delivery.	• Simpler routes to market for distributed assets; reduced duplication and complexity at the DNO/TO boundary; and clearer roles and coordination across system operators.

Collaborating across sectors to improve our practices and raise national standards

We're both sharing and seeking insight with other sectors and keeping stakeholders and users at the heart of our processes

Championing engagement and sector leadership

Over the past year, our DSO Powering Change campaign – delivered in close collaboration with Faversham House – has been a cornerstone of our stakeholder engagement strategy. We brought together senior representatives from a wide range of sectors for a series of closed roundtable discussions, deliberately creating a safe environment for open and honest dialogue about the evolving role of the DSO as we approach our next price control period. Roundtables have included:

- Exploring the DSO's role in enabling local decision-making
- Supporting the rollout of low-carbon technologies (LCTs)
- Shaping priorities for ED3

To ensure transparency and widen the impact of these discussions, we published key insights and outcomes in Utility Week's publications, sharing learnings with the broader sector and inviting further input.

In addition, we commissioned sector-leading research as part of the campaign, helping to inform the national debate, raise industry standards and influence policy development. Through these efforts, we've not only provided stakeholders with a genuine opportunity to shape our direction but also contributed to wider sector progress by openly sharing knowledge and best practice.

Case Study

The Common Ask – A case study in proactive cross sector engagement

Working collaboratively with UK Power Networks and National Grid Electricity Distribution, we co-developed a local authority 'Common Ask Template'. Within SSEN, 42 out of 63 local authorities within our licence areas are also served by other DNO's, which has meant duplication and inconsistency in providing information to inform Local Area Energy Plans.

The Common Ask was trialled with Oxfordshire County Council, incorporating cross vector inputs and engagement with gas networks, enabling councils to provide their data once, in a consistent format, even where multiple DNOs are involved. The template is now available for all local authorities to access via the LENZA platform.

In our licence areas, the Common Ask template will benefit around two-thirds of the local authorities it serves, at least halving the effort required by these stakeholders in submitting their local planning data.

This work sits alongside enhancements to our Strategic Development Plans (SDPs), DFES and Local Energy Strategy development, through ensuring that local plans are systematically embedded into our forecasting systems and processes and NESO's emerging RESP, while strengthening confidence that local ambitions are accurately reflecting in both local and regional energy planning.

"Local authorities like us rely on clear, consistent and high-quality data to deliver our net zero ambitions. This standardised template removes a major barrier for councils like ours that work with more than one DNO. It will save time and resources while giving us the confidence that our plans are fully aligned with regional and national energy needs. We welcome the collaborative approach taken and see real potential for the template to be adopted widely."

Sarah Kerr, Energy Systems Lead, Oxfordshire County Council

"SSEN helped us engage with the community about what this quite technical subject means for them and how they can get involved" and "biggest barrier in terms of energy planning is that data piece and LENZA helps us to address that challenge. SSEN helped us pull together the necessary data that we need to inform the tRESP being undertaken by NESO providing technical expertise helping us to navigate what information is needed, in what format and how to find it, which was really beneficial."

Will Barnes, Energy and Climate Engagement Team Leader, Bracknell Forest Council

Our DSO Advisory Board provide clear, independent oversight of our decisions

Our DSO Advisory Board continues to provide sustained and constructive challenge, having met at least quarterly each year since its establishment in 2023. With industry-leading expertise and a deep understanding of our organisation and operating context, the Board is well placed to provide informed, independent scrutiny across a wide range of DSO activities.

During the last year the Board has focused on how DSO decisions are formed, evidenced and assured across governance, strategy and operational delivery. Its challenge increasingly shifted from asking whether processes are compliant to testing whether they reliably produce the right outcomes for customers, stakeholders and the wider energy system. This included end-to-end examination of investment decision making through the DNOA, Operational Decision-Making framework and Engineering Justification Papers, with emphasis on evidence quality, consistency of assumptions, treatment of uncertainty, handling of trade-offs and visibility of internal challenge.

