SP Electricity North West | DSO

DSO Performance Panel Submission

2025/26

Pictured: Our DSO Team at our March 2026 Stakeholder Conference and our Active Network Management engineer **showcasing** the connection of our first Lancashire customer through ANM.

Our report at a glance

This is our third annual Distribution System Operation (DSO) Performance Panel submission, setting out how we have delivered against Ofgem's DSO Incentive objectives during 2025/26. The report is structured explicitly around Appendix 5 assessment criteria, enabling the panel to clearly trace our strategy, delivery, outcomes and learning across all areas of DSO activity.

Evidence is organised in a criteria-led, not function-led way, allowing the panel to assess not only what we have delivered, but how delivery has evolved, where we have gone beyond baseline expectations, and how learning from experience and previous panel feedback has informed changes in approach. Across the report, we provide a clear summary of performance against each criteria, supported by 25 case studies, quantified outcomes where possible, and practical examples of in-year delivery and course-correction. Links supplied throughout the submission direct the panel to supporting datasets, dashboards and appendices, but only where deeper assurance is likely to be most helpful.

Our aim is that our submission demonstrates a clear line of sight between ambition, action and impact, and reflects our commitment to continuous improvement, transparency, and delivering demonstrable benefits for consumers and the wider energy system.

The region we serve

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1. Executive summary

I am proud to present our 2025/26 DSO Performance Panel submission, demonstrating a year of strong benefits delivery and substantial progress.

2023/24: Built capability | 2024/25: Integrated capability | **2025/26: Delivered measurable outcomes** | 2026/27: Focus on scalable growth | 2027/28: Focus on ED3 readiness

This year marks a clear transition in our DSO journey, from building capability to delivering consistent outcomes. As Chief Operating Officer, I'm proud to lead a team where the systems, data and market frameworks developed in early ED2 are now embedded in day-to-day network operations, delivering demonstrable benefits for consumers and the region. **Learning from previous panel feedback** has informed a sharper focus on operational delivery, transparency, and evidencing impact in a way that reflects the size and characteristics of our network.

Our DSO now plays the central strategic role in shaping network operation and regional net zero planning. Local authorities, public services and businesses increasingly rely on our data, planning insight and flexibility markets to deliver their own decarbonisation plans. At the same time, our DSO capability is contributing to network performance **recognised by Ofgem as industry-leading** by enabling smarter use of assets, accelerating connections through active network management (ANM), and supporting more efficient investment decisions.

This year has seen an important change in ownership, with our integration into the Iberdrola group via Scottish Power. Throughout 2025/26, we have continued to operate as a legally separate licence, with no material changes to our operational model during the period. While we are actively engaging with SP Energy Networks to develop a single plan for ED3, we are taking a considered approach to integration, recognising our distinct strategies and stakeholder needs.

Across the industry, the DSO Incentive continues to raise the bar, and we have both learned from and contributed to this progress. We have adopted and scaled best practice from other regions, particularly **standardising data and tools** to make engagement easier for local authorities, while maintaining a **highly tailored, place-based approach** to partnership working. We **continue to lead** in areas such as ANM, Social DSO and **benefits development across the sector**, and are actively working to accelerate progress in these areas through collaboration.

Our flexibility markets continue to mature. While our network currently faces fewer constraints than most regions, we have focused on growing participation, lowering barriers to entry and testing new use cases to ensure we are ready for evolving system needs. Alongside this, we are delivering value today by **accelerating connections**, which account for **68% of benefits realised this year**.

This has been a year of delivery, but also of learning. We have been clear where progress has been strong and where delivery has been more challenging, and we are using these insights to shape our priorities going forward. **Senior accountability for DSO outcomes** is embedded across the business, with a clear focus on delivering **long-term value**, not just compliance.

Looking ahead, our **DSO will continue to act as our radar for the future system** — supporting longer-term planning, enabling regional growth and ensuring we are ready for the increasing pace and complexity of the energy transition, with a clear focus on delivering a **just and fair transition** through our **Social DSO** approach.

Stephanie Trubshaw
Chief Operating Officer

2025/26 highlights

1. Benefits

Realised benefits

2024/25 £36.4m
2025/26 **£62.4m** (+71%)

Delivered a 71% increase in benefits in 2025/26 and £132m incremental value in ED2 compared to our original transition plan.

130,000 Smart Street participants saved up to £48 per household, which is 39% of their average annual distribution network bill.

2. Data

Total datasets

2024/25 43
2025/26 **143** (+233%)

Launched an industry-leading geospatial LCT Readiness Checker (covering 2.4 million properties).

3. Flexibility

Flexibility dispatched

2024/25 4,349 MWh
2025/26 **8,786 MWh** (+102%)

Lowered participation thresholds to ≥5 kW, widening access to smaller providers and communities.

Accelerated generation customers by six years and demand by four years through flexible connections.

4. Options assessment

Coordinated development schemes deliver cost reductions up to 20% (EHV) and 33% (HV) vs reactive reinforcement.

117 sites were assessed through options assessment, with 47% signposted for flexibility in 2025/26 (+7% points).

5. DER dispatch

First ANM connection accelerated the connection date by three years, delivered £3.2m in savings, and limited curtailment to just 0.5% of potential energy (90,420 MWh).

2. Delivery of DSO Benefits

Benefits from DSO activities

Building on our strong improvement last year, we have realised **£62.4m of benefits** (2020/21 prices) for customers and the wider system in 2025/26, a **71% increase on the prior year and a 53% increase in total ED2 benefits** compared with our original transition plan.

This step-change is directly driven by our DSO activities, with accelerated connections through commercial flexibility outperforming forecasts by 4,284%, and generation connections via ANM exceeding expectations by 386%. Only impacts directly attributable to DSO activities are claimed, with examples of these actions provided throughout this section. Our benefits methodology (page 9) includes a graphical summary showing how activities and actions translate into outcomes and, ultimately, deliver benefits to the stakeholders set out in the table below.

Table 1: impact of DSO activities on different types of DSO stakeholders

Stakeholder	Benefit	Year 1	Year 2	Year 3	ED2 to date	End of ED2 forecast
Consumers	Avoided or deferred reinforcement costs from using flexibility, reducing consumer contributions to distribution costs, and reduction in energy consumption	£13.5m	£21.4m	£34.8m	£69.7m	£158.3m
Distributed Energy Resources (DER)	Avoided or deferred reinforcement costs from using flexible connections, reducing costs to connecting customers and accelerating revenue	£0.3m	£0.8m	£2.5m	£3.6m	£69.4m
Whole system	Reduced wholesale electricity costs from improved network access for renewable DERs, allowing low carbon generation to connect sooner	£0.7m	£11.1m	£19.2m	£31.0m	£115.8m
Local authorities	Reduced resource costs from decarbonisation planning tools and support	£0.3m	£0.9m	£1.6m	£2.8m	£9.1m
Environment	Value of reduced carbon emissions from improved access for renewable DERs, deferred network reinforcement (avoiding embedded and operational carbon), and increased uptake of low carbon technologies (LCTs) that displace fossil fuel combustion	£0.4m	£1.6m	£3.6m	£5.6m	£23.0m
Social DSO	Direct financial savings to at-risk customers, including LCT uptake, energy use optimisation and wider societal benefits such as enhanced air quality, resilience, health and wellbeing	£0.1m	£0.4m	£0.8m	£1.3m	£4.8m
Total		£15.3m	£36.4m	£62.4m	£114.1m	£380.4m

What this means for consumers

DSO activities in ED2 reduce customer costs through deferred reinforcement (lower Distribution Use of System charges (DUoS) for all our customers), avoided connection charges (reduced customer capital expenditure), and whole-system savings (lower nationwide costs over time). This equates to an estimated **£14.35 saving on the DUoS element of a typical bill over ED2**, with benefits increasing from £0.51 in 2023/24 to £1.20 in 2024/25, £2.34 this year, £3.69 in 2026/27 and £6.61 in 2027/28.

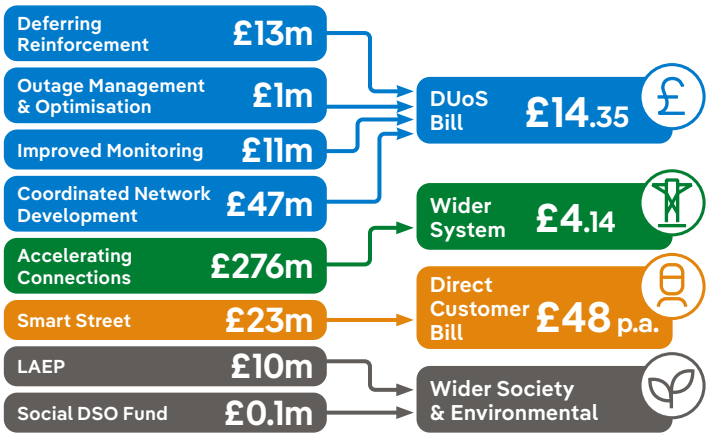
More significantly, for some customers in our region, DSO activities create savings on the non-DUoS element of their bill by reducing overall energy usage. Consumers who are part of our Smart Street programme have benefited, on average, from **£48 of energy bill savings this year** (39% of the average annual distribution bill component).

Indirect bill impacts: Estimated £0.69 this year and £4.14 bill reduction per customer over ED2, driven by lower wholesale prices. Scaling the use of ANM is a key part of our forward strategy; by accelerating connections, it enables more low carbon generation to connect earlier, increasing supply and helping to lower wholesale prices and customer bills.

Other indirect customer benefits: Our DSO activities have significant implications on the region's ability to decarbonise in a timely and cost-effective manner. A distribution network that is efficient, well-coordinated and equipped with sufficient capacity is essential if homes, businesses and public spaces are to adopt LCTs.

Many of these impacts are systemic and difficult to quantify directly, so we apply proxy measures to estimate their value. The resulting benefits are significant and would not materialise, or would be materially delayed, without our DSO interventions.

Figure 1: Impact of DSO benefits on customer bills over ED2



2.1 Our DSO strategy and ambition for delivering system and social value

Enabling green growth and efficient long-term capacity

We work with our stakeholders to deliver green growth and reduce carbon dioxide emissions across the region. This transition represents more than a technical evolution; **our DSO ambition is to ensure that our distribution network acts as an enabler of sustainable economic growth and decarbonisation**, rather than a passive responder to demand.

We promote wider system benefits by:

- enabling greater and faster access for DERs;
- improving coordination across the transmission / distribution boundary; and
- aligning forecasting, planning and flexibility procurement with whole-system pathways.

This ensures national objectives are delivered in a way that reflects the specific economic and social characteristics of the North West.

Becoming a leading Social DSO supporting a just and fair transition

We aim to be a leading Social DSO by embedding social value within network planning and market design rather than treating it as a parallel activity. This means:

- considering impacts on different DSO personas;
- ensuring flexibility markets are inclusive and accessible;
- targeting interventions where economic growth and vulnerability intersect; and
- integrating social cost-benefit considerations within investment appraisal.

We have embedded social considerations within forecasting, capacity release and flexibility procurement, supporting a just and fair transition alongside system efficiency.

We believe the next evolution of DSO in ED3 should go further. Long-term efficiency must be complemented by **a clear commitment to a just and fair transition** — ensuring that communities are actively engaged in net zero planning and that the benefits of decarbonisation are widely shared.

A place-based strategy: embedding system and social value

The North West is economically and socially diverse, with 14.4% of the population being classed as fuel-poor. Our DSO strategy recognises that network investment and flexibility deployment must reflect this variation. We have therefore evolved towards a deliberately **place-based model** in which:

- Local area energy plans (LAEPs) inform forecasting assumptions within distribution future electricity scenarios (DFES); DFES scenarios in turn inform headroom forecasts, network development planning, and flexibility procurement; and
- Investment sequencing reflects regional growth and decarbonisation ambitions, not just connection applications.

Our approach ensures regional insight directly informs investment timing, option selection and procurement strategy. Without this coordination, reinforcement would be driven primarily by individual connection requests and static forecasts, risking over-build in some areas and delayed growth in others. By contrast, we release capacity earlier and more efficiently.

Proactive regional and cross-vector planning

We are ensuring that electricity network development is aligned with transport, heat, water and gas infrastructure across the North West by taking a proactive role in regional, cross-vector investment planning and working closely with local actors, including local authorities. This goes beyond consultation: our engagement directly informs forecasting assumptions, investment sequencing and strategic investment requests.

Greater Manchester: embedding electricity within regional growth strategy

Greater Manchester Combined Authority's (GMCA) five-year environment plan includes 30,000 new affordable net zero homes, a fully integrated, carbon-neutral public transport system including providing additional capacity for four bus depots, and new district heat networks. We support alignment on infrastructure investment over a 15–20 year horizon through active membership of the Greater Manchester Strategic Infrastructure Board.

Influencing national system planning: Transitional regional energy strategic plan (tRESP)

Through structured and proactive local engagement with local authorities, we gathered detailed data on planned developments and infrastructure ambitions. This evidence base directly informed our **Strategic Investment Needs submission to NESO** under the tRESP process. As a result:

- We submitted 72 strategic energy need (SEN) projects to the National Energy System Operator (NESO), and 35 were approved. In the final tRESP, 38 projects were approved for proactive investment—92% of which originated from our submission.
- In the final tRESP outcome, 12 strategic energy grid supply point (GSP) areas were identified in our licence area — the joint highest in GB.

This demonstrates the value of DSO-led regional insight translating into national investment recognition.

Cross-vector collaboration beyond electricity

We also work across sectors to support coordinated decarbonisation pathways:

Cadent: We have integrated reciprocal links in our data portals to network datasets and adopted common template approaches (adopted from UK Power Networks) for our LAEP service. Monthly bilateral meetings ensure we align forecasting assumptions, data standards and infrastructure sequencing.

Northern Gas Networks – Navigator Project: We contributed network data and advisory board feedback, particularly in relation to modelling approaches for network investment costs. This engagement supports a more consistent, evidence-based approach to cross-vector infrastructure planning and strengthens alignment between electricity and gas transition pathways.

Hybrid heating collaboration: We contributed technical expertise to national cross-industry work and policy development on hybrid heating systems, including advisory panels alongside the Department of Energy Security and Net Zero (DESNZ), NESO, gas distribution networks (GDNs), heat pump manufacturers and consultancies.

NHS England: We worked closely with NHS trusts to develop flexibility opportunities across approximately 20 sites within active constraint management zones (CMZ), aligning public sector decarbonisation with local network optimisation. See page 15 for more information.

Taken together, these activities have directly improved the accuracy of forecasting, informed investment sequencing and increased the visibility of regional needs within national planning processes.

Delivering whole-system value through visibility and coordination

By improving visibility and coordination of the network, scaling flexibility delivers whole system benefits including deferred reinforcement, lower system costs and enabling faster connections. Embedded across planning and operations, this approach has delivered tangible outcomes during the year, including increased headroom, accelerated generation connections and significantly higher flexibility dispatch. See page eight for a worked example of how coordinated network development is helping to reduce connection delays and wider system costs.

2.2 How we measure, evidence and act on DSO benefits

Quantification of benefits

We use a structured, systematic approach to identify, quantify and report net DSO benefits, **ensuring that only impacts directly attributable to DSO activities are claimed**. Each benefit area is underpinned by a clear theory of change, providing a transparent and defensible pathway from activities to outcomes and monetised benefits.

Clear identification and appraisal of benefits

We distinguish clearly between:

- **Core (standardised) DSO benefits** – Benefits arising from flexibility procurement, network optimisation and whole system coordination. These include, for example, avoided reinforcement, reduced carbon emissions and improved network utilisation.
- **Social DSO benefits** – Incremental and targeted benefits arising from our Social DSO strategy, including impacts on vulnerable customers, local communities and wider societal outcomes.

Consistent and robust economic appraisal

We quantify benefits in line with **HM Treasury Green Book principles, Ofgem's established cost-benefit analysis (CBA) methodologies** and relevant industry and regulatory guidance. Where benefits cannot be robustly quantified, we explain them qualitatively and set out the evidence gap.

As a social DSO, we apply the same level of rigour to social and environmental benefits as to financial benefits, ensuring that impacts on different types of consumers, network users and the wider energy system (including carbon emissions and air quality) are considered alongside system efficiency outcomes. **Our benefits reporting is independently assured**.

Through our leadership of the ENA DSO Collaboration Forum, we have championed standardisation of benefits methodologies to improve consistency and comparability of DSO benefits. This year **71% of the benefits (£m) we've realised are derived from the standardised methodology**, which you can read more about in the ENA Collaborative Appendix.

We have enhanced our approach to capturing social and environmental impacts through an expanded social cost-benefit framework, enabling a more comprehensive assessment of wider system benefits.

This framework is applied both prospectively and evaluatively to support decision-making and ensure benefits are maximised over time. Further detail is provided in Section 2.4.

Governance, tracking and continuous improvement

We maintain robust governance arrangements for identifying, tracking and assuring DSO benefits. Each year we review methodologies, update assumptions, apply standardised templates (including our Social CBA framework) and obtain independent assurance.