The Board also assessed the maturity of DSO–DNO conflict-of-interest arrangements, flexibility deployment and data and digital services. In doing so, it drew on insight from across the sector, including engagement with other DSOs, assurance providers, market participants, suppliers, local authorities and community energy organisations. This cross-sector perspective helped test whether our approach reflected emerging best practice, is scalable beyond pilots, and delivers system-wide value rather than isolated benefits.

A consistent theme was ensuring stakeholders and users remain at the heart of DSO processes. The Board scrutinised whether data, flexibility services and engagement approaches are genuinely usable and decision enabling for different user groups, and whether DFES outputs reflect real-world behaviours and uncertainties. Using a Theory of Change lens, it also challenged ED3 readiness, including clarity of the DSO vision, alignment between activity and outcomes, and robustness of metrics and benefit claims. We both recognise that further work is also needed to better understand affordability and financial vulnerability across the energy sector.

EMPOWERING A SMARTER, MORE INTEGRATED GRID

We remain dedicated to upholding industry-leading standards for visibility and clarity in every dispatch decision we make

Over the past year, we've significantly strengthened our DER visibility and dispatch capability—moving from foundational processes to a more integrated, data-driven operational model.

Network visibility has improved through richer DER datasets, clearer ANM transparency and stronger constraint modelling, enabling faster, more accurate operational decisions. At the same time, we've refined communication pathways and dispatch signals, increasing consistency and supporting broader participation from DER across our system processes.

Our coordination with NESO has deepened through improved real-time data sharing, enhanced forecasting and clearer governance, ensuring a more aligned and transparent approach to managing whole-system constraints. These upgrades—across data, systems and operational interfaces—are shifting us decisively towards a smarter, more responsive and more transparent operational environment where DER plays an active role in maintaining reliability, enabling early access and supporting efficient network operation.

Together, these developments demonstrate a mature, scalable and increasingly automated DER dispatch framework—one that provides clear, trusted decision-making today while laying the groundwork for a unified, whole-system Scheduling, Dispatch and Settlement platform in ED3.

Benefits in DER dispatch for customers and stakeholders

£75.91m in benefits

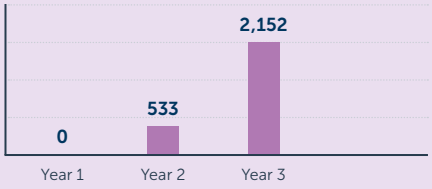
From utilising smarter access products and ANM to bring forward generation, demand and housing ahead of network reinforcement, cutting whole-system and customer costs, accelerating renewables, reducing emissions, and delivering tangible social and bill benefits. (Gross benefit excluding monetised carbon savings to 20/21 price base)

Our stakeholders are constantly driving improvement

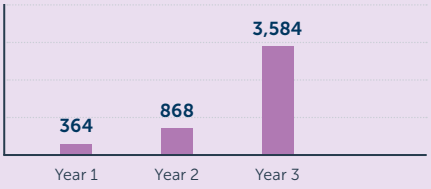
They said	We did
"We want clear transparency on dispatch decision-making and the reasons behind curtailment or activation."	We enhanced transparency by adding new SOR KPIs (cost savings and carbon), publishing quarterly ANM performance reports, and reporting conflicts identified and resolved.
"We need fairness and consistency across dispatch decisions and between system operators."	We strengthened consistency through our ODM framework, improved ANM latency to <5s and published datasets enabling operators to validate dispatch logic.
"We want improved support."	We implemented extended support hours, enhancing on-call coverage and provided faster-response digital support channels to ensure quick ANM issues resolution.