In March 2025 we published the first version of our benefits methodology. In March 2026 we updated our methodology in direct response to stakeholder feedback, including greater transparency on underlying assumptions, integration of our new Social CBA tool and alignment with the ENA standardised calculation methodology for carbon and societal benefits.

Throughout ED2, we have **progressively matured our approach**, but we recognise that methodologies continue to evolve. Areas for further improvement include refining data collection for certain social outcomes and strengthening consistency where industry data remains limited.

Tracking progress against our transition plan

Delivering DSO requires balancing business-as-usual (BAU) activities with investments and transformation programmes to build capability and evolve our role.

By the end of Year 3, all but six activities in our original RIIO-ED2 DSO Transition Plan have been fully completed and are targeted to deliver £248.7m of benefits, with several now continuing as ongoing activities, such as collaboration with network operators and system partners to standardise flexibility products and agreements. One initiative was stopped due to misalignment with wider industry direction, and another is constrained by external dependencies.

In addition, we have committed to **87 new activities over the past three years** in response to feedback from the Ofgem DSO Performance Panel and wider stakeholders. Of these, 74% are complete and a further 18% are progressing or nearing completion, **contributing to an increase in our latest ED2 benefits forecast to £380m (up 53%)**.

Further details on activities stopped, started and ongoing are provided in Appendix C.

Using KPIs to drive action that maximises benefits

We use a targeted set of key performance indicators (KPIs) to track delivery of outcomes that drive DSO benefits. Published quarterly alongside performance commentary, these KPIs enable in-year course correction, maximise value for consumers, and support internal focus and stakeholder accountability. The table below sets out the seven KPIs that directly track quantified benefits, reflecting a step change in the value delivered to wider society as momentum builds across our full KPI portfolio. In addition, we publish seven supporting capability metrics separately online; these are not monetised, but are valued by stakeholders as indicators of capability development and future delivery.

Table 2: Extract of KPIs from full framework

Category	KPI	2024/25 actual	2025/26 target	2025/26 actual	RAG status
DSO benefits	Deferred reinforcement	£3.7m	£3.0m	**£6.1m**	Green
	Accelerated connections via ANM	-	30 MW	**30 MW**	Green
	Capacity of flexible connections energised	248 MW	273 MW	**111 MW**	Red
	Value of benefits delivered to wider society	£21.8m	£43.6M	**£62.4m**	Green
Flexibility marketplace development	Flexible services procured	7.18 MW	21.54 MW	**10.06 MW**	Red
DER decision-making framework	Energy savings from Smart Street	3,681 MWh	5,427 MWh	**5,933 MWh**	Green
	Flexibility dispatched	4,349 MWh	8,698 MWh	**8,786 MWh**	Green

How we have acted to improve performance

Case study: Improving uptake of flexible connections

Need
Customers expect timely and cost-effective access to the network. Where constraints exist, flexible connections should be clearly understood, consistently offered and straightforward to deliver.

Insight (from KPI monitoring)
KPI tracking identified that uptake of flexible connection options was below expected levels, particularly for newer products such as timed connections and ANM. Analysis indicated this was not due to lack of suitability, but limited familiarity among designers and delivery teams, and inconsistent communication of options to customers.

Action (course correction)
In response, the DSO led targeted interventions across the business:

- Embedded subject matter expert support from the DSO team into the connections processes
- Delivered training sessions and workshops for designers and delivery engineers
- Provided direct technical support in customer discussions
- Co-created the technical limits curtailment methodology consultation with Connections teams, improving clarity.

Outcome
These actions led to a measurable shift in behaviour. Designers and delivery engineers more actively identified and progressed flexible connection opportunities. This improved visibility and consideration of flexible options at point of design strengthening alignment between DSO and Connections teams.

Learning / improvement
This intervention highlighted the importance of internal capability and process alignment in enabling flexible connections at scale. While domestic LCT connections have more than trebled, major connections activity has declined (linked to connections reform). Societal benefits continue to exceed targets, driven by customer savings, reduced whole-system costs and lower air pollution.

Case study: Smart Street – using insights to maximise benefits

Need
Customers expect us to reduce bills, improve efficiency and enable LCT uptake without unnecessary reinforcement costs. As a Social DSO, we choose to prioritise interventions that deliver the greatest social value, particularly in areas of higher vulnerability. For customers experiencing fuel poverty or financial stress, passive interventions that reduce bills without requiring action, engagement or upfront investment are especially valuable.

Evidence
Smart Street is our voltage optimisation technology, which manages the voltage of domestic and small commercial customers connected to our underground low voltage (LV) networks in a way that reduces their electricity consumption. It can reduce household electricity usage by up to 8%, equivalent to savings of around £48 per year for the average household, with **greater distributional value for fuel-poor households**, where total benefits can reach up to £99 per year.

We are delivering Smart Street to 285,000 customers by 2028, above our Business Plan target of 250,000. **This year we deployed 139 units, reaching 87,397 customers and saving 13,749 MWh, bringing the ED2 total to 133,715 customers benefiting**.

Action (course correction)
DSO champions Smart Street within SP Electricity North West and monitors Distribution Network Operator (DNO) delivery. We re-based our KPI target due to deployment being ramped-up later in ED2 and additional time taken to type-test new transformer designs and integrate Smart Street with wider substation upgrades. This integration enables combined solutions at lower cost and reduced disruption.

Smart Street is up to 40% cheaper than traditional reinforcement and facilitates faster connection of clusters of LCTs. Using our Social DSO model, we have worked with our DNO colleagues to **prioritise deployment in areas with higher concentrations of vulnerable households**.

Outcomes
Insights from our benefits framework have directly informed deployment targeting and scaling decisions, increasing both system and social value.

Smart Street delivers measurable energy savings, reduces bills, improves voltage management, and supports earlier LCT uptake. The cumulative social benefit through targeted deployment is £5.2m in ED2 so far and £22.9m by 2028. We are planning a programme of similar scale in ED3, subject to stakeholder acceptability and CBA revalidation.

Learning / improvement
We developed a detailed LV network model to assess wider application, including rural overhead networks. With maturing pole-mounted solutions, we are evaluating the feasibility and cost-benefit of extending Smart Street to rural circuits, supported by desktop analysis and a planned small-scale demonstrator trial.

This reflects our Social DSO ambition to ensure benefits are not limited to urban or areas with a lower cost to serve, but are accessible across the region, including rural and lower-income communities. This will be a key focus for our 2026/27 progress update.

2.3 Realisation of DSO benefits: in-year delivery

This section sets out how the benefits summarised on page two (table 1) are realised in practice across key DSO activities, including flexibility, accelerated connections and coordinated network development. These activities directly deliver the benefits reported by beneficiary group and reflect our DSO strategy and ED2 Business Plan commitments.

The following table provides a detailed breakdown of benefits realised this year, totalling £62.4m. It shows year-on-year progress and cumulative delivery to date, alongside our latest ED2 forecast compared with our ED2 Business Plan. This demonstrates that **our DSO activities have materially increased benefits**, with a significant proportion already realised or unlocked. While performance varies across categories, reflecting evolving system needs and the timing of constraints, the latest forecast indicates **overall delivery ahead of our ED2 ambition**.

Table 3: Net present value (NPV) of DSO benefits – actuals, ED2 plan and latest forecast

NPV actuals £m						
Year on year tracking	Realised				ED2 plan	End of ED2 latest forecast
	Year 1	Year 2	Year 3	ED2 (3-years)		
Standardised and comparable across DSOs						
1. Deferring reinforcement*	-	0.8	2.1	2.9	30.5	12.9
2. Accelerating connections	6.9	25.0	42.5	74.4	182.1	276.4
3. Outage management and optimisation	-	-	-	-	-	0.7
Sub-total (standardised)	**6.9**	**25.8**	**44.6**	**77.3**	**212.6**	**290.0**
Additional benefits quantified						
4. Improved monitoring	(0.3)	0.0	1.8	1.6	11.9	10.7
5. LAEP support	0.3	1.0	1.7	3.0	-	9.8
6. Coordinated network development	8.6	9.0	9.4	26.9	24.2	47.0
7. Smart Street rollout	(0.2)	0.5	5.0	5.2	-	22.9
8. New Social DSO Fund	-	-	0.0	0.0	-	0.1
Sub-total (not standardised)	**8.5**	**10.5**	**17.8**	**36.8**	**36.1**	**90.4**
Total benefits quantified	**15.3**	**36.4**	**62.4**	**114.1**	**248.7**	**380.4**

**Standardised methodology includes BSP, primary and secondary reinforcement assessment and excludes wider benefits e.g. ANM*

In our Benefits Methodology Annex, we set out in detail how each of the eight core benefit categories delivers value, including our quantification approach, underlying assumptions and a supporting theory of change. To avoid duplication, the examples below focus on what has changed, our learning, and how these activities translate into the most material benefits to specific DSO personas, as well as the environment.

Benefits to consumers

Deferring reinforcement

Trend: Increased ↑

With greater network visibility (62% of customers covered by physical LV monitoring) we can target flexibility or reinforcement where needed, reducing unnecessary costs and deferring upgrades at secondary substations.

We derive unique benefits from our ANM by using real-time, centralised power flow control based on live measurements. Unlike other industry approaches, this enables rapid scaling of flexibility services and flexible connections without new hardwiring, while enhancing real-time capacity balancing.

This year, our **first ANM customer** delivered £3.2m of avoided DUoS reinforcement costs and £1.5m in reduced connection costs, demonstrating tangible benefits of this approach.

Case study

Need
Customers expect us to use flexibility to accelerate connections and minimise unnecessary capital expenditure.

Evidence
Although most flexibility in our region is procured ahead of need, limiting large-scale deferral opportunities, we continue to target areas where extra high voltage (EHV) reinforcement would otherwise delay connections. Our Distribution Network Options Assessment (DNOA) identifies Moss Side in Leyland and Seven Stars in Blackpool as examples. We procured 23MVA of flexibility, enabling the deferral of £1.32m of load-related reinforcement.

Outcomes
This intervention released capacity earlier and more cost-effectively, delivering £0.12m NPV benefit and deferring conventional reinforcement into ED3 (post-2028). At a programme level, we exceeded our KPI target, delivering £6.1m (up from £3.7m last year, against a £3.0m target), driven by flexibility at primary substations and the successful integration of an ANM-managed generation connection.

Learning / improvement
In a relatively unconstrained network, flexibility benefits are targeted. By expanding participation, stretching procurement and accelerating firm connections, we position flexibility as a strategic driver of customer value beyond reinforcement deferral.

Benefits to DERs

Accelerating storage, demand and generation connections

Trend: Increased ↑

A core component of our DSO role is increasing access to the network for DERs and improving coordination across the transmission–distribution boundary.

We use the lowest-cost options to manage constraints, aiming to increase the proportion of connections facilitated through flexible arrangements. Our ANM system identifies the optimal combination of connection curtailment and flexibility procurement to manage capacity constraints, as well as accelerating gross value added (GVA) and/or wider system benefits.

Case study

Need
Customers expect timely access to the network, particularly in areas affected by distribution or transmission constraints. They expect us to use innovative connection solutions to avoid unnecessary delay and reduce the cost impact of reinforcement.

Evidence
This year, we delivered 111 MW of additional flexible connections capacity, compared with 243 MW last year. While the total MW connected is lower this year, this largely reflects fewer EHV connections (typically associated with large, single-scheme capacity) as well as the impact of ongoing connections reform. At the same time, the volume of domestic LCT flexible connections has increased significantly, with nearly four times as many projects connecting.

This year we used refined our benefits methodology to align with the standardised approach. Historic and current year performance is now based on robust actual data, with future projections reflecting latest DFES forecasts which align with actual connections data and current planning assumptions. The increase in forecasted benefits reflects a higher proportion of generation connected, increasing actual kWh output.

Outcomes
Flexible connections materially accelerate project delivery, enabling customer projects to proceed despite existing constraints, connecting on average six years sooner where distribution constraints apply, and ten years sooner where transmission constraints apply.

This has delivered £877k avoided reinforcement per major connections customer (£21.9m across 25 customers since ED2), and £987k deferred DUoS reinforcement (£3.0m across three customers).

Learning / improvement
We have strengthened tracking and transparency by adopting the standardised methodology and publishing aligned data via our portal. Although it is too early to report in-year results, we have expanded tracking to capture benefits flowing directly to connecting customers, including additional revenue or savings realised through earlier or flexible access.

Benefits to wider system

Coordinated network development helps to reduce connection delays and wider system costs. Here we take a closer look at our expanding work in this area which also reduces embodied/grid carbon.

Embedding coordinated network development

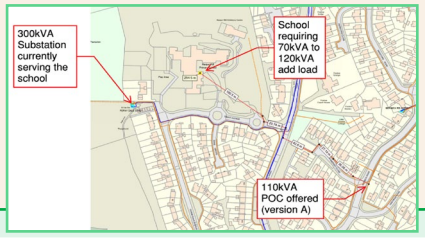
Trend: Sustained

Case study

Need
Stakeholders expect network development that avoids fragmented, connection-by-connection upgrades and delivers best value. Where reinforcement is required, it should be delivered at the right scale, informed by growth forecasts and build-versus-flex testing.

Evidence
Building on the success of our benefits-driven approach to Ofgem's load-related reopener last year, we used stakeholder engagement and enhanced forecasting to scrutinise DNO asset-based solutions and ensure best value.

EHV example	HV example	LV example
• Proactive coordinated reinforcement: a new primary delivering 32MVA at £6.2m • Reactive alternative would have involved uprating transformers and switchgear across three sites: £11.9m delivering 49MVA • ~48% lower cost compared to a staged reactive build: £197 per kVA versus £230 per kVA.	• A £215k proactive scheme with new 1,000kVA transformer and load transfer addressed both immediate overload risk and future growth. • A reactive approach would have required separate LV works and subsequent reinforcement, resulting in higher cumulative cost and disruption.	• £75k proactive LV cable upgrade released 70kVA of capacity, supporting local growth more efficiently than a reactive alternative of similar cost.
By coordinating reinforcement ahead of individual connection triggers, we reduced unit costs and avoided inefficient staged upgrades.		



Outcomes
Across voltage levels, proactive reinforcement benefitted consumers by reducing the cost per kVA, improved resilience and backfeed capability, and avoided repeat intervention and disruption. More widely it released capacity earlier for connecting customers enabling environmental and economic growth benefits. Our load-related expenditure (LRE) re-opener submission demonstrated that each £1 invested in ED2 not only eliminates the requirement for equivalent expenditure in ED3 but also generates an additional £0.18 in broader benefits.

Learning / improvement
These cases reinforce the value of early demand identification, coordinated planning, and systematic testing of reactive alternatives. Proactive reinforcement, aligned with flexibility where appropriate, delivers strong value-for-money outcomes and avoids piecemeal network expansion.

Opportunity-led adaptation on outage optimisation

Trend: New focus

Historically, outage optimisation has been a relatively small benefit category, however, recent learning indicates potential for expansion. We now also benefit from a standardised methodology for measuring and benchmarking performance, strengthening both consistency and comparability.

Case study

Need
Our customer research shows reliability is critical, with a clear preference for fewer, coordinated interruptions rather than multiple outages. There is also increasing expectation that flexibility and data are used to minimise disruption, particularly during severe weather.

Evidence
Following best practice sharing with SPEN we have expanded our outage optimisation approach, combining operational flexibility ("Storm Flex") with improved planning and coordination.

- We introduced a pre-agreed Storm Flex trigger, enabling rapid demand reduction during severe weather events
- In parallel, we are improving coordination of planned outages using enhanced network visibility. A new QGIS-based tool identifies customers affected across works, enabling better sequencing and reducing repeat interruptions.

This builds on industry best practice and strengthens our ability to manage outages proactively.

Outcomes
Storm Flex dispatch increased from 41 kWh in Winter 2024/25 to 238 kWh in Winter 2025/26, providing an additional restoration lever during Storm Babet and reducing reliance on temporary generation. Improved coordination of planned outages is reducing repeat interruptions and improving the customer experience.

Learning / improvement
We will continue to scale Storm Flex and embed data-led coordination of planned outages to improve resilience and customer outcomes.

Benefits to local authorities

LAEP support – course correction in benefits delivery

Trend: Increased

In April 2025, we commissioned independent research with 30 representatives from 16 local authorities into our LAEP support service. We heard that LAEP progress is uneven across the region, with gaps driven by funding, resourcing, coordination challenges, and the absence of national mandate or central funding.

Case study

Need
Authorities in earlier stages want stronger non-technical guidance; during engagement and modelling, digital tools could complement one-to-one support; and authorities moving into delivery need ongoing optioneering for investment cases and clearer guidance on interpreting energy data.

Evidence
Delivery of early-stage non-technical support
We strengthened coordination by appointing a Stakeholder Engagement Manager and running workshops with 20 local authorities in September 2025. The feedback led to Empower, a co-designed energy planning training programme with Green Economy, addressing gaps in energy literacy, data confidence and delivery capability through flexible, stage-specific support from introduction to delivery.

It provides structured, **free of charge** support as follows:

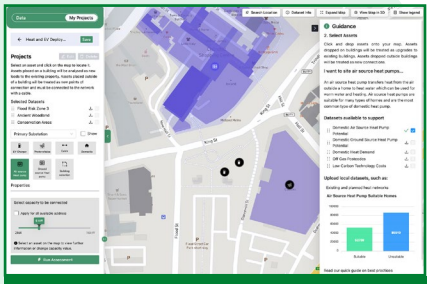
- **Introduction to energy literacy (1.5 hours, online):** On-demand foundational training designed to build baseline understanding and support senior buy-in.
- **Build your LAEP (1 day, in person):** Practical training including use of templates, spatial data, cost modelling, and action planning to improve coordination and viability.
- **Deliver your LAEP (1 day, in person):** Focused on implementation, strengthening investment cases, and project/site appraisal to unlock funding and accelerate delivery.

Participants can take part in the sessions most appropriate to their current progress and position, and gain access to resources and practical tools that extend beyond the training.

Delivery of modelling and optioneering support
To support 15 local authorities working across DNO boundaries, we adopted a 'Local authority common ask template', which only needs to be completed once by the local authority and is shared with their local GDN and DNO.

While our BAU model focuses on bespoke, human-centred support and tailored data solutions, this approach does not meet all needs.

Therefore, we also chose to fund **stakeholder access to the LAEP+ platform, free of charge**. It enables both technical and non-technical users to develop, model and share LAEPs with DNOs. Several councils have already received structured onboarding and are supported with monthly webinars and Q&A sessions, live chat, and regularly updated resources.



A user-created an accelerator project showing PV, heat pump and EV deployment, with insights into overall potential and site suitability and information down to lower voltage levels.

Supporting advanced digitalisation
This year we agreed terms of reference (ToR) to collaborate with GMCA and its partner Energy Systems Catapult on developing a digital twin tool integrating our network data with the strategic heat pipeline — including projected demand, grid capacity, and planned growth locations. We actively share data to support this work, although automation will take longer to implement.

Outcomes
- Empower translated identified barriers into a structured, scalable capacity-building programme aligned to LAEP maturity
- LAEP+ has reduced local authorities' resource burdens and standardised LAEP approaches. Following feedback, we have made a significant investment to **roll out LAEP+ and Empower to all 40 local authorities** in our region until at least 2028. This will deliver over £1m benefits within ED2
- The common data request templates mean that authorities on our borders no longer need to repeatedly submit the same local datasets to different networks, saving time and cost.

Learning/improvement
The learning from delivering Empower with eight local authorities is captured in an independent report. Participants not only reported feeling more confident and empowered but also found the **CIPD accreditation gained through participation** a strong motivator for engagement. We are now engaging with the North West Net Zero Hub to explore alignment with the Hubs Ready for RESP programme.

2.4 Going beyond our ED2 plan to maximise benefits

In addition to delivering against our ED2 Business Plan, we have taken a proactive leadership role to enhance methodologies, deliver additional outputs and maximise benefits beyond baseline expectations.

Leadership in industry standardisation and comparability

We initiated and have chaired the ENA DSO Collaboration Forum for two years. Through this forum we have **led the creation of a first-ever standardised industry approach** to articulating and measuring DSO benefits. We prioritised industry-wide consistency over individual company optimisation, accepting that alignment could increase or decrease our reported benefits.

The project focused on social benefits, defined as those that accrue to billpayers and to the environment but excludes those that accrue to commercial market participants (e.g. flexibility service providers).

Progress this year includes:

- Agreement of common principles, terminology and stakeholder categorisation to improve clarity and comparability
- In-depth benchmarking of DSO benefits methodologies, which identified 13 areas of divergence (including price base, discounting, net vs gross definitions, and sharing of network benefits)
- Standardisation of all 13 elements across 13 benefit themes (see ENA appendix for a breakdown)
- Approach in line with relevant regulatory guidance and good practice documents (e.g., the Common Appendix, DSO Incentive Governance and HM Treasury Green Book).

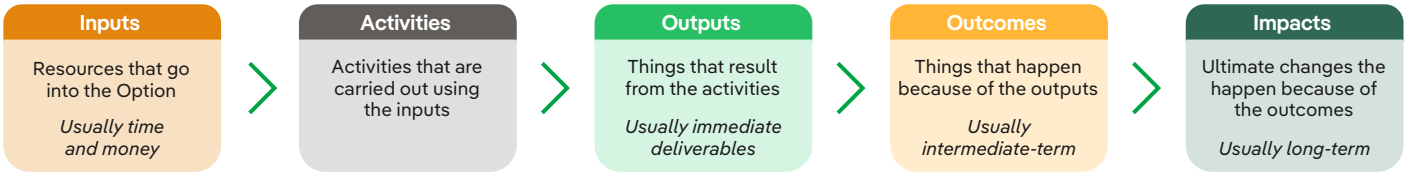
As Chair, we drove greater methodological consistency and comparability, improving transparency and traceability. We recognise the potential for further industry standardisation and will continue to champion this.

Sector-leading Social CBA framework – robust, transparent and replicable

We have developed a sector-leading Social CBA framework that goes beyond standard industry approaches and is now actively shaping investment and delivery decisions. In 2025, we commissioned Frontier Economics to develop and assure a new social CBA model, **addressing gaps in existing approaches**, including limitations within the ED2 template and the narrower scope of ENA collaboration, enabling systematic capture of wider societal impacts.

The enhanced framework has been **validated against the HM Treasury Green Book principles** and strengthens the treatment of counterfactuals. It retains the core functionality of the Ofgem ED2 CBA while introducing modules to capture wider societal benefits and distributional impacts.

A core addition is a logic model that maps the pathway from activities to outcomes and monetised benefits, supporting assessment of distributional impacts across different consumer groups.



As we implement our Social DSO strategy, the model enables us to quantify and forecast impacts, supporting robust assessment, and has been **applied across ten Social DSO initiatives** this year to ensure consistency in decision-making.

A central output is a quality-assured **proxy bank of 500+ indicators** from national, academic and sector sources. Alongside carbon, it includes monetised impacts of air pollutants (e.g. NOx, SO_2, PM2.5), linking energy activity to health outcomes—creating one of the most comprehensive social valuation resources in the DNO sector.

This framework has directly informed decisions to initiate, adjust and scale key programmes including Smart Street, coordinated network development and Social DSO initiatives.

Social DSO - additional outputs maximising customer benefit

Our Social DSO Strategy places fairness and equity at the centre of network planning and operation.

Every major decision now assesses:

- Distributional impacts across consumer groups
- Impacts on vulnerable users
- Carbon and wider system outcomes
- Economic participation and regional equity

This ensures social value is evaluated alongside traditional cost-efficiency metrics — not added afterwards.

From strategy to implementation

2024/25 was our co-creation phase; this year we moved into mobilisation and delivery. A dedicated Social DSO Manager was appointed to embed our philosophy across DSO operations.

Social DSO Fund case study

Need

Promote broader sharing of net zero benefits by supporting clean energy investments, sustainability and climate projects in vulnerable communities.

Evidence

Through collaboration and co-investment, we launched a Social DSO Fund to enable:

- Community resilience and decarbonisation projects
- Increased participation in flexibility markets
- Measurable social value alongside network benefit
- Community-owned flexibility assets.

Projects can receive up to £25,000, with matched funding required. Where low carbon assets are installed, they must participate in flexibility markets under a minimum three-year dispatch contract — explicitly linking social investment to system optimisation.

Outcomes: In the first funding round of funding among the projects we invested in included:

Table 4: Projects we invested in through our Social DSO fund

Stakeholder	Culterham Hall	Burneside Community Energy	Energy Cloud	NHS	Solar for Schools
Who benefited and why prioritised	A rural community with 20% over 65 and 20% under 16, lacking emergency backup power.	A community hall transitioning from gas heating, with strong local energy leadership but capital constraints.	Households in fuel poverty.	NHS Trusts — where energy resilience directly affects patient safety and operational continuity.	Schools serving higher proportions of lower-income families, where energy cost pressures directly affect education budgets.
Intervention	Solar PV (16kW) and battery storage to establish a designated resilience hub capable of operating during outages.	Solar PV, 50kWh battery storage and infrared heating panels to replace fossil gas heating.	A platform that shares surplus renewable energy to vulnerable households in real time. A signal switches on water heaters automatically.	Through collaboration with NHS Trusts, we are enabling battery storage deployment linked to flexibility participation.	Partnering with Solar for Schools (SfS), we co-funded battery installation, helping unlock viable solar and storage schemes in schools that would otherwise be unable to proceed.
System + social outcomes	• Provides dispatchable flexibility asset • Reduces outage vulnerability for high-risk groups • Lowers energy costs and carbon emissions	• Reduces carbon emissions • Maximises use of renewable electricity • Enables participation in flexibility services	• Reduces bills for vulnerable customers • Improves utilisation of renewable generation • Enhances system efficiency	• Increased resilience for critical healthcare infrastructure • Reduced energy costs • Enhanced grid efficiency through dispatchable flexibility	• Reduced energy costs for schools • Carbon reduction • Creation of DERs • Building energy literacy among future consumers
NPV (of first funding round)	Financial bill savings **£224k**	Carbon savings **61 tonnes**	Resilience and Reliability benefits **£39k**	Social and wellbeing benefits **£166k**	Social return on investment **£1:£3.34**

Social DSO Fund learning and trade-offs

The first funding round focused on operationalising the fund and embedding Social CBA measurement. We published our Social DSO Fund: Strategy & Governance Framework on our website, alongside an application form and guidance.

While measured benefits appear modest, this reflects our granular and robust methodology. Social DSO Fund benefits are smaller in scale than network interventions but can be significant locally, for example, projects like Burneside support communities of around 1,800 people. It also reflects that we are building a movement that will take time to gain momentum, similar to our early flexibility market development, with increasing awareness and engagement unlocking wider participation and future benefits.

The Social DSO Fund will operate throughout ED2, with a maximum allocation of £500,000. Funding will be distributed through scheduled rounds, up to three per year, subject to available funds and organisational priorities. Our website is updated regularly with round details, and interest in the fund is growing significantly. In the latest round, we received 11 applications requesting £254,538, with conditional awards made to six projects.

3. Data and information provision

Highlights

Expanded dataset coverage and automation: Published 100 new datasets (143 total), all accessible via API, enabling stakeholders to automate data access and integrate network insight directly into their own tools and workflows.

Improved accessibility and usability: Introduced persona-led navigation, AI-enabled search and use-case-driven design across our Data Portal and Education Hub.

Enhanced LV network visibility: Delivered an 88 million-record LV visibility dataset, combining PRESense and smart meter data to provide time-series insight across more than 60% of customers, supporting more accurate capacity assessment and flexibility identification.

Greater integration of third-party data: Expanded integration of datasets including DVLA, MCS, ONS and Natural England.

Standardisation and cross-DNO alignment: Worked with Northern Powergrid and others to standardise data presentation and adopt shared visualisation tools.

New decision-support tools for stakeholders: Launched an industry-leading geospatial LCT Readiness Checker (covering 2.4 million properties).

Real-time data provision: Published live fault data, which is refreshed every 15 minutes and aggregated demand.

3.1 Scope, granularity and accuracy of data

Sharing comprehensive data and information in an accessible location

Stakeholders have asked us to improve accessibility, expand available data and consolidate datasets within the Open Data Portal as a single, central source. In response, all datasets are now available via the portal, and we published 100 new datasets this year, bringing the total to 143—comprising 103 open datasets and 40 available via a Shared Data Licence.

These datasets expand access to network planning, operational and market information **beyond baseline expectations**, enabling a shift from static analysis to integrated, automated decision-making. Stakeholders can now combine network capacity, demand, and external datasets within their own tools to identify constraints, target investment and plan LCT deployment without requiring 1-1 engagement.

We also provide an **online interactive map** of our network, with advanced functionality such as multi-voltage network tracing, built on our leading connectivity model.

In addition to expanding coverage, we have improved how datasets are structured and accessed. **90% of our datasets are spatially mapped**, enabling stakeholders to identify relevant data and overlay datasets, while **all are available via application programming interfaces (APIs)** to support automated integration.

We have also increased the availability of more granular and operationally relevant data, including **LV-level and time-series datasets**, addressing previous panel feedback on the limited availability of actionable and near real-time data through the portal.

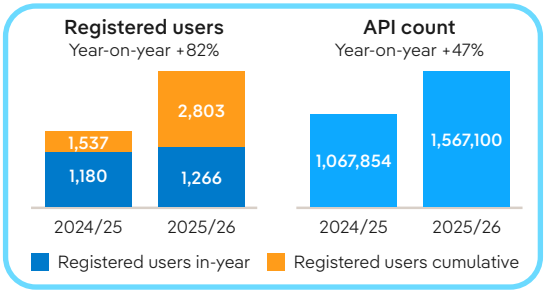
Table 5: Summary of new planning, operational and market data collected and shared

Category	Examples of new datasets published	Stakeholder value
Network planning data	Time-series capacity data across 6,000+ substations, distribution-level generation headroom, and advanced earthing assessment tracing tools	Supports local authorities, developers and planners to assess future capacity, identify electrification opportunities, and streamline connections assessment
Operational and asset data	Spatial DFES data covering bulk supply point (BSP) and primary substation locations, overhead conductor networks, LV monitoring data and aggregated smart meter insights	Supporting planners, flexibility providers and other stakeholders with visibility of local network infrastructure, performance and utilisation
Market and flexibility data	Flexibility tender postcode mapping, and SLC31E flexibility dispatch reporting	Supports flexibility providers, aggregators and investors in identifying and participating in flexibility markets
Decision-support tools	LCT Readiness Checker (a first-of-its-kind industry leading property-level, decision-support tool)	Enables stakeholders to translate network data into practical decisions, such as planning LCT deployment
External datasets	DVLA electric vehicle (EV) registrations, LCT installations, Sites of Special Scientific Interest, Areas of Outstanding Natural Beauty, National Parks, and flood risk polygons	Helps stakeholders combine network data with wider energy system and regional datasets

Metadata for all datasets aligns with the Dublin Core standard, and most are published under a Creative Commons Attribution 4.0 licence to support open access. Where data is more granular or sensitive, we have introduced a **Shared Data Licence to balance transparency with security**, enabling controlled access for eligible stakeholders. Around **40 datasets are now available on this basis**. A new collection of linear network asset datasets represents the first application of this approach, detailing all underground and overhead conductors clipped into local authority boundaries, which enables data sharing while protecting sensitive network information.

Usage continues to grow, with approximately **1.5 million portal interactions and more than 2,800 registered users, 45% of whom joined this year**. API provision has expanded, with all datasets now API-accessible and available in multiple common, machine-readable formats.

Figure 2: Data portal usage



Driving up data quality, accuracy and standards

In response to panel feedback last year, we have strengthened our approach to data quality by placing greater emphasis on external transparency and stakeholder usability, alongside robust internal assurance.

We take a systematic, stakeholder-led approach to improving data quality, ensuring data is decision-ready, trusted and clearly understood by users. This combines structured identification of data limitations, prioritisation of improvements based on stakeholder impact, automated validation and cleansing, and transparent communication of data quality and assumptions.

This year we have:

- Continued to adhere to Ofgem's Data Assurance Guidance and Data Best Practice Guidance when publishing regulatory and operational data, and actively participated in the ENA's Data and Digital Steering Group to align with emerging industry standards.
- Applied these standards in practice through consistent metadata structures, validation rules and publication processes across all datasets, ensuring interoperability and comparability for users.
- Embedded a dataset triage process across all datasets on the data portal, providing transparent documentation of data considerations, limitations, mitigations and classification decisions, enabling stakeholders to assess data quality and fitness for purpose.

This approach ensures published data is accurate and unbiased and enables stakeholders to understand how data is produced, interpreted and shared, supporting consistent decision-making while balancing transparency with security and sensitivity.

We publish a combination of curated, assured data products, validated by internal experts, to our data portal and raw data sourced directly from our core network systems. These systems operate on a single source of truth, ensuring consistency and enabling any errors to be quickly identified and resolved at source, strengthening data reliability for stakeholders.

We automate data preparation wherever possible, providing stakeholders with confidence that **our data is accurate, unbiased and consistent** for decision-making.

We publish methodologies alongside datasets where this supports interpretation and reuse, such as our recently added LV visibility dataset. We are progressively expanding coverage to ensure all complex or modelled datasets include supporting methodology documentation.

Case study: Use of smart meter data and LV visibility

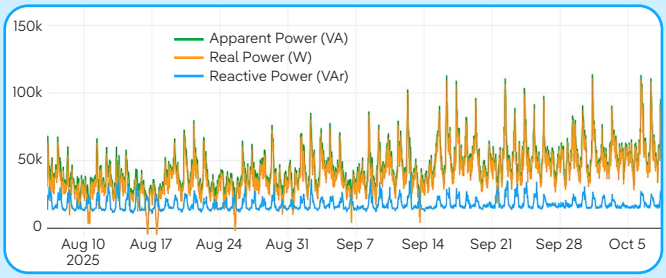
Need

Stakeholders expect us to achieve full network visibility at LV level by combining physical monitoring (PRESense) and smart meter data, enabling more accurate capacity and flexibility planning.