Our accelerator in numbers

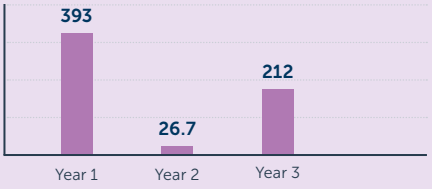
Annual risks of conflicts between DSO and NESO assessed



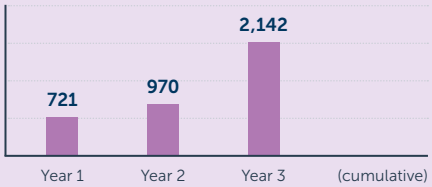
Annual decisions we've made



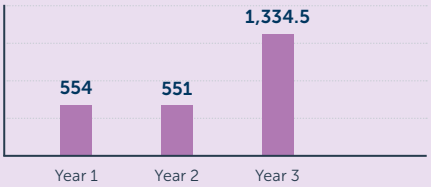
Annual MW of accelerated DER connections through transmission access



MW of DER participation in NESO markets



Annual MWh dispatched



Year 3 accelerator progress

Every year during our 3-year accelerator we've shared an action plan with stakeholders where we made commitments on progress. Below you can see what we've achieved in DER Dispatch and Decision-Making in year 3.

Action plan commitments	Outcome
Implement the final ICCP link with NESO, enabling live operational data sharing	–*
Expand NeRDA data across all flexibly connected schemes and update ODM/SOR	✓
Upgrade ANM systems and local ANM controllers to reduce costs to connecting customers	✓
Implement the first phase of the Systems for Flexibility (SFF) solution, enabling automated scheduling and dispatch	✓

* at time of publication we are still completing our final ICCP link with NESO

Enabling coordinated dispatch through comprehensive DER visibility

Our robust visibility of DER characteristics and data parameters inform accurate, timely and coordinated dispatch instructions.

Embedded Capacity Register (ECR)

Our ECR provides comprehensive information on all DER above 50 kW connected or connecting to our network. The dataset is updated monthly and published on our Data Portal. Going beyond DCUSA requirements, we've added navigation through a customer-friendly geographic interface — see page 12 for more on our Centralised Network View.

Near Real-time Data Access (NeRDA)

Our NeRDA platform is GB's first and only source of granular (street level) real-time network usage data available via open API. Our street level half-hourly smart meter data is also GB's first and only daily updated open data set for energy usage. This critical information provides unparalleled insight into network usage and support better coordination. Octopus Energy used NeRDA's near-real-time data to align EV and heat pump charging, shifting demand away from constrained substations.

DER visibility

We've expanded DER visibility on NeRDA through tailored outputs including enriched DER characteristics, curtailment information, and dispatch data. These improvements give flexibly connected customers actionable insights that support better operational and investment decisions. This enhanced visibility now extends across all of our ANM systems and the customers they support.

Flexibility Market Asset Registration (FMAR)

We're leading on the development of FMAR, helping shape how flexibility assets are registered and coordinated across markets. Building on our earlier leadership in supporting the Flexibility Unlocked programme, we're continuing to inform design of the platform, including its governance and operational development. We're also ensuring that our existing market platform will be able to integrate with the FMAR system.

Active Network Management

ANM remains a key tool for enabling early access for new connections by avoiding reinforcement delays. ANM performance has now exceeded the speed of traditional SCADA. To address this risk of latency, we installed dedicated measurement points to deliver additional near real-time visibility, whilst also creating new data now published through NeRDA for stakeholders.

Modelling substation demand

Modelling substation demand through an innovative partnership with Advanced Infrastructure and Sheffield University. We're exploring how we can support interactive dashboards to enable more transparency on our network through business-as-usual funding.

Delivering coordinated, transparent and scalable DER Dispatch

We're optimising real-time decision-making, and a consistent and efficient dispatch infrastructure that's aligned with NESO requirements and the other DSOs

Operational Decision-Making (ODM)

Our ODM framework has set the industry benchmark for clear, transparent and fair decisions evidenced by its adoption by other DSOs and we continue to share insight and learning across industry.

We continue to lead the sector as the only DSO that publishes quarterly **Seasonal Operability Report (SOR)**, setting out how we applied ODM to dispatch DER and manage network constraints.