Evidence

Our 2025 study compared aggregated smart meter data with physical devices at distribution substations. Smart meter penetration was relatively high (61%, now 70%), but usable data availability was only 32%. Smart meter consumption differed from substation measurements by 4% to 70%, highlighting limitations in raw use.

Figure 3: Substation Loading (Substation: 166132)



To address this, this year we:

- Published a new '[unlocking value from smart meter data]' report demonstrating use cases including fault identification, voltage monitoring, consumption analysis and flexibility trials.
- Expanded the proportion of LV customers physically monitored via PRESense to 62%, achieving full LV network visibility when combined with virtual monitoring.
- Published a new [LV visibility dataset] combining smart meter and PRESense data across 40 datasets—88 million records, 12 months of time-series data, and load-duration curves for ~6,000 substations, covering over 60% of customers.
- Developed a methodology to derive substation load profiles from smart meter data, transforming raw data into planning-ready insights.

Table 6: LV substation monitoring progress

33,139 LV substations - monitoring progress	End of ED1	ED2 to date	%
No. of LV substations physically monitored*	3,962	6,386	20%
No. of substations virtually monitored **	-	26,753	80%
Total number of LV substations monitored	3,962	33,139	100%
Share of customers served who are connected to physically monitored LV substations	43%	62%	(+19%)

**PRESense, Smart Street Rural and Perch ** Smart Meters and Foresight*

Outcomes

- Improved LV capacity assessment supporting faster and more targeted reinforcement.
- Enhanced identification of flexibility opportunities at feeder level.
- Reduced reliance on physical monitoring alone, improving scalability and cost efficiency.
- Greater transparency for stakeholders through published methodology and metrics.

Learning / improvement

Published data must be useful to stakeholders. We are progressively expanding our smart meter data as quality improves and availability increases, enabling substation-level capacity estimates across more of the network and maximising the value of the smart meter rollout.

Using smart meter data to deliver improved customer outcomes

Our strategic intent is to make greater use of smart meter data alongside physical monitoring to enhance LV visibility, improve issue identification, and provide coverage in areas where active monitoring is not yet installed but smart meter penetration is strong. This will enable us to offer even more granular insight in 2026/27 into local network conditions, supporting proactive network planning, earlier identification of emerging constraints, and more targeted collaboration with stakeholders.

In 2026, GMCA and the Bee Net Zero Group requested data to identify high-energy industrial sites and support their decarbonisation. In response, we are working with GMCA to develop a data-driven framework to identify sites with high energy demand, using data on flexibility potential and network headroom. We are building up sufficient **PRESense data alongside aggregated smart meter data** within test locations to illustrate combined demand patterns and energy trends (e.g. day/night peaks), helping to identify decarbonisation and flexibility potential and support targeted engagement on decarbonisation opportunities.

Expanded use of third-party datasets

External datasets provide important context that network data alone cannot offer. Through engagement with data portal users and stakeholder events, stakeholders consistently requested easier access to combined customer, place and network insights, including population characteristics, biodiversity constraints and LCT adoption.

In response, **we expanded the integration and signposting of third-party datasets across the portal**. This includes reciprocal links to other utility data portals, such as Cadent Gas and United Utilities. We also published datasets from Natural England, Ordnance Survey, MCS, DVLA, the Office for National Statistics, the Environment Agency and data.gov.uk. These datasets are either provided in their original format or integrated with our network data to create combined planning insights.

Leveraging third-party data to enable stakeholder decision-making

This year we worked with MCS to make available LCT installation data. This dataset offers certified records of heat pumps and small-scale embedded generation.

We mapped these installations to our secondary network, enabling stakeholders to identify the number and type of installations by distribution substation.

Learning / improvement
Stakeholders have asked for improved interoperability and automated access to datasets across sectors. We used the MCS example to host a data workshop where stakeholders co-presented practical use cases demonstrating how multiple datasets can be combined. Following positive feedback, we will repeat this format to support capability building and promote consistent data use.

Outcomes

- Improved visibility of LCT uptake at network level.
- Better targeting of flexibility and reinforcement planning.
- Enhanced evidence base for local authority decarbonisation strategies.

3.2 Stakeholder-led improvement of data provision

Last year, the panel recognised our Data Education Hub as an industry-leading initiative. This year we expanded its scope and improved navigation so stakeholders can more easily identify relevant datasets, understand how to use them and integrate them into decision-making processes.

We introduced an **artificial intelligence (AI) enabled search capability** within the data portal, improving dataset discoverability.

We added **new walkthroughs**, including guidance on how NESO uses granular regional data to support its regional energy strategic planning (RESP) mandate.

We strengthened persona based **and** use-case signposting so users can quickly find datasets relevant to their interests.

Datasets are tagged to personas, meaning users who select a persona are presented with tailored dataset suggestions.

Our nine stakeholder personas

We have developed four initial use cases reflecting common stakeholder planning challenges, with linked datasets to support navigation and application. The approach will be scaled in 2026/27, with infrastructure in place to **expand use cases** and integrate into the next phase of the Empower LAEP training programme.

Further examples of new data tools tailored to stakeholders' needs

Stakeholder engagement directly informs how we prioritise, design and improve data provision. Stakeholders told us they needed clearer visibility of what data is available and what is planned. In response, we refreshed our data roadmap **as a central landing page that explains available datasets, planned releases, themes and stakeholder benefits.**

We apply this stakeholder-led approach systematically across our data provision. Insights gathered through engagement, portal analytics and user research are translated into prioritised changes to datasets, tools and accessibility. These are implemented through our data roadmap and delivery processes, ensuring continuous improvement in response to stakeholder needs. The following examples illustrate how this approach is applied in practice.

Case study - Industry-leading LCT readiness tool

Need

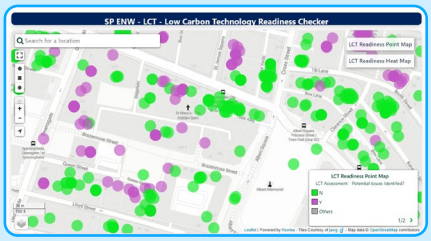
Stakeholders need early visibility of network readiness to support LCT deployment and avoid installation delays. Looped supplies are common in the North West due to housing stock, with around 500,000 across our network. Customers often only become aware during installation, leading to delays, uncertainty and additional costs while upgrades are assessed.

Two primary user groups identified this as a priority: domestic customers and installers seeking to install heat pumps or EV chargers, and local authorities and housing associations planning area-based retrofit programmes.

Evidence

Engagement with local authorities, including GMCA and Rossendale Council, highlighted the need for street-level visibility of constraints to support retrofit planning. For example, over 2,000 social homes in Greater Manchester are scheduled for retrofit, with looped supplies identified as a potential programme risk.

We initially **developed a prototype** allowing users to search by meter point administration number (MPAN), postcode district or postcode sector to determine whether a property was looped and to view density heatmaps showing concentrations of looped supplies.



During **data triage**, we identified sensitivity risks in publishing the underlying dataset, as it would expose MPAN-level identifiable information.

We therefore **redesigned the solution** using a geospatial dataset derived from ConnectDirect data that provides property-level LCT readiness insight without including MPAN or address data.

We then launched our LCT Readiness Checker. **Based on the largest dataset we have ever compiled** and covering 2.4 million connected properties, it assesses multiple constraints affecting LCT deployment, including looped services, service cable size and type, and overhead versus underground supply.

Users can search by postcode and navigate to properties of interest via map visualisation, enabling practical planning without exposing personal data. This expanded the scope from looped supply identification to a **broader LCT readiness assessment across all LV-served properties**.

Outcomes

- Improved retrofit programme design for local authorities through hotspot identification.
- Earlier identification of unlooping requirements, reducing unexpected installation delays.
- Better communication with residents on likely works, improving trust and participation.
- Self-serve insight for customers and installers, improving the connections journey.
- Earlier identification of constraints, reducing delays, and lowering connection costs.

Learning / improvement

Property-level datasets deliver significant stakeholder value but require careful governance. The triage process enabled us to balance transparency with data sensitivity, creating a scalable approach that can be expanded safely.

Case study - NHS EV and decarbonisation planning

Need

The NHS required a scalable way to identify network capacity for electrification across 236 sites, enabling EV charging, heat electrification and retrofit programmes.

Evidence

NHS Trusts needed to identify which primary substations serve their sites to assess available headroom and plan decarbonisation activities, including heat electrification, energy retrofit projects and EV charging rollout. Existing services did not enable this analysis at estate level.

Work is in progress with the NHS to develop an automated process and associated dataset to map the hierarchy of primary and bulk supply points feeding each NHS site. This will support the NHS in understanding current and future electricity requirements and enable them to identify decarbonisation opportunities across their estate.

Early feedback indicates this will reduce the need for bespoke data requests and improved stakeholder confidence in early feasibility assessment.

Outcomes

- Assists planning and delivery of decarbonisation activity.
  - o Reduces uncertainty in early project development.
  - o Supports prioritisation of sites based on available capacity.
- Enables estate-level electrification planning without bespoke DNO engagement.

Learning / improvement

Stakeholders require location-specific capacity insight early in planning. Providing self-serve tools (initially to the NHS in 2026 and then more broadly via our data portal) aims to improve planning efficiency.

3.3 Accessibility and usability of published data

We focus on ensuring data is not only published but usable, decision-ready and interoperable. Improvements this year focused on standardisation, visualisation, granularity and methodology transparency so stakeholders can confidently reuse data for planning and market participation.

Bringing data together in one accessible location

In section 3.1 we set out the action taken this year to centralise datasets within the Open Data Portal, providing a single, well-signposted entry point on our website for easy discovery, exploration and reuse.

DFES and network development plans remain available in multiple formats to reflect different user needs we've identified through engagement. File downloads support detailed modelling workflows, while portal visualisation supports exploration and scenario analysis. Some sensitive datasets, including long-term development statements, remain behind separate authentication.

This year we developed **dedicated portal pages that combine multiple datasets** to provide richer topic-based insight. For example, DFES data has been integrated with network connectivity, Ordnance Survey geography, Natural England boundaries and GIS mapping of substations. This enables stakeholders to interpret DFES parameters in network and geographic context and interact dynamically with more than 6,000 generated summary charts.

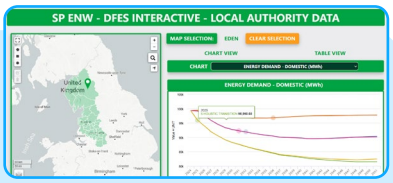
Considering and applying industry standards and common formats

We provide network models and associated datasets in **industry-standard formats**, including publication of our **CIM-aligned network** model and associated heatmap data via the Open Data Portal. This enables stakeholders to access and download these datasets (including via API) to support their own planning and analysis. An enhanced version, incorporating additional data and functionality, will be published in November 2026.

Case study - Standardising cross-DNO data to enable whole-system planning

Need
Stakeholders require consistent scenarios, aligned datasets and shared planning assumptions.

Evidence
We continued to improve cross-DNO accessibility through collaboration with Northern Powergrid across our shared RESP boundary, including Cumbria, North Yorkshire and transmission interface locations where growth affects both networks. **We worked jointly to standardise functionality across our headroom capacity reports** and combined both DNO reports within our Open Data Portal to demonstrate how NESO could use aligned DNO outputs.



Enhancements included consistent filters, shared polygon definitions and improved visualisation of headroom data, including separation of BSP and primary substations and expanded tooltip information.

Outcome
- Improved cross-boundary planning visibility.
- Reduced interpretation differences between DNO datasets.
- Demonstrated a scalable approach for NESO to use DNO headroom data.

Case study - Improved standardisation and visualisation of planning data

Need
Stakeholders requested simpler presentation of complex planning datasets and greater availability of local authority-level insight through dashboards and map-based visualisation. Local authority engagement consistently highlighted the need for area-based views rather than spreadsheet outputs.

Evidence
This year we expanded visualisation across datasets by combining corporate data sources including NMS, geographic information system (GIS) and the Enterprise Asset Register. **Network assets can now be spatially visualised**, network hierarchies explored and additional asset attributes incorporated.

Outcomes:
- Improved accessibility for non-technical stakeholders.
- Faster identification of constraints and opportunities.
- Increased use of data in local authority planning.
- Greater visibility of flexibility opportunities.

We created a smart optimisation output resource providing access to digital network tools and visual representations of existing and future assets, constraints, growth drivers and flexibility opportunities.

We adopted emerging industry good practice by implementing a new DFES web visualisation aligned with approaches used by two other DNOs (including Northern Powergrid), while extending the scope of information available. Users can now select scenarios, parameters, geography and timeframe, view change over time through timeline visualisation and export maps or graphs.

We expanded the DFES workbook to provide approximately 750,000 data points across multiple geographic levels including network hierarchy, local authority, county and the Lake District National Park. This improves accessibility while maintaining analytical depth.

Learning / improvement
Visualisation significantly expands the audience able to use planning data. Providing multiple formats (maps, charts, tables) supports different user needs and improves reuse without replacing detailed datasets. **We are sharing approaches, methodologies and design decisions with wider industry** to support consistent sector improvement.

Timely updates

Stakeholders requested more frequent updates, including monthly and real-time data where appropriate.

We now update even more of our operational datasets monthly, including GIS, the Embedded Capacity Register, connection capacity heatmaps and GSP queue datasets.

Some datasets are now refreshed more frequently including data on half-hourly measurements for loads in the long-term development statement.

Our focus is to provide decision-ready data rather than raw data that requires significant interpretation. For some datasets, annual updates remain more appropriate because seasonal context is important and planning data requires cleansing before publication (for example, high voltage (HV) circuit maps).

This year, we established an IT fusion team to identify and make available relevant static and dynamic data in a usable format. We are now automating dataset updates to ensure routine, reliable and consistent data provision.

Where **real-time publication** is valuable to stakeholders, we have integrated aggregated demand via our network management system (NMS) and live fault data, which is **refreshed every 15 minutes**. In addition, planned supply interruptions for the coming month and historical unplanned supply interruptions are **updated daily**.

4. Flexibility Market Development

Our three flexibility pillars, flexible assets, flexible connections, and flexibility services procurement, operate across our network, with their coordination delivering whole-system benefits.

This year we **scaled flexibility delivery across all voltage levels**, expanded market access and introduced new procurement approaches to better match flexibility to network and stakeholder need.

Highlights

We reduced participation thresholds to ≥ 5 kW for direct participation in LV markets, enabling smaller assets to participate and widening market diversity.

Alongside our bi-annual tenders, we launched a monthly procurement window to provide more predictable dispatchability and revenue for providers.

We continued to innovate in product design, including piloting passive flexibility to create additional headroom ahead of ED3.

We introduced new automation tools—including MPAN eligibility validation—to reduce manual processes, improve procurement accuracy and enable faster provider participation.

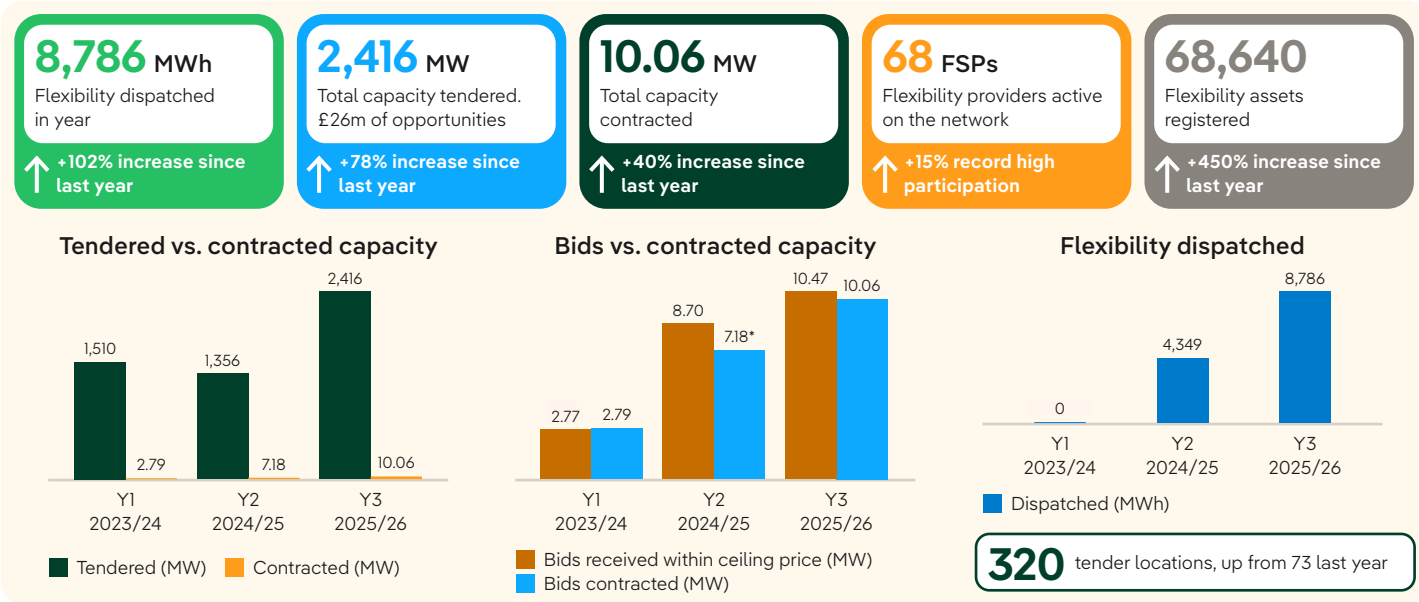
We extended flexibility participation beyond traditional commercial actors to community organisations, linking our Social Impact Fund to flexibility market participation. This supports fair access while unlocking new flexibility capacity.

We tested demand turn-up capability through operational trials, innovation and collaboration with NESO.

4.1 Flexibility market participation and outcomes

Last year the DSO Performance Panel wanted to understand the participation levels and impact of our tenders, with greater quantification. We have sought to provide greater granularity this year in the outcomes reported below.

Figure 4: DSO performance dashboard



Excludes 40MW of ANM testing to aid data comparability

This year, we contracted 96% of bid volume (MW) within the ceiling price, focusing on economically efficient, deliverable outcomes.

Bids are only rejected in limited circumstances, primarily where duplicate bids are submitted within the same tender round (e.g. where a flexibility service provider (FSP) participates in multiple markets but can only contract in one).

Since the start of ED2, we have contracted a total of 19.44* MW of peak flexibility across multiple sites, including 10.06 MW in 2025/26.

Table 7: dispatch by product type

Flexibility product	Total dispatched (MWh) 2024/25	Total dispatched (MWh) 2025/26
Peak Reduction	4,320	8,736
Scheduled Utilisation	0	43.2
Operational Utilisation	0.041	0.239
Variable Availability + Operational Utilisation	29.26	6.15
Total	4,349.390	8,785.581
% of total primary substations	100%	99.5%
% of total secondary substations	0%	0.5%

4.2 Flexibility market design, products, contracts and processes

Lower contracted (vs. tendered) volumes reflect regional characteristics identified in collaborative research, with fewer constraints reducing immediate utilisation needs. We tender broadly to support market development and build liquidity, including overlapping and carried-forward requirements in some locations, and contract only where this delivers value.

Actions to reduce participation barriers, lower thresholds, improve visibility via the Flexibility Hub, and simplify entry through MPAN validation are delivering results, with a 450% increase in registered assets and record provider participation.

Industry standard flexibility products

Our Electron market platform and industry-leading ANM **enable the full suite of ENA Open Networks flexibility products** (including dynamic services) and flexible connection products supported by central systems. We implement ENA Open Networks flexibility products while adapting them to reflect unique local network needs, stakeholder insights, and operational learning.

We currently procure **four of the five ENA flexibility products**, including services supporting reinforcement deferral, operational constraint management and fault restoration, and capacity creation for connections. We do not currently procure Scheduled Availability + Operational Utilisation products as we believe they do not create efficient markets aligned to our network and stakeholder needs.

Instead, we use the Variable Availability + Operational Utilisation products. This enables services to be procured months or years ahead, with availability refined week-ahead so that we can confirm the level of availability required and stand down any capacity not needed, releasing it to other markets. This approach also allows FSPs to earn more £/MWh for providing the same level of service, as **we only procure and pay for the availability we require**.

Standard contracts and processes

Stakeholders can access our standard flexibility service contract via our website. Alongside published guidance and Common Evaluation Methodology (CEM) tools, we also hold bilateral meetings to understand and address any challenges that FSPs may face when signing the ON-P Standard Agreement.

In the past year, **100% of our contracts have used the ENA Standard Agreement**. Where necessary, we engage with providers to address **minor contractual points** that may otherwise act as barriers to entry.

We have worked with other DNOs and NESO to establish common processes across our flexibility markets, including prequalification, primacy, and baselining, ensuring a consistent and transparent approach for participants.

In addition, we adhere to the **Market Facilitator Rules,** further supporting market-wide consistency.

Following and setting industry standard practices

Case study: MPAN eligibility checker – setting a benchmark for the sector

Need

FSPs need fast and accurate confirmation that their assets are eligible to participate in specific tenders. Postcode-based approaches can create uncertainty because postcodes often span multiple network assets (e.g. substations), making it difficult to confirm whether an asset can support a specific constraint. This creates delays, manual validation and a risk of procuring assets that cannot deliver system value.

Traditionally, eligibility has been assessed using an asset's import MPAN. However, some FSPs found it difficult to locate or provide this and instead ask if they can supply their export MPAN instead.

Evidence

We developed an in-house **MPAN eligibility checker** that verifies whether assets are electrically connected within relevant constraint management zones.

Unlike postcode-based approaches, MPAN validation enables decisions to be based on precise connectivity rather than approximate location and the tool supports bulk validation.

We **expanded the tool** to allow eligibility checks using **export MPANs as well as import MPANs**, responding to feedback from FSPs who could more easily access export MPAN data. For example, we assessed 13 export MPANs submitted by Versa Energy, confirming four as eligible. Between November 2025 and April 2026, **we assessed a total of 237,120 MPANs**.

We are currently the only DSO systematically applying MPAN-level validation across tenders.

Outcomes

- Removal of weeks of manual eligibility checks.
- More accurate procurement volumes aligned to system need.
- Reduced over-dispatch and improved cost efficiency.
- Faster eligibility assessments and onboarding.
- Stronger primacy coordination through clearer asset validation.

MPAN-based decision-making approach provides confidence for us, FSPs, NESO and Ofgem in the **traceability** of asset eligibility for flexibility services in our region.

Learning / improvement

Automation enables this approach to scale while retaining targeted human intervention where data gaps exist. This balance has enabled us to improve efficiency without compromising accuracy. **This is a replicable model for improving flexibility procurement accuracy and transparency across the sector.**

Forward look: Scaling MPAN validation

We have enhanced MPAN eligibility checks via ElectronConnect, adapting the toolset for primacy asset verification. Using API submissions and near real-time connectivity data, eligibility can be confirmed within seconds; where automation is not possible, cases are triaged for targeted manual review. Now in final testing, the tool will significantly reduce onboarding time while improving procurement accuracy and scalability.

Case study: Actively working with industry to develop domestic flexibility services

Need

The Association for Decentralised Energy (ADE) and Flex Assure 'HomeFlex' code of conduct sets clear expectations of consumer protection, transparency, and service standards for household flexibility providers.

Evidence

We supported the development of domestic flexibility standards through funding and participation in the 'HomeFlex' initiative and NESO's CrowdFlex project.

We contributed operational insight from distribution network delivery and enabled unrestricted trials of demand turn-up and demand turn-down services on our network, which provided practical insight into customer participation, baselining, notice periods, and remuneration.

Outcome

As a result of these trials, NESO has expanded its Demand Flexibility Service (DFS) product to include demand turn-up services in 2026/27, and has also influenced the development of primacy rules specific to DFS, which are being trialled in BAU during 2026/27.

Case study: Advancing demand turn-up to unlock system efficiency

Need

Demand turn-up can help manage periods of high generation and low demand, but requires coordination across NESO, DSOs and providers to ensure network security.

Demand turn-up has traditionally been viewed as a system-balancing tool. However, we are exploring how it can also support our Social DSO ambition (Goal 5) — using smart technology and partnerships to maximise the use of zero carbon energy while delivering tangible benefits to customers.

Evidence

In January 2025, a battery site delivered demand turn-up as part of ANM testing.

Crucially, we have gone beyond trialling demand turn-up as a technical service and are actively exploring its **social and system value** through partnerships such as Energy Cloud. This approach enables surplus renewable energy which would otherwise be curtailed to be redirected to customers, including those in vulnerable circumstances, to provide tangible bill and welfare benefits.

This is particularly important in the context of growing curtailment. In the first two months of 2026 alone, over 2,000 GWh of zero carbon energy was curtailed across GB, with an estimated retail value exceeding £500m highlighting the scale of untapped opportunity.

We are engaging customers through a trusted intermediary, Irwell Valley Homes. In phase 1, 50 customers are benefiting from surplus energy diverted to heat their hot water cylinders overnight, with associated costs automatically refunded via their supplier—**delivering savings of around £146 per year**.

Alongside this, we have assessed the use of **demand turn-up** to mitigate generation curtailment. In several locations this was not viable due to network topology, limited local demand availability, or security constraints reinforcing the need for coordinated system-wide solutions.

In addition, we have had an **active flexibility services contract** in place providing generation turn-down and demand turn-up where short-term asset restrictions create network constraints. Through this, we have demonstrated that, where there is a clear business driver, these services can be procured and delivered in practice.

Outcomes

- Demonstrated technical capability to support demand turn-up.
- Enabled NESO to trial domestic demand turn-up services safely.
- Generated operational evidence for national service design.
- Pioneered integration with social outcomes, linking surplus renewable energy to customer benefit.

Constraints to BAU deployment

- While technically feasible, demand turn-up is still an emerging service with strong potential. Scaling to BAU will be supported by the evolution of funding mechanisms, regulatory frameworks and service design.
- Deployment is also influenced by factors beyond DSO control, including NESO service design, local demand availability and the regulatory treatment of curtailment.

Learning / improvement

Demand turn-up is technically feasible and can support system optimisation, but scaling requires clearer commercial pathways and coordinated market design. We are continuing to shape this space through operational trials and partnerships, while also engaging with Ofgem and other DNOs on ED3 incentives to reduce generation curtailment. This could provide the financial framework needed to support the wider BAU deployment of demand turn-up services, enabling a transition from niche application to a scalable, system-wide solution.

Engaging stakeholders to identify barriers to market participation

We have undertaken extensive, purpose-driven stakeholder engagement to identify unmet needs and shape flexibility market solutions. This year, we **engaged directly with over 2,500 stakeholders** through conferences, consultations, surveys, local authority workshops, community energy events and webinars, alongside reaching hundreds more at industry events.

In addition, we have **established a dedicated Flex Forum**, which is the only engagement forum focused exclusively on flexibility services, enabling more targeted discussion. The forum meets quarterly and currently brings together 15 existing and potential providers, local authorities and community energy groups to discuss technical, commercial and operational aspects of flexibility participation.

The forum achieves open dialogue and co-creation of solutions that make participation easier and more scalable. We work collaboratively with providers to simplify processes, improve market design and unlock more flexibility across the network.

Agile, month ahead procurement implemented

Through engagement, including the Flex Forum, prospective FSPs highlighted a need for faster revenue turnaround. In response, we introduced our first month-ahead tender (February 2026 delivery) alongside biannual tenders.

This approach provides faster revenue opportunities, better alignment with emerging constraints and more predictable participation, while enabling FSPs to operate across markets and stack revenues. Increasing procurement frequency also improves responsiveness and makes access easier for smaller or newer participants.

Case study: New flexibility hub

Need
Stakeholders asked us to make flexibility information easier to navigate and more integrated across platforms to support wider participation, particularly for non-technical users.

Evidence
We worked with Business Modelling Applications to develop a **new flexibility hub**, integrating existing tools into a single interface within our Open Data Portal. The platform enables users to view opportunities by location and voltage, including an interactive map of CMZs, postcode-level eligibility checks, and filters to match opportunities to user capabilities—improving accessibility for non-technical participants such as SMEs and community groups.

Outcomes
- Reduced information complexity for new and existing participants and interest activated in flexibility markets.
- Improved self-serve capability.

Learning / improvement
Stakeholders have told us that they are pleased to see improved accessibility, pointing to features that have reduced the technical expertise required to engage.

Making improvements to products in response to stakeholder feedback

We are developing new flexibility products to address emerging network challenges and gaps created by market and regulatory changes, using pilots to test, learn and scale solutions aligned to system needs.

Case study: Passive Flex: creating headroom ahead of ED3

Need
Residual charging changes reduced incentives for customers to lower their maximum import capacity, creating a need for alternative approaches to manage peak demand.

Evidence
We developed 'Passive Flex' to reward demand reduction during peak periods and create additional headroom. The Autumn 2025 tender targeted future ED3 constraints across 35 substations, with 11 progressing as pilot zones. The one-year pilot supports requirements to 2032 and may evolve into multi-year products as learning matures.

Outcomes
- Established a new approach to managing peak demand.
- Created participation opportunities in new locations.
- Simplified the customer pathway through a standardised design.

Learning / improvement
Initial engagement was limited, reflecting the opportunity's novelty and market readiness. In an extended pilot, we are strengthening engagement and developing shorter-term procurement pathways to build liquidity and inform future design.

Unlocking flexibility in more nascent areas

To broaden participation in flexibility markets, we have focused on areas where engagement is less established, particularly among community groups, the public sector, and LV-connected customers. These segments represent a significant opportunity to expand flexibility volumes while delivering wider system and societal benefits – which is key to our Social DSO strategy.

Removing barriers to LV participation

This year represents a step change in our LV flexibility procurement, both in scale and accessibility.

We published our LV Flexibility Strategy to provide greater transparency on how flexibility requirements are identified and procured, giving prospective providers clearer routes to participation.

To address barriers identified through market feedback, **we reduced the minimum participation threshold from 10 kW to ≥5 kW**. This reduces smaller assets' reliance on aggregation as the primary route to market.

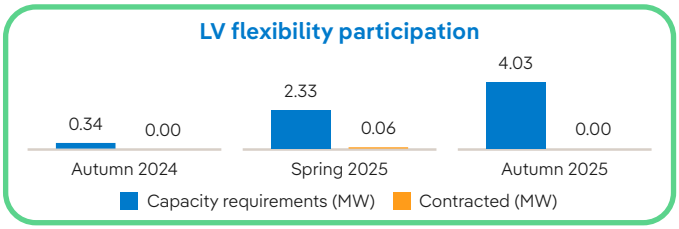
LV procurement has scaled rapidly since Autumn 2024, with a significant increase in both the number of requirements and total capacity required. This expansion is enabling growing market participation.

Table 8: Rapid scale-up of LV flexibility procurement

LV flexibility requirements	Autumn 2024	Spring 2025	Autumn 2025
Number of sites	15	67	141
Number of requirements*	22	134	282
Connected customers	5000	54666	110000

*A requirement refers to an individual flexibility product at a site (e.g. Peak Reduction or Scheduled Utilisation), meaning multiple requirements may exist per location.

Figure 5: Tendered vs. contracted capacity



While we did not dispatch any LV flexibility last year; this year, we have dispatched 43.2 MWh.

Enabling future participation through Smart Street

Alongside procurement, we are investing in enabling technologies to unlock flexibility in currently nascent areas. Our Smart Street programme is a large-scale voltage optimisation and network visibility initiative, targeting LV networks where traditional flexibility participation is limited. By improving voltage management and reducing energy consumption, Smart Street **lowers customer bills by approximately £48 per year**. Deployment is targeted in areas of higher vulnerability, enabling behind-the-meter savings without requiring customer action.

This year, **we onboarded 87,397 additional homes**, bringing the total to 133,715 properties. Beyond immediate savings, the programme enhances network visibility and enables flexibility from domestic and community-level assets in the future.

Proactively expanding participation through a dedicated outreach team

Historically, our flexibility procurement has been dominated by larger commercial actors. Through our Social DSO strategy, we have adopted a proactive outreach approach to increase participation from public sector organisations, community energy groups, and smaller providers, enabling flexibility markets to deliver both system and societal value.

Case study: Enabling public sector participation (NHS, schools, community infrastructure)

Need

Public sector organisations often have suitable flexibility assets but face barriers to participation, including limited internal resource, uncertainty on financial value and lack of investable pathways.

Supporting critical infrastructure to participate in flexibility markets can improve resilience while **delivering savings to public services which generate wider societal benefit**.

Evidence

We worked with NHS England and Energy Systems Catapult to identify NHS sites located within active CMZs suitable for flexibility participation. An initial longlist of 237 sites was refined to 29 candidate locations suitable for **battery storage installation**.

We provided £25,000 of Social DSO grant funding, with participating trusts committing to feasibility and procurement of a battery solution. The Royal Lancaster Infirmary (RLI) was selected as the first NHS trust due to the availability of half-hourly electricity data. RLI was introduced to a range of FSPs, and following installation the trust will be able to participate in flexibility tenders and generate revenue from flexibility services.

To support decision-making, Energy Systems Catapult is undertaking site-specific modelling using real demand data and expected flexibility tender opportunities in the relevant network area, providing a clear assessment of potential financial benefits.

Analysis has identified at least **85 NHS sites within active CMZs, representing over 100 GWh of annual demand** demonstrating significant scalable potential for public sector participation.

Outcomes

- Created learning and a pathway for public sector organisations to overcome barriers to participating in flexibility.
- Demonstrates how Social DSO funding can unlock flexibility participation.
- Increased market diversity beyond traditional providers.

Learning / improvement

The pilot aims to assess the impact of targeted funding, modelling, and coordinated engagement, and to quantify the social, operational, and financial benefits through a post-installation evaluation. Over the coming year we will look to scale funding to other trusts.

Below, we highlight a further example of increasing participation in the energy transition, reaching beyond traditional groups to include those at risk of being left behind.

Case study: Start your flexible energy future

Need

A Social DSO must engage all parts of society in the net zero transition. Research shows this starts with trust; many residents feel overwhelmed, unsure where to begin, and wary of commercial providers. As trusted infrastructure providers, DNOs can offer impartial guidance.