We've published new insights on the number of conflicts identified and **resolved jointly with NESO**, further strengthening transparency for stakeholders.

In response to customer feedback; we've included scheme-specific details for each of our live ANM zones, providing further transparency.

Increasing our system capabilities

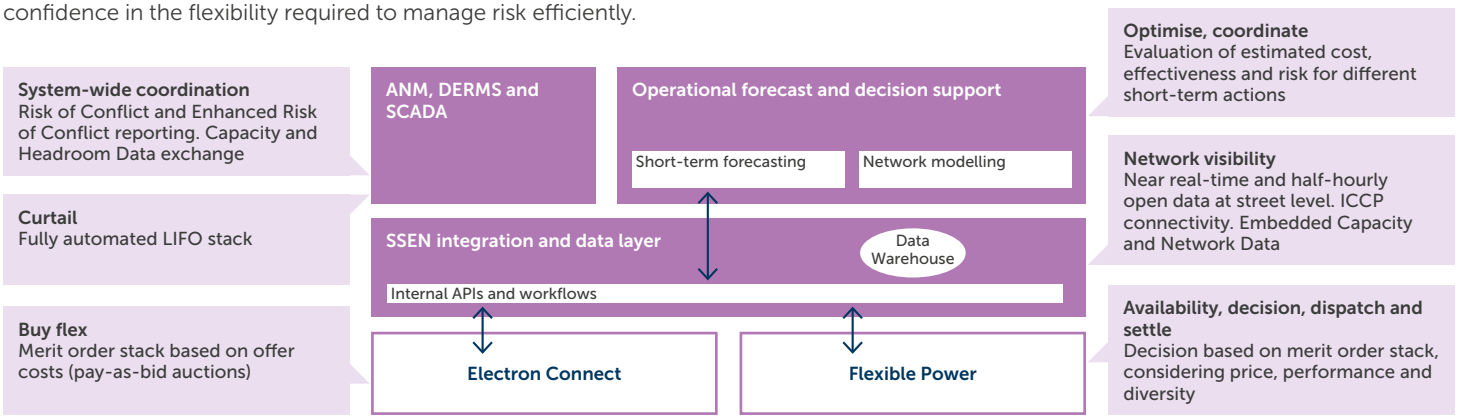
This year we implemented machine-learning-enhanced operational forecasting that improves the accuracy and efficiency of flexibility dispatch decisions. From September 2025, this has delivered a **27% point reduction** in mean forecasting error giving us greater confidence in the flexibility required to manage risk efficiently.

As our dispatch volumes scale, we have strengthened our reporting infrastructure through the development of the **Flexibility Operations Database (FLO)**. This advanced database schema is enabling rapid, accurate reporting for internal performance management and supports external transparency through key publications such as Section 31E.

Scheduling, dispatch and settlement

We've re-selected **Flexible Power** for our business-as-usual processes, following comprehensive supplier engagement and a regulated tender, based on its advanced functionality. Flexible Power is an adaptable solution adjusted to meet existing and future standards such as OpenADR and market settlement rules. This is a collaborative platform used in **more than 40% of GB distribution licence areas**

This platform has enabled us to efficiently scale our dispatch volumes whilst also allowing us the flexibility to to further develop new capability such as merit-order stacking, self-declaration, and implementing the new market rules for settlement.



Optimising whole-system DER coordination across DSOs and NESO

Our enhanced DSO–NESO communication arrangements and integrated coordination of DER manage and resolve cross-system service conflicts

We've expanded our ICCP signal exchange with NESO, including MW power-flow data and full ANM system-health visibility to support both forward and reverse power flows. We now share **64 data sets every second**.

We deploy specialist systems such as our **SWANs ANM platform in SEPD**, which gives NESO detailed operational insight into DER activity across SEPD and enables automated DER management to meet transmission constraints

This year, through our **Shetland Whole Island solution**, we've refined data exchanges and dispatch logic to jointly coordinate with the TO, NESO, DER, distribution-connected batteries (operating for grid stability), transmission-connected generation, and Shetland cable capacity limits, to ensure all customers have fair and equitable access to the network.