Evidence

We fund the Take Charge service, delivered with in-house advisors and partners including Energy Saving Trust, Green Homes in Lancashire and YES Energy, providing free, independent advice on LCTs, grants, flexibility, and tariffs. This year, we expanded support beyond domestic customers through collaboration between Customer Inclusion and DSO teams, extending to local authorities, industrial and commercial customers, and community groups.

We launched a modular "**Start your flexible energy future**" education programme covering solar, storage, EVs, heat pumps and smart tariffs, delivered both digitally and in person to maximise accessibility.

Outcomes

This approach improves awareness, understanding and participation in LCTs and flexibility. Success is measured through digital engagement, reach into harder-to-engage groups, customer satisfaction, and the net value of information delivered.

Learning / improvement

Trust drives participation. Combining impartial advice with inclusive delivery strengthens engagement and reduces the risk of customers being left behind. We will continue to expand our modules and scale up the reach of the programme in 2026/27.

Progressing readiness for secondary trading through BiTraDER

We have progressed secondary trading from concept testing to **live ANM trial environments this year**, demonstrating technical and operational readiness. Trials with Lancaster University and five commercial providers successfully showed how **trading can reduce curtailment risk** and improve asset utilisation. While current network constraints limit near-term liquidity, this work establishes the **foundations for scalable secondary trading** as system needs grow.

4.3 Facilitation of market access

We have undertaken a range of initiatives to improve market access and enable simple, cost-efficient participation. These include threshold reduction, monthly procurement, a social strategy to broaden access for smaller participants, the MPAN validation tool, and Flex Hub consolidation. Further initiatives are set out below.

Improving market access via the ElectronConnect platform

Our Electron-enabled market platform provides a single interface for registration, dispatch, and settlement, supporting seamless data exchange via API. It also enables week-ahead visibility of availability and dispatch to NESO.

We have collaborated with other users of the platform to harmonise our existing processes and platform functionality. In turn, this will enhance their potential revenue streams and increase market liquidity.

The platform now:

- Automates technical qualification.
- Provides real-time visibility of tender progress.
- Supports API-enabled dispatch and bulk asset processing.
- Enables improved availability-refinement functionality, allowing FSP assets to be released sooner (week-ahead) when no longer needed and enabling providers to stack across markets.
- Allows registration of individual assets, improving data accuracy and onboarding efficiency.
- Allows FSPs to bid for specific half-hour periods rather than the full service window, increasing flexibility and enabling participation where delivery is genuinely feasible.

During the Autumn 2025 tender, 14 new providers registered and five participated for the first time, with improvements reducing administrative burden and enabling easier participation for providers of all sizes.

Improving transparency in commercial arrangements

We are taking targeted steps to improve transparency in our flexibility procurement and commercial arrangements. We publish detailed tender outcomes **after each procurement cycle** on our Flexibility Hub, hosted on our DSO website, including contracts awarded, commercial arrangements, locations and requirements that received insufficient bids (and will be re-tendered) and the CEM losses tool used to inform bid evaluation.

Building on this, our commercial arrangements are designed to **support coordination across markets**. We procure our Peak Reduction and Scheduled Utilisation products using methods that define utilisation profiles more accurately, allowing FSPs to align their response with other market commitments.

We also provide refinement windows for our Variable Availability + Operational Utilisation products a week in advance of service delivery. This allows us to release unnecessary capacity from contractual availability obligations, **enabling FSPs to participate in other markets** where possible.

We actively support revenue stacking and **do not include exclusivity clauses in our contracts**.

Operational data provision strengthens co-ordination with wider system operators

We continued to publish flexibility procurement and dispatch data via our Data Portal, enabling providers, NESO and other DNOs to **undertake primacy analysis** and better understand dispatch patterns. This year we went further by publishing historical fault data to support conflict risk assessment.

To further support dispatch coordination, we embedded the practice of providing a Risk of Conflicts report to NESO at the week-ahead stage via an API.

In parallel, we have been actively participating in the **Fractal Flow programme** alongside Northern Powergrid and NESO, exploring approaches to cross-network visibility, automated conflict detection and improved flexibility market coordination.

We have established an inter-control centre communications protocol (ICCP) link between our control rooms and NESO's, enabling bilateral real-time data exchange, with initial data flows now in place. This follows extensive collaboration with NESO and the Operational Data Sharing working group to define requirements and interfaces.

In addition, we have expanded the availability of planning and network data by:

- Increasing physical network monitoring coverage to 62% of customers connected via secondary substations.
- Continuing to share half-hourly GSP boundary flow data via our Open Data Portal, with 27,729 stakeholder interactions.

Collaborating to deliver flexibility for system optimisation

By using ANM and flexible connections, projects can connect up to four years earlier than under the reinforcement counterfactual. With ANM now a BAU solution, the number of flexible connection types we offer has increased to five this year.

The ICCP link strengthens our Technical Limits capability by enabling direct access to transmission boundary flow data from NESO, improving accuracy beyond last year's interim approach based on aggregated monitoring points.

This year, 13 connection schemes (649.8 MW) progressed through Gate 2 and 6 schemes (217.8 MW) progressed through Gate 1 as part of the connections reform process. While delivery is dependent on NESO issuing connection offers, our proactive engagement in recent months has helped accelerate progress, with NESO beginning to issue connections reform offers in late March. This has **brought timelines forward by around a year,** significantly improving the outlook for these projects.

5. Options assessment and conflict of interest mitigation

Highlights

- 117 sites assessed via DNOA and 47% of sites signposted for flexibility
- 72 local stakeholder plans submitted through the tRESP process, with 35 achieving SEN approved status
- Coordinated development schemes deliver cost reductions up to 20% at EHV level and 33% at HV level compared with a reactive reinforcement approach
- 20 conflicts logged and managed
- 610 stakeholders directly engaged
- 6 projects approved for our Social DSO fund
- 5 independent PwC recommendations on our governance framework taken forward
- 97 LAEP bilaterals delivered

5.1 Transparent and consistent evaluation of network investment options

A single, integrated options assessment framework

We apply a structured, end-to-end options assessment methodology that integrates forecasting, optioneering, cost-benefit analysis and governance to ensure consistent, transparent and whole-system decision-making.

All decisions follow a consistent process: **need identification → option generation → comparative evaluation → governed decision through the Operational Decision Making Framework (ODMF)**. This is enabled through an integrated framework combining our DFES (long-term forecasts), DNOA (asset and flexibility optioneering), DSO Capacity Strategy (prioritisation of zero/low capital expenditure solutions), CEM and real options cost-benefit analysis (ROCBA) (asset and flexibility evaluation) and the ODMF. Together, these components provide a **single, coherent framework** for assessing solutions on a consistent basis.

This framework is applied consistently across all constraints, ensuring that each option is assessed using the same inputs, assumptions and evaluation criteria, and that decisions are taken through a repeatable, auditable process.

Accessible and transparent methodology

We have **improved accessibility and transparency** by publishing our methodology and outputs in a clear, structured way, enabling stakeholders to understand both how decisions are made and how they apply in practice. Key documents include:

- DNOA methodology
- DNOA report with persona-specific guidance and new insights on optioneering

- ODMF (full and easy-read versions)
- CEM outputs and supporting datasets via our Data Portal.

Consistent valuation of all options

Reinforcement, flexibility and operational solutions are all assessed on a consistent basis using:

- Whole-life cost assessment
- Valuation of flexibility deferral benefits
- Explicit treatment of optionality under uncertainty
- Scenario testing across demand pathways to 2050
- Consideration of whole-system impacts beyond local network boundaries.

Our DSO Capacity Strategy ensures that zero-capital expenditure and non-network solutions, including ANM, flexible connections and flexibility procurement, are assessed first. Reinforcement is only progressed where these options cannot meet system needs efficiently or sustainably.

Delivering lowest cost over the long term

We apply coordinated network development to avoid piecemeal reinforcement and preserve optionality where future demand remains uncertain.

- **Benefit to customers:** In 2025/26, coordinated development reduced scheme costs by up to 20% at EHV levels and 33% at HV levels compared to a reactive reinforcement approach to connections applications.

In practice options with lower upfront cost are rejected if they result in earlier reinvestment or reduced flexibility, ensuring decisions reflect long-term system value.

Decision-making in practice — Wigan BSP case study

Wigan BSP supplies approximately 34,000 customers. Faced with a forecast capacity constraint by FY28, we assessed a full range of options using CEM and ROCBA including flexibility, load transfer, staged reinforcement and asset replacement.

Options were evaluated against whole-life cost, resilience across scenarios and preservation of optionality. The selected solution, installation of 132kV switchgear, delivered the lowest whole-life cost, resolved the constraint for the longest duration and created wider system benefits.

ROCBA enabled identification of the least-regret pathway, balancing timing, cost and flexibility while avoiding repeated intervention.

While asset-based, this decision demonstrates how the framework selects reinforcement only where it delivers superior long-term value compared to flexibility or staged alternatives.

Decision-making in practice — Flexibility-led solution

At Moss Side (Leyland) & Seven Stars, forecast capacity requirements identified a future constraint at EHV level. We assessed reinforcement and flexibility options using our full options assessment framework, including CEM and ROCBA.

Given relatively low current constraint levels, flexibility was identified as the preferred solution to meet near-term capacity needs while also preserving long-term optionality.

This approach allowed capacity to be released more quickly and cost-effectively. Flexibility procurement delivered £0.12m of direct benefit, while deferring significant capital investment and maintaining optionality for future network development.

Flexibility procurement enabled:

- 23 MVA of capacity to be released
- Deferral of reinforcement beyond ED2, with £1.32m of costs deferred into ED3
- Delivery of capacity at a cost below the reinforcement ceiling price.

Independent review and stakeholder challenge

Our DSO Stakeholder Panel provides independent review and challenge of our DSO activities, ensuring outcomes reflect the interests of both current and future customers.

This year, the DSO advisory panel introduced its first independent annual report, strengthening transparency and demonstrating how independent oversight is shaping our DSO transition.

The panel has directly influenced:

- Launch and governance of the Social DSO strategy and fund.
- Refinement of DSO performance metrics and benefits measurement, including wider social value.
- Evolution of our flexibility strategy and procurement approach.
- Strengthening of DSO–DNO governance and conflicts management.

Table 9: DNOA key statistics

	2024/25	2025/26
Sites assessed via DNOA	117	117
Sites signposted for flexibility*	44%	47%

flexibility assessed universally and applied where technically viable.

As Independent Chair Andrew McIntosh notes: "After our annual ToR review, the panel now meets bi-monthly to provide earlier and more agile challenge and has expanded membership. Governance, methodology, and conflicts of interest remain regular agenda items, with quarterly reviews of the conflict register to ensure transparency. A new policy sub-group was also formed for closer examination of ED3 and regulatory reforms."

5.2 Proactive engagement across sectors and vectors

Engagement embedded in decision-making

Our engagement is explicitly designed to support options assessment. Insights gathered through **stakeholder engagement are translated into decision-grade inputs**, which inform DNOA optioneering and evaluation. This ensures a clear chain from stakeholder need, through options assessment, to the final investment or operational decision.

We take a relationship-led, structured approach to engagement with local authorities. We deliver regular LAEP bilaterals (3–4 per authority annually), supported by targeted data sessions and planning workshops. In 2025/26 we delivered:

97 LAEP bilaterals, reaching 94% of local authorities

We submitted 72 SEN projects to NESO, and 35 were approved. In the final tRESP, 38 projects were approved for proactive investment—92% of which originated from our submission.

Bi-weekly meetings with GMCA on strategic growth zones (from the integrated pipeline) and key escalation areas: connections, heat networks, digital maps/tools, and NESO engagement

Cross-vector engagement feeding directly into decisions

Our engagement directly informs options assessment, operational decisions and investment choices. We work across vectors to translate stakeholder ambition into actionable network solutions, ensuring alignment between electricity infrastructure and wider system needs.

2025/26 examples include:

- Supporting Manchester City Council to optimise import capacity across its building portfolio, informing options to reduce peak demand and avoid reinforcement
- Providing optioneering support for grid-scale battery deployment in Wigan, enabling early assessment of connection and flexibility options
- By aligning DFES forecasting with local planning and engaging in delivery forums, we enabled Oldham to establish a strategic energy partnership, secure £8.87m in funding, and progress delivery through network-aligned priority zones
- Assessing capacity and connection feasibility for large-scale developments such as data centres at Atom Valley, informing investment timing and solution selection.

These examples, alongside those on page four, demonstrate a clear pathway from proactive engagement with network companies and users to resolving network needs, options assessment and decision-making.

Whole-system engagement with network companies and users

We also engage with network companies and market participants to resolve system needs and inform options assessment. This includes coordination with NESO on constraint management and connections reform, collaboration with other DNOs through ENA forums, and engagement with flexibility providers and large network users to test deliverability and refine option selection. These interactions ensure options are assessed on a whole-system basis and reflect real-world feasibility and market capability.

Delivering whole-system outcomes through early coordination

Heat networks are a growing focus for local authorities, and this case study shows how we have integrated them into planning.

Case study: Whole-system options assessment in practice

Need
Support West Lancashire Council's district heat ambitions by translating cross-vector planning into actionable electricity network and connection decisions.

Evidence
We applied a **whole-system options assessment** approach to support heat decarbonisation at Lancaster University, combining lower-layer super output area (LSOA) heat demand datasets, DFES forecasting and connection requirements.

A future increase in campus electricity demand, driven by heat decarbonisation, identified a potential network constraint. We assessed a range of options, including conventional network reinforcement, flexibility procurement and ANM-enabled demand and flexible connection arrangements.

These options were evaluated using our CEM and ROCBA framework, comparing whole-life cost, deliverability, scenario resilience and optionality under uncertain demand growth.

ANM-enabled demand was selected as the preferred solution. This approach enabled increased load while maintaining network security, avoided or deferred reinforcement, improved utilisation of existing network capacity and preserved flexibility to respond to future demand uncertainty.

We complemented this with **flexibility service tenders** in the area to reduce curtailment and support earlier access to full capacity.

This approach also delivered **whole-system benefits**. Increased campus demand improves the network's ability to absorb local generation, reducing export constraints. In parallel, technical limits work is helping to unblock projects currently constrained in transmission queues.

Engagement also **improved network data quality**. Through discussions with the university, we identified a decommissioned CHP unit not reflected in network models. Updating this reduced fault level assumptions and enabled additional generation capacity to be released ahead of previous forecasts.

Outcomes
- Heat decarbonisation was enabled without immediate reinforcement, reducing cost and delivery risk while maintaining optionality. Network utilisation improved, and additional generation capacity was unlocked, delivering wider system benefits.

Learning / improvement
Whole-system options assessment requires integration of cross-vector data and early engagement. Future improvements will focus on scaling ANM-enabled demand approaches for similar use cases.

5.3 Management of conflicts of interest

We proactively identify, assess and manage both actual and perceived conflicts between our DSO and DNO roles. We embed mitigation into operational processes, subject decisions to executive accountability and provide independent scrutiny through our DSO Stakeholder Panel and external review.

Reporting on compliance, not just governance

In March 2025 we published our DSO–DNO governance framework. Following feedback from the DSO Performance Panel, we strengthened transparency further by updating the governance framework itself to provide greater operational detail, including clearer articulation of decision-making structures, escalation routes and how key processes operate in practice.

We also published our first annual governance and compliance report, which provides further evidence of how governance operates in practice.

This includes:
- How DSO–DNO interactions are governed through defined processes and decision forums
- How options assessment and operational decisions are structured and controlled
- How conflicts are identified pre-emptively, logged, risk-scored and monitored
- How executive oversight and board visibility are maintained.

Independent external review

We commissioned PwC to undertake an **independent review of our governance framework**, focusing on key DSO–DNO interaction areas including network planning, flexible connections and flexibility services. PwC concluded that our framework is well-designed, with:
- Clear conflict management processes
- Strong cross-functional and independent oversight
- A transparent culture supported by published data and reporting.

The review also identified improvements already implemented this year, including:
- Clearer ownership of real-time flexibility dispatch
- Formalisation of conflict of interest controls within the DSO Stakeholder Panel, including recusal protocols.

We are taking forward further recommended enhancements, including formalising data-sharing protocols between DNO and DSO functions, strengthening role-specific governance training to ensure staff (particularly those operating at key DNO/DSO interaction points) understand how governance requirements apply in day-to-day activities and can recognise conflicts when they arise, and implementing a rolling programme of internal and external assurance.

We will publish updates annually, benchmarking our approach against other DSOs and industry best practice, reinforcing continuous improvement rather than one-off assurance.

Evolution of our DSO–DNO functional separation model

From 2026, SP Electricity North West operates within a holding company structure under Iberdrola, integrating three regional DNOs while maintaining distinct legal identities.

Our functional separation model was informed by our assessment of separation options, which demonstrated that more extensive separation (e.g. legal separation) would introduce significantly higher costs, operational complexity and loss of synergies, without proportionate benefit to customers. Evidence supporting this evaluation is included in the appendix of our DSO DNO Governance Framework.

This year we matured our operating model, bringing DSO and DNO under Chief Operating Officer (COO) oversight. COO oversight strengthens conflict management in practice by providing clear executive accountability for cross-functional decisions, enabling rapid escalation and resolution of potential conflicts, and ensuring consistent application of governance controls across interconnected processes.

Final accountability for DSO decisions sits with the COO, with board-level visibility of material decisions and DSO governance as a standing executive committee item.

Importantly, DSO and DNO roles remain distinct. Independence is maintained through formal governance controls rather than organisational separation alone, including defined decision rights, structured escalation, compliance oversight and independent scrutiny. Shared services are proportionate and do not compromise neutrality.

Safeguarding independence within a vertically integrated group

Following Iberdrola's acquisition, we assessed perceived conflicts from group ownership, informed by DSO Stakeholder Panel feedback. Mitigations include compliance with Distribution Licence Condition 42, CMA-approved arrangements, a business separation policy, system and data segregation, non-discrimination controls, and prohibition of cross-subsidy.

These controls, combined with executive accountability and independent panel scrutiny, ensure impartial DSO decision-making within the wider group structure.

Formalisation of the DSO–DNO relationship

While we do not operate a single codified "operational agreement", the DSO–DNO relationship is formally structured through defined shared processes (e.g. options assessment, flexibility procurement and operational decision-making) and **codifying how decisions are taken** through the ODMF.

To enhance collaborative oversight in decision-making, outputs, and conflict management, the **DSO–DNO Decision Group** convenes monthly. This group comprises senior representatives from DSO, network operations, connections, and strategic planning. As well as compliance oversight, this ensures robust delivery and cross functional evaluation within the process.

Conflicts of interest management framework

Our framework is designed to identify and mitigate conflicts before they arise, rather than relying on post-event resolution.

This year we strengthened transparency by publishing a standalone DSO conflicts of interest policy, a formal conflicts of interest reporting form, and a live conflicts of interest risk log.

Conflicts are identified through structured risk assessment embedded in planning, operational and market processes, supported by weekly DSO management review and formal governance forums.

In our Governance and Compliance Report, we evidence the implementation of this robust process.

In 2025/26, we logged and managed 20 conflicts (13 pre-defined and 7 stakeholder-raised), all assessed, mitigated and published in line with our framework.

Structured escalation

Conflicts may be raised by colleagues, stakeholders or partners. All conflicts are logged, risk-scored by the **DSO Compliance Officer** and categorised as actual, potential or perceived. Risks and documented rationale are reviewed monthly by the DSO–DNO decision group, and on a quarterly basis by our independent DSO Stakeholder Panel Where required, matters escalate to the strategic forum and ultimately to the COO's executive committee.

Stakeholder influence on conflict management

Feedback from our DSO Stakeholder Panel and wider engagement directly informed improvements to our conflicts framework, including publishing the conflicts register, strengthening governance reporting, and clarifying recusal and escalation protocols. Scrutiny of DFES, DNOA and ODMF sharpened conflict identification at key DSO–DNO interfaces, while oversight of the Social DSO fund strengthened recusal, transparency and escalation controls.

Embedded mitigation — not theoretical controls

Our framework addresses **structural conflicts** (e.g. DSO–DNO interactions), **market neutrality risks** (e.g. flexibility and ancillary services participation), **behavioural** and **operational neutrality** risks, and **strategic** and **distributional** tensions (e.g. Social DSO Fund allocation). We explicitly recognise perceived conflicts, not just actual ones.

How conflicts have been handled in live situations

The case studies that follow demonstrate how we identify and manage conflicts in live situations, including whole-system market neutrality (CLASS), operational decision-making (flexible services vs flexible connections), and strategic trade-offs (Social DSO Fund). We selected these examples because they show how the framework operates where decisions extend beyond traditional DNO–DSO boundaries into wider system markets and operational behaviours.

Case study 1: Primacy signalling and CLASS – Whole-system market neutrality

CLASS originated in the North West and now operates as BAU. During 2025, we activated CLASS 2,464 times, delivering 56,355MWh and £4.2m of benefit to customers through the 50% revenue sharing factor. As a locally developed service operating within national ancillary markets, we recognise that structural separation and transparency are essential to maintaining market neutrality and stakeholder confidence.

The conflict

Under primacy arrangements, the DSO can signal to NESO where local constraints risk conflict with national balancing services. Because CLASS operates as a NESO service, this created both a potential and perceived conflict: DSO signalling could exclude CLASS or competing providers from dispatch in specific locations.

As NESO operates a pay-as-clear auction, excluding lower-priced providers could influence clearing prices, creating a perceived risk of market distortion. This extended beyond internal DSO–DNO boundaries into national market outcomes.

How we identified risk

The DSO team identified this risk while planning primacy trials and logged it as both a potential and perceived conflict, given its system-wide implications.

The action taken

We established clear, objective signalling criteria and published DSO primacy risk of conflict reports. We confirmed that NESO retains final commercial dispatch authority and enabled external review of signalling volumes and forecasting by NESO and Elexon. To maintain ongoing transparency, we committed to six-monthly reviews once trials commence.

We also operate under a formal CLASS Separation of Duties and REMIT Compliance Policy (v3.2, November 2025), which enforces organisational separation between commercial bidding and network operations and codifies inside information controls.

This reduced the controlled risk rating to low (score of 3)

The role of oversight

The DSO–DNO decision group reviewed and approved the mitigations, with independent oversight and challenge provided through established governance arrangements. Escalation to the strategic forum or executive committee remains available if materiality increases.

Case study 2: Flexible services vs flexible connections – Operational neutrality

The conflict

As flexibility markets mature, we identified a behavioural and operational neutrality risk. Historically, control engineers frequently curtailed DERs under flexible connection arrangements.

As ANM and flexibility markets expand, there was a risk that familiarity or perceived simplicity could bias operational decisions toward curtailment or reinforcement rather than economically efficient set-point optimisation or dispatch of flexibility services.

How we identified risk

The DSO team identified this internally and formally logged it as a potential conflict. We recognised that cultural practice could influence neutrality as much as structural governance.

The action taken

We published our decision-making methodology, audited flexibility utilisation against the ODMF and increased ANM automation to reduce the risk of human bias. Additionally, we monitored connection offers and set-point scheme uptake, and delivered targeted training on set-point optimisation.

This reduced the controlled risk rating to low (score of 3).

The role of oversight

The DSO–DNO Decision Group approved the assessment and we embedded monitoring into routine governance processes. This case study demonstrates that **our framework addresses behavioural and operational neutrality risks** — not only formal structural conflicts.

Case study 3: Social DSO Fund – managing strategic and distributional tensions

The conflict

The Social DSO model incorporates wider societal value into network decision-making. This creates an inherent tension between supporting customers at risk of being left behind in the energy transition; and maintaining fairness and proportionality for all customers who fund network investment.

Because we define funding criteria and allocate grants, we identified potential and perceived conflicts relating to strategic bias, distributional fairness and project selection balance.

How we identified risk

We identified the following risks during fund design and formally assessed them under our governance framework:

- ✖ Strategic bias toward DSO-aligned projects.
- ✖ Perceived imbalance in prioritising vulnerable groups.
- ✖ Over-weighting social value through social return on investment relative to deliverability or scale.
- ✖ Information asymmetry favouring well-resourced applicants.

These risks were assessed as inherent to a Social DSO model and therefore requiring structured mitigation rather than elimination.

The action taken

We implemented a transparent, balanced scoring framework with equal weighting across five categories:

Table 10: Social DSO scoring framework

Strategic alignment with Social DSO strategy	Engagement of at-risk individuals	Deliverability and risk	Availability of match funding	Net present value (NPV) / SROI
20%	20%	20%	20%	20%

Following scoring, we conduct a **portfolio-level fairness review** assessing geographic spread, beneficiary diversity and balance between short- and long-term impact. Where we identify unintended bias, we adjust future funding rounds accordingly.

This reduced the controlled risk rating from medium to low (score of 6).

A practical example tested this approach. During Round 1, an EV project within a CMZ could not technically deliver flexibility. The assessment panel determined that eligibility should depend on scoring criteria rather than location. While flexibility was not feasible, wider societal benefit could still justify support.

The role of oversight

The assessment panel includes internal and external representation. We share decisions and scoring outcomes with the DSO stakeholder panel for transparency and challenge.

6. DER dispatch decision-making

Highlights

- First ANM connection accelerated connection date by up to three years and stopped the customer facing 50% restriction of their import capacity for most of the day
- Scaling constraint management zone readiness, with live operation across multiple GSP groups and rapid activation capability
- Progressing whole-system coordination through primacy rule alignment, open data publication, and development of ICCP data exchange with NESO
- Demonstrating real-time coordination of flexible resources through integrated ANM and MOM
- Expanding network monitoring to 62% of connected customers and enhancing forecasting capability, enabling data-driven dispatch decisions and wider ANM deployment

Context and system position

SP Electricity North West has not experienced any conflicts between distribution flexibility dispatch and national balancing actions to date. This reflects current network conditions, DER penetration levels, and early alignment with ENA and Elexon primacy principles.

As a result, our focus this year has been on ensuring **operational readiness for coordinated dispatch**. This includes **implementing ICCP data exchange with NESO** across priority GSPs, aligning dispatch logic with primacy rules, and developing scalable processes to support future coordination requirements.

This year we moved from capability development to live operational delivery of DER dispatch. **Our systems are now fully integrated and delivering measurable outcomes.**

We now operate one of the most **integrated DER dispatch environments** among UK DSOs, combining ANM, merit order management (MOM), and the ElectronConnect flexibility platform to enable coordinated use of flexible connections, contracted flexibility services and flexible assets.

Together, these capabilities ensure that DER dispatch decisions remain transparent, predictable and optimised for whole-system outcomes.

Our progress has enabled us to **dispatch more flexible services in 2025/26** than ever before, including 0.24 MWh for Operational Utilisation, 6.15 MWh for Variable Availability + Operational Utilisation, 43.2 MWh for Scheduled Utilisation, and 8,736 MWh for Peak Reduction services.

6.1 Dispatch capability and decision-making framework

Dispatch infrastructure

Our dispatch infrastructure combines three systems operating together in real time to deliver continuous, automated dispatch decisions without the need for manual intervention:

- **ANM** – coordinates flexible services, flexible connections and network assets to manage network limits, automatically adjusting DER output and other controllable resources when constraints arise
- **MOM** – determines the commercially optimal dispatch order and records dispatch actions
- **ElectronConnect** – manages flexibility contracts and dispatch signals

Scan QR code or click to see our dispatch infrastructure graphic

This integration of real-time ANM control, dynamic commercial optimisation through MOM, and flexible services dispatch via ElectronConnect enables a more consistent, coordinated and responsive approach to decision-making. **We are leading in this area, with this level of integration not yet widely deployed across other UK DSOs**.

Using a real-time network topology model, the ANM system continuously evaluates network conditions and adjusts DER import or export when constraints are detected. The system also re-optimises the resources it is controlling **every 15 minutes** to ensure efficient dispatch of flexibility.

The MOM system's primary role is to hold commercial data and determine the stack order of dispatch. It is controlled by the DSO team, providing **separation between DSO and DNO operations**. MOM also acts as the system historian, recording dispatch actions and curtailment levels, enabling post-event analysis and validation of operational performance.

ANM, MOM and ElectronConnect have been designed to **avoid hard-coding** dispatch capabilities within network operations. MOM logic can be adapted by the DSO team, while flexibility service providers can choose their preferred dispatch method (email, API, remote terminal unit (RTU) or scheduled).

Dispatch decision hierarchy

Dispatch decisions follow a defined optimisation hierarchy embedded within our ODMF. When a constraint is detected, systems apply the following logic:

1. Prevent asset overload using automated ANM control where available
2. Dispatch contracted flexibility services via ElectronConnect
3. Apply flexible connection curtailment rules using the curtailment index methodology for DNO constraints and LIFO for DERs with technical limits contracts
4. Escalate to operational (manual) intervention only where automated actions are insufficient.

This hierarchy ensures dispatch decisions are transparent, predictable and consistently applied across all DER types, while maintaining fairness between participants and optimising system efficiency. The hierarchy has been designed to align with emerging **ENA and Elexon primacy principles** and is capable of supporting coordinated dispatch with NESO as implementation progresses.

We consult annually on the ODMF and incorporate stakeholder feedback into our dispatch decision hierarchy. In response to last year's feedback, we introduced an '**ODMF at a glance**' document to provide a shorter, more accessible version of the framework that reduces technical detail while remaining comprehensive, alongside the full ODMF which also reflects how our Social DSO vision informs decision-making.

DER visibility enabling effective dispatch

This year we strengthened network visibility and decision transparency.

We expanded LV monitoring coverage and forecasting capability across the network, enabling improved real-time understanding of network conditions and DER behaviour. Advanced LV monitoring data now directly informs operational decisions, allowing us to identify emerging constraints earlier, increase participation in flexibility tenders, and deploy ANM capability more widely.

LV monitoring coverage has increased from 43% to 62% of connected customers in ED2 (see case study on page 13), and HV monitoring now supports expanded ANM deployment. Combined with our **48-hour ANM forecasting** capability, this provides improved foresight of network conditions and flexibility opportunities.

To support transparency, we **publish CMZs and future ANM deployment** locations on **our website**.

Our approach is to activate CMZs only when customers require them, ensuring operational resources are deployed efficiently. At the same time, the **rollout of CLASS** relays provides the necessary level of HV monitoring to enable ANM zones, allowing us to rapidly deploy ANM as new opportunities emerge.

- 260 of 370 primary substations (70%) now have CLASS relays installed
- Two GSP groups are fully commissioned for BAU ANM operation
- A third GSP group is currently undergoing proving tests
- 1 customer is fully operational and under active control

Across our 17 GSP groups, this represents significant progress in scaling ANM deployment. We have also demonstrated the **ability to commission new CMZs within a single day**. Our **dispatch infrastructure is scalable**, with ANM now live across multiple GSP groups, rapid CMZ commissioning capability, and ElectronConnect providing flexible dispatch routes as participation grows.

Dispatch verification and performance monitoring

During the year we strengthened verification and post-event monitoring of DER dispatch decisions using the MOM system. This enables engineers to analyse dispatch actions, validate system behaviour, and confirm that outcomes align with expected network performance.

Key achievements include **successful BiTraDER live testing**, verification of **ANM performance** under both demand and generation constraint scenarios, and establishment of **MOM as the historian** for ANM actions, enabling engineers to analyse curtailment levels and operational events. This also enables accurate tracking of customer curtailment, allowing us to **quantify the benefits of ANM** compared with conventional flexible connection arrangements.

These processes ensure that dispatch logic is not only defined but consistently applied in practice, supporting transparency, accountability and continuous improvement.

Transparent curtailment methodology

Following stakeholder consultation, we **implemented last in, first out (LIFO)** as the methodology for managing curtailment of technical limits connections, alongside the curtailment index for distribution-level constraints.

This approach ensures transparency, predictability and fairness, while demonstrating our ability to **adapt dispatch methodologies dynamically in response to stakeholder feedback**. It also reinforces that our dispatch logic is not hard-coded and can evolve as system requirements change.

6.2 Coordination with NESO and whole-system dispatch

Whole-system coordination remains a core priority. Currently, there are no active conflicts that SP Electricity North West or the NESO are aware of within our licence area. We have **proactively aligned our processes and systems** such that when conflicts are identified, we will adopt the appropriate Primacy Rules and share the relevant data within the Risk of Conflict Report, which is shared on a weekly basis.

In the North of England, where a higher number of primacy conflicts are anticipated in the medium term (2–5 years), we are **working with Northern Powergrid to trial how primacy rules operate in practice**. This includes simulating high-impact, low-probability events to ensure our dispatch processes, systems and coordination arrangements are robust ahead of wider industry implementation.

We have **established an ICCP data exchange link with NESO**, enabling direct control room-to-control room data sharing. Initial implementation covers three GSP groups, reflecting current operational need and prioritisation agreed with NESO. This phased approach ensures capability is deployed where coordination value is highest, while maintaining scalability for wider rollout.

We have also published procurement and dispatch data through our Open Data Portal, aligned risk of conflict reporting with the updated industry template, and contributed to industry development of primacy implementation processes.

We signed a bilateral data sharing agreement with NESO and, during 2025/26, actively trialled primacy reporting. However, NESO required all DNOs to sign a collective data sharing agreement before real asset data could be shared, which led to delays as some DNOs did not complete this in time for the 2025/26 trials. Since the start of 2026/27, all DNOs have now signed the agreement. We began sharing weekly reports with NESO in April 2026.

6.3 Enabling DER participation and delivering outcomes

By enabling flexible connections, including technical limits arrangements, and applying transparent curtailment methodologies, **we are making it easier for more DER operators to participate in NESO markets** while distribution constraints are actively managed. ANM, MOM and ElectronConnect ensure that dispatch actions remain compatible with wider system requirements, enabling coordinated outcomes across distribution and transmission systems.