We're supporting the Transmission Operator in the North of Scotland to strengthen their ICCP links and are reorganising our own ICCP architecture in the region.

Technical coordination is matched with commercial coordination. This year we agreed new BCA variations, data-exchange arrangements and process flows to underpin new schemes in SHEPD. We designed these as a replicable package and have made them available to other DNOs, NESO and NGET in support of GB-wide consistency.

NESO benefits from our unique open-data resources, including NeRDA, Smart Metering datasets and the ECR. We meet monthly with NESO to share insights, review operational experience, and strengthen joint approaches to coordination.

How we've increased DER participation in NESO markets

We remain a leading partner in the **Local Constraint Market (LCM)** and welcome its extension to January 2027, reflecting its proven role in managing constraints and supporting a more flexible, resilient and decarbonised system. Working with NESO, we continue to embed LCM insights into wider market frameworks, strengthening whole-system value and accelerating the integration of local flexibility.

This year we've supported NESO's development of the **Demand-for-Constraint (DFC)** product, targeting new distributed demand investment in the North of Scotland to alleviate transmission constraints and increase renewable utilisation. Our approach – supported by SPEN and UKPN – is informing the case for GB-wide deployment.

We provide **monthly operational headroom data** to NESO, giving detailed visibility of our network that informs LCM congestion management across the B6 boundary increasing our headroom from **970MW to 2142MW** in the last year. Through this work we've demonstrated how headroom can act as a valuable indicator across multiple markets—pinpointing where flexibility delivers greatest benefit and where alternative strategies may be required to optimise constraint management and service outcomes.

We're advancing BAU innovation with CASCADE, offering industry-leading insight to create proof-of-concept software that links NESO control rooms with GSP data, focusing specifically on ANM systems. Led by NPG and NESO, we're not funded through innovation for this initiative, demonstrating our commitment to driving national innovation.

How we've optimised whole-system coordination of DER to resolve service conflicts

DSI pilot delivery

This year we completed the first DSO pilot of NESO's Data Sharing Infrastructure to implement operational outage-planning data exchanges. This complements our existing coordination practices using the Common Information Model for modelling and outage data. We're now working with NESO to scale up the full data-sharing capability.

Local flexibility and coordination with NESO

We're prioritising local flexibility, supporting NESO's Crowdflex project (as BAU not innovation) to test how local CER and DER operation by NESO can be coordinated with distribution networks. We also extended our analysis of flexibility 'flowing through' our network researching the nature and extent of implicit flexibility. This analysis is shaping how we collaborate with all energy partes on future flexibility-coordination approaches.

Primacy and operational improvements

We lead the 'Enabling efficient Risk of Conflict reporting (Primacy)' Issue Working Group of the Market Facilitator and remain among the first DNOs to prepare practical steps to prevent unwinding of NESO actions within our DERMS. This gives NESO greater confidence when dispatching services for the wider network.

Primacy rules and conflict management

We've implemented new primacy market rules, including enhanced conflict-management processes, and automated data-sharing between our DSO and NESO control rooms. As the first DSO to sign the data-sharing agreement, these improvements have enabled earlier visibility of curtailment risks and better dispatch decisions. This year we assessed **2,152** flexibility and outage conflicts, identified **75** network risks and mitigated **74**, with just one remaining to resolve.

Operational headroom provision

We continue to provide monthly operational headroom to relieve transmission constraints. This year we've procured **2142MW**.

"Our likeminded collaboration across the Flexible Power and ANM User Groups has delivered immense value. Sharing our operational experience has improved transparency, strengthened coordination, and delivered practical enhancements – jointly delivering more consistent approaches to merit-order, dispatch and baselining, which contribute to improved customer accessibility and experience."

Helen Sawdon, Head of DSO Operations (NG DSO)

Ensuring our systems are efficient and scalable

Evidencing an efficient, scalable dispatch infrastructure, with clear definitions that avoids "hard coding" capabilities

We operate open, transparent procurement to secure the best products and partners for scalable flexibility infrastructure, built to adopt GB standards, such as OpenADR. Our modular OT/IT architecture combines cloud and physical systems to deliver high-availability, scalable operations. This year, this adaptable approach enabled rapid adoption of **Day-Ahead flexibility procurement**.

Since implementing GB's first ANM systems, we've built deep operational maturity and multi-vendor capability, enabling a wide range of early-access arrangements. Following Connections Reform, we have enabled a further **331.4 MW of distribution and transmission constrained generation,** demand and storage connected ahead of reinforcement.

We've applied our high-voltage experience to develop the Access Platform, providing early-access benefits for smaller connections without the complexity or infrastructure overhead of ANM. This platform supports new temporary connection products such as **Scheduled Capacity**.

By maximising ICCP links with NESO, we've expanded T-D boundary power flows, supporting **10 GSP-level ANM systems** under technical-limits and transmission-ANM programmes.

Our Systems for Flexibility (SFF) programme continues to deliver new functional capabilities, including **operational forecasting** and **automated merit-order decision making. This capability has enabled rapid adoption of new requirements**, including flexibility services that reduce curtailment risk for GB's first early-access demand connection, and flexibility solutions that reduce customer disruption during planned outages.

We continue to expand the use of flexibility, increasing CMZs from **121 to 203**.

We've built a scalable, modular and vendor-independent integration architecture that automates previously manual processes and enables data-led coordination between flexibility markets and dispatch. The same design supports efficient scale-down where enduring solutions are no longer required.

Case Study

Rolls Royce: our first early access demand customer

Rolls Royce are expanding their headquarters near Goodwood in West Sussex. Connecting onto Chichester Bulk Supply Point substation, this expansion is reliant on distribution reinforcement works completing in 2029, and transmission reinforcement works completing in 2036 meaning a 10-year delay to their expansion plans.

Through engagement with Rolls Royce, we've provided them with accelerated system access through a combination of Early Access products allowing ramped, firm and curtailable capacity over time as reinforcement is undertaken across the electricity system.

The ramped connection, launched as part of our latest suite of Early Access products in 2025, enables the customer to access **48%** of their requested capacity immediately, increasing to **65%** following initial distribution reinforcement works in July 2026, and **77%** once the transmission ANM is enabled in late 2026. Distribution works will be completed in 2029, enabling the full firm capacity of the site subject to transmission related constraints until transmission works are completed in 2036.

This approach enables Rolls Royce to secure capacity while they undertake construction work on the manufacturing facility itself, reducing the cost of connection and accelerating the realisation of benefits to the customer and providing wider economic benefits to the local area through the provision of high-quality employment.

The risk of curtailment is managed by our dispatch of flexibility services and will end entirely once reinforcement works are complete giving Rolls Royce the fastest possible connection.

"We engaged with SSEN regarding our connections requirement and they were able to offer us a combination of [early] access products that mean we'll have initial access to the network 10 years ahead of our initial connection offer, which was constrained by transmission and distribution reinforcement requirements. Being able to access the network early by developing our new facility will allow us to scale up our capacity requirements."

Rolls Royce

How we're leading industry in ensuring dispatch logic is consistent and adhered to

Local Constraint Market

In collaboration with **NESO and Piclo**, we continue to work closely with the Local Constraint Market (LCM) to embed insights into broader market frameworks- enhancing system wide value and accelerating the integration of local flexibility.

Automated processes

We've deployed our automated merit order decision-making tool for availability and scheduling of flexibility services. This consistently applies our ODM principles to create a dispatch stack based on diversity, reliability and performance. Available to other DNOs through Flexible Power, this enables faster decision-making and supported the launch of our Day-Ahead markets.

Bringing it all together: operational forecasting and decision-making

Prioritising the capabilities that drive faster decision-making and Day-Ahead markets (see page 28), our operational platforms, data management and integration create a modular roadmap that meets the needs of today and tomorrow.

Improved Internal Processes

We've changed our internal ANM policies to improve operability, reduce curtailment and release more capacity.

We've also developed a bespoke version of Technical Limits (for GSP boundary limit assessment) for 20 GSP's in the North with ANM sites >10MW, accelerating coordination, delivering faster connections and operational management of DER.

Supporting international networks

We've actively shared our expertise and insights with international DSOs, fostering collaboration, best practice that benefits the entire flexibility industry. Most notably, our sessions with DSO's from **New Zealand, Poland, France, Australia and Thailand** focused sharing how we're operating flexibility services and deploying smart grid systems- critical components in enabling a more resilient, efficient network. By sharing this we're helping global partners to integrate renewable energy and empower customers to play an active role in the energy transition.

Glossary

Active Network Management (ANM)	Control system technology used to actively manage generation and demand in constrained areas, enabling earlier connections and reducing the need for traditional reinforcement.
BCA – Bilateral Connection Agreement	Bespoke commercial arrangements used to enable flexible or non standard connections, including operational coordination and data exchange requirements.
CMZ – Constraint Managed Zone	A defined network area where we use flexibility services to manage constraints instead of relying solely on asset reinforcement.
DFES – Distribution Future Energy Scenarios	Forward looking scenarios that forecast how demand, generation and low carbon technologies may evolve locally and regionally, informing network planning and investment.
DGIF – Distribution Governance and Investment Framework	Our formal framework governing how DSO activity interfaces with wider DNO investment decisions, ensuring clear decision rights, stage gates and conflict mitigation.
DNOA – Distribution Network Options Assessment	A structured process used to assess network needs and compare flexibility, efficiency and reinforcement options to identify the most economic whole system solution.
DSOAB – DSO Advisory Board	An independent body providing challenge, scrutiny and assurance over our DSO decisions, governance and methodologies.
ECR – Embedded Capacity Register	Our public dataset showing where distributed generation and storage are connected or seeking to connect, improving transparency and coordination with wider system operators.
FLO – Flexibility Operations Database	Our internal platform supporting performance tracking, assurance and reporting for flexibility procurement and dispatch.
FMAR – Flexibility Market Asset Registration	A common registration approach being shaped by us to enable flexibility assets to participate consistently across DSO, NESO and wider markets.
LENZA – Local Energy Net Zero Accelerator	Our geospatial planning tool used by local authorities and stakeholders to develop credible Local Area Energy Plans and understand network opportunities and constraints.
LMA – Load Managed Area	Areas of the network, particularly in the north of Scotland, where demand is actively managed to maintain security of supply.
NeRDA – Near Real-time Data Access	Our open data platform providing near real-time, street level visibility of network usage to support planning, forecasting and operational coordination.
NMM – Network Model Manager	Our internal "single source of truth" system managing network models used across planning, operations and markets.
NVMM – Network Visibility and Model Management	Our programme focused on improving the accuracy, consistency and governance of our network models by integrating asset, monitoring and smart meter data.
ODM – Operational Decision Making	Our published framework setting out how we make fair, transparent and consistent real time operational decisions, including flexibility dispatch and curtailment.
PCNZ – Powering Customers to Net Zero Fund	Our funding programme supporting projects that help customers decarbonise, trial flexibility or adopt low carbon technologies.
SDP – Strategic Development Plan	Our regional, long term electricity system blueprints identifying future network needs and transparently evaluating flexibility, efficiency and reinforcement options.
SFF – Systems for Flexibility	Our programme to modernise and automate flexibility scheduling, dispatch and reporting, enabling scalability and interoperability.
SOR – Seasonal Operability Report	A quarterly public report explaining how we anticipate and manage seasonal network risks and applies operational decision making in practice.

FOLLOW US

Website
ssen.co.uk

X
@ssencommunity

Facebook
/ssencommunity

LinkedIn
/ssencommunity

Register for updates here using this code

Scottish & Southern Electricity Networks