Leading with ANM: delivering real operational benefits at scale

We recently connected the first customer to our real-time, whole-region ANM system, marking a step change in network operation. The platform integrates ANM, MOM and ElectronConnect to enable automated, real-time dispatch, with adaptable logic that can evolve without hard-coding, representing an **industry-leading approach**.

The first ANM customer is a 30MW battery storage site near Wrightington. The project was originally quoted for a 132kV connection, which would have required substantial reinforcement works. ANM manages the site's import demand (battery charging) to ensure network assets remain within safe operating limits under abnormal network conditions.

Case study: How ANM kept the lights on — with minimal impact on the customer

The challenge

A large battery connected to the network in late November 2025. Without smart controls, its charging demand risked overloading critical network assets supplying 8,532 properties under abnormal network conditions. If these assets were damaged restoring power could be slow and difficult, particularly during winter. The traditional solution would have been major network reinforcement.

The solution

We connected the site using ANM, allowing the connection to proceed safely without reinforcement.

ANM went live for this customer on 26 November 2025 and has operated automatically since then, requiring no control room intervention. **ANM continuously monitors network conditions and adjusts the battery's charging demand when network limits are approached**.

The site has been fitted with a new control panel allowing control engineers to set a partial demand and generation curtailment level. This enables, via RTU supervisory control and data acquisition (SCADA) control, faster and more precise control, reduced manual intervention, improved fault response times, and participation of the battery in flexibility services.

What actually happened

Between 26 November 2025 and 31 March 2026:

- ANM has activated 404 times.
- Total curtailed energy: 492.87 MWh. This is enough to fully charge a Nissan Leaf around 7,950 times or power over 100,668 televisions for a full day.
- This represents just 0.545% of the site's potential import energy.

All curtailed energy relates to the import (charging) direction, meaning the battery was briefly prevented from charging at full capacity during constraint periods.

Why this matters

Without ANM:

- ✗ The customer could have faced around 29,198MWh of curtailed import energy, equivalent to almost 32% of their potential charging capacity.
- ✗ Bill payers would have funded infrastructure designed primarily for rare worst-case events.
- ✗ The network would have faced a higher risk of asset damage.

With ANM:

- Customer connection accelerated by three years.
- £3.2m of network reinforcement costs were avoided, with a further £1.5m reduction in customer connection costs, benefiting both bill payers and our connecting customer.
- Curtailment occurred only at the moments it was needed.
- The battery was able to operate almost normally.
- Network assets remained protected.

The battery now supports the wider electricity system by storing surplus renewable energy and releasing it during periods of high demand.

6.4 Learning and continuous improvement

Live ANM deployment has provided **valuable operational insight**, including control room training, policy updates, system commissioning and customer integration.

MOM data enables engineers to review dispatch events, validate system behaviour and refine configuration, strengthening **confidence in automated dispatch** and demonstrating reliable operation with minimal manual intervention.

Our experience confirms that automated DER dispatch can deliver **faster connections, lower curtailment, reduced reinforcement costs and improved network utilisation**, and can scale while maintaining system security.

Appendix A – Glossary

We have abbreviated terms throughout our report, where doing so improves clarity and readability. We provide the full form of an abbreviation at first use and then the abbreviation thereafter. A full list of the abbreviations used is provided below.

ADE	Association for decentralised energy
AI	Artificial intelligence
ANM	Active Network Management – an application of the Network Management System that manages network constraints in real-time by using flexible assets / connections and varying the import and/or export of distributed energy resources
API	Application Programming Interface – a set of functions and procedures allowing the creation of applications that access the features or data of an operating system, application, or other service
BAU	Business as usual
BiTraDER	BiTraDER will investigate, design, build and trial – live on the network – options for the introduction of a bilateral trading market through which large, connected customers can trade their position in the merit order stack, which determines the order in which they are asked to curtail their output at times of high demand on the network
BSP	Bulk supply point substation (typ. 132/33kV)
CBA	Cost benefit analysis – decision-making tool used to justify a wide range of potential interventions
CEM	Common evaluation methodology – developed through the ENA Open Networks Project (2020) to assess a range of solution options, particularly flexibility, against traditional reinforcement. An MS Excel tool, based on Ofgem's Cost Benefit Analysis, was created to support DNO assessments in RIIO-ED1.
COO	Chief Operating Officer – Stephanie Trubshaw
CIM	Common information model – a protocol for sharing electrical network data between parties
CMA	Competition and Markets Authority
CMZ	A defined part of the electricity network where capacity constraints are expected, and where flexibility services are procured to manage those constraints instead of (or ahead of) traditional reinforcement
DER	Distributed energy resource – small-scale power generation and storage such as solar, wind and electric vehicles that operate locally and are connected to a larger power grid at the distribution level
DFES	Distribution future electricity scenarios – a set of forecasts exploring how low carbon technologies may be adopted and how the network could respond. These scenarios inform investment planning and provide visibility of future flexibility opportunities.
DNO	Distribution Network Operator – company licensed to distribute electricity in Great Britain within a defined geographical footprint
DNOA	Distribution Network Options Assessment – a structured, data-driven process used to identify and compare potential solutions to network constraints—such as reinforcement, flexibility and operational measures—and select the most efficient option
DSO	Distribution System Operation – the systems and processes needed to operate energy networks in the net zero carbon future
DUoS	Distribution use of system – charges paid by electricity users for using the local distribution network that delivers power from the transmission system (or local generation) to homes and businesses
ED1	RIIO-ED1 price control period which ran from 2015 - 2023
ED2	RIIO-ED2 price control period which runs from 2023 – 2028
ED3	RIIO-ED3 price control period which will run from 2028 - 2033
EHV	Extra high voltage – 33kV to 132kV network
ENA	Energy Networks Association – industry body which represents electricity transmission and distribution network operators
EV	Electric vehicle – a vehicle powered by an electric motor instead of a traditional internal combustion engine
FSP	Flexibility service provider - a person or organisation who provides flexibility by making temporary changes to the way they consume, generate, or store electricity when requested
GDN	Gas distribution network - the system of local pipelines and infrastructure that transports natural gas from the high-pressure transmission network to homes, businesses and industry
GIS	Geographic information system - digital framework for capturing, managing, analysing, and mapping all types of data by linking it to specific locations
GMCA	Greater Manchester Combined Authority
GSP	Grid supply point – the connection between the transmission and distribution systems (typ. 400 or 275/132kV)
HV	High voltage – 6.6kV to 11kV network

ICCP	Inter-control communications protocol – a standard communication protocol used to exchange real-time operational data between different control systems, such as those operated by network companies and system operators
KPI	Key performance indicator – used to track the delivery of our outputs and outcomes and assist in prioritising management focus
LAEP	Local area energy plan – a data-driven and whole energy system, evidence-based approach that sets out to identify the most effective route for the local area to contribute towards meeting the national net zero target, as well as meeting its local net zero target
LCT	Low carbon technology – technologies that produce, use or enable energy with low or zero greenhouse gas emissions, helping to reduce carbon output compared to traditional fossil fuel alternatives. Examples include electric vehicles, electric heat pumps, solar panels and wind energy
LEVI	Local electric vehicle infrastructure - a UK government funding programme that supports local authorities in planning and delivering electric vehicle charging infrastructure, particularly for residents without access to off-street parking
LIFO	Last in, first out
LRE	Load related expenditure – capital expenditure required to install new assets or upgrade existing ones to handle changes in electricity demand and supply
LSOA	Lower layer super output areas - made up of groups of output areas, usually four or five. They comprise between 400 and 1,200 households and have a usually resident population between 1,000 and 3,000 persons
LV	Low voltage - 0.4kV
MIC	Maximum import capacity - the agreed maximum power, measured in kVA, that a site can draw from the electricity network
MOM	Merit Order Management – SP Electricity North West's system that derives the merit order or curtailment stack, using the curtailment index and flexible services contracts, which is shared with the Active Network Management system for delivery
MPAN	A unique identifier assigned to each electricity supply point in Great Britain, used to identify and manage electricity supply and billing
NESO	National electricity system operator – responsible for managing the planning and design of electricity and gas networks across the Great Britain
NMS	Network management system – an electricity network control system
NPV	Net present value - a financial measure that calculates the current value of future costs and benefits by discounting them back to today's value
ODMF	Operational Decision Making Framework – sets out SP Electricity North West's approach to decision making surrounding the use of network automation systems, flexibility, and human decision making. This includes the use of flexible services, flexible assets, and flexible connections
Ofgem	Office of Gas and Electricity Markets – the regulator in GB
ON-P	Open Networks Project – the Open Networks programme is ENA's strategic initiative that brings together all electricity network companies, the Electricity System Operator, the government, the regulator, and the wider industry to lead the UK's transition to a smart, flexible energy system ready for net zero
ONS	Office for National Statistics
PRESense	Our low voltage monitoring devices that capture power flow data, enabling the proactive management of the network and an understanding of any emerging constraints due to the adoption of low carbon technologies
RESP	Regional energy strategic plan / planning – a coordinated approach to planning future energy infrastructure at a regional level, aligning electricity, heat, transport and local development to meet net zero and system needs efficiently
ROCBA	Real option cost benefit analysis – used to quantify the benefits in terms of cost and risk assessments accounting for uncertainties in future peak demand growth as well as other uncertainties (e.g., energy prices, weather conditions etc)
RTU	Remote terminal unit - a microprocessor-controlled electronic device that interfaces objects in the physical world to a distributed control system
SCADA	Supervisory control and data acquisition - control system architecture comprising computers, networked data communications and graphical user interfaces for high-level supervision of machines and processes
SEN	Strategic energy need - the identified future energy requirements of a region—such as demand, generation, infrastructure and flexibility needs—used by NESO to inform Transitional Regional Energy Strategic Plans
SLC	Standard licence condition - which apply to all Ofgem-licensed companies
SP ENW	SP Electricity North West
tRESP	Transitional regional energy strategic plan – an interim, regionally coordinated energy plan that brings together existing data, scenarios and stakeholder insights to guide near-term network and infrastructure decisions until a full Regional Energy Strategic Plan is in place

Appendix B – Links to supporting documents

Last year, the Ofgem DSO Performance Panel highlighted that the volume of supporting material—and the reliance on numerous hyperlinks—made it difficult to navigate and assess the evidence base.

In response, this appendix brings together the most important and material documents underpinning our submission into a single, structured place. It is designed to improve transparency and accessibility by clearly signposting the key methodologies, data, reports, and frameworks that demonstrate how we are delivering DSO benefits, supporting stakeholders, and operating as a responsible and effective DSO.

Each section below groups the core evidence by theme, helping the Panel quickly locate and understand the documents most relevant to our performance this year.

Section 2: Delivery of DSO Benefits

Document	Type	Purpose
DSO Benefits methodology	Methodology	This document explains how we quantify the benefits delivered by our DSO activities. It sets out the calculation approach to improve transparency for customers and stakeholders and shows how quantified benefits link to actions in our DSO panel submission.
ENA common appendix and glossary	Transparency	A shared appendix and glossary document, developed collaboratively by DNOs, that sets out the progress made in standardising terminology, benefits methodologies, and supporting information used in DSO performance submissions.
Social CBA model with SROI integration	Framework	A detailed technical model and guidance document that sets out how we apply "social" cost–benefit analysis—by integrating social return on investment into Ofgem's standard CBA—to consistently quantify and monetise the full economic, environmental, and societal impacts of its DSO activities and investment.
DSO KPIs	Performance	This quarterly report tracks performance against DSO targets and demonstrates delivery of measurable benefits.
DSO Personas	Insights report	This report uses user personas to bring to life the unique attributes, goals and challenges of our key stakeholders, and explains how we are delivering for them.
DSO: You Said, We Did	Insights report	A report summarising stakeholder feedback received over the past year, and the actions taken in response, demonstrating how engagement informs DSO activities.
Empower: Upskilling for Local Area Energy Planning	Insights report	This report outlines learning from the Empower programme, which supports local authorities with the skills, tools and knowledge needed to develop effective Local Area Energy Plans and deliver net zero initiatives.
Social DSO Strategy	Strategy	A strategic framework document that sets out how we operate as a "Social DSO"—embedding fairness, inclusivity, and social value into the energy transition so that decarbonisation delivers benefits for all customers and communities, not just technical or economic outcomes.
Social DSO Fund	Resource	A webpage describing our Social DSO Fund—a grant and co-investment scheme that provides matched funding and support to community energy projects (like solar, batteries, and EV charging).

Section 3: Data and information provision

Document	Type	Purpose
Unlocking value from smart meter data	Insights report	This report sets out learning from the Empower programme, which supports local authorities with the skills, tools and knowledge to develop Local Area Energy Plans and deliver net zero initiatives.
LV visibility dataset	Dataset	Combines smart meter and PRESense data across 40 datasets—88 million records and 12 months of time-series data—alongside load-duration curves for ~6,000 substations, covering over 60% of customers.
Data Education Hub	Resource	Provides guidance on how to use the Open Data Portal.
Persona based signposting	Data portal	User personas highlight stakeholder needs, aligning relevant datasets to improve navigation and accessibility.
Data roadmap	Roadmap	A central landing page outlining available datasets, planned releases, key themes and stakeholder benefits.
LCT readiness checker	Data tool	Based on a dataset covering 2.4 million connected properties, it assesses constraints on LCT deployment, including looped services, cable size/type, and overhead vs underground supply.
Smart optimisation output resource	Resource	Provides access to digital network tools and visualisations of current and future assets, constraints, growth drivers, and flexibility opportunities.

Section 4: Flexible market development

Document	Type	Purpose
Regional variation in the uptake of flexibility services	Insights report	This report, prepared by WSP in collaboration with us and Northern Powergrid, explores regional differences in the uptake of flexibility services across Great Britain.
LV flexibility strategy	Strategy	This document sets out our approach to assessing flexibility requirements on the LV network, including how, when and where flexibility is procured to manage constraints.
Flexibility hub	Resource	Provides an interactive map-based platform that helps users understand our flexibility requirements, explore opportunities across the network, and identify eligible locations through postcode search and CMZ visibility.
Detailed tender outcomes	Transparency	Provides detailed results from flexibility tenders, including contracts awarded, commercial arrangements, locations, areas with insufficient bids (for re-tender), and the CEM losses tool used in bid evaluation.
Flexibility procurement and dispatch report	Transparency	An annually produced SLC31E procurement report which summarises the Flexible Services that have been tendered for, those that have been contracted with, and those which have been dispatched.

Section 5: Options assessment and conflict of interest mitigation

Document	Type	Purpose
Distribution Network Options Assessment (DNOA)	Transparency	In this report we present our recommendations in terms of network constraint solutions, including the use of flexibility services.
DNOA	Methodology	Sets out our approach to identifying and assessing network needs and determining the most efficient solutions—across flexibility, reinforcement and other interventions—to manage constraints and deliver value for customers.
Operational decision making framework (ODMF)	Framework	Sets out our approach to decision-making on how, when and where we deploy network automation, flexibility measures (e.g. flexibility services, flexible assets and connections), and other interventions such as reinforcement.
Distributed future energy scenarios (DFES)	Insights report	Outlines projected electricity demand, distributed generation and battery storage uptake across the North West to 2050.
DSO DNO Governance Framework	Framework	This document sets out how we manage perceived conflicts of interest between our DNO and DSO roles, to provide transparency for our stakeholders.
Governance and compliance annual report	Insights report	This report provides more detail of the practical operation of the DSO-DNO Government framework. It covers updates, successes and challenges as we deliver our DSO strategy and business plan commitments.
DSO conflicts of interest policy and process	Policy	This document sets out how we identify, assess and manage conflicts of interest within our DSO activities. It defines different types of conflicts (actual, potential and perceived) and outlines the roles, responsibilities and processes in place to ensure decisions are made transparently and in the best interests of customers.
DSO conflicts of interest reporting form	Form	This document is a standardised template used to report conflicts of interest within our DSO activities.
DSO conflicts of interest risk log	Transparency	This spreadsheet is a live register of identified conflicts of interest risks within our DSO activities. It records each potential, actual or perceived conflict, along with its risk assessment, mitigation actions and current status, providing an auditable trail of how conflicts are monitored and managed over time.
DSO stakeholder panel annual report	Insights report	This year, the DSO advisory panel introduced its first independent annual report, strengthening transparency and demonstrating how independent oversight is shaping our DSO transition.

Section 6: DER dispatch decision-making

Document	Type	Purpose
ODMF and ODMF at a glance	Framework	The ODMF document explains our operational principles and approach in terms of using automation, flexibility or other interventions.
Primacy - Risk of Conflict Report	Dataset	This is the risk of conflict report which is shared as part of the Primacy Open Networks Project Working group.

Appendix C – List of initiatives

This section sets out the key initiatives delivered, ongoing and planned across our DSO activities. It provides a consolidated view of how our initiatives have progressed over time, drawing on actions from previous submissions, our business plan, and new initiatives introduced this year. Together, these initiatives demonstrate how we are evolving our capabilities, embedding learning, and delivering tangible outcomes for customers and the wider energy system.

Category	Activity	Source	Status
Delivery of DSO benefits	1. Expand collaboration with SSEN to other networks, jointly developing a common framework for assessing and tracking DSO benefits	Submission 23/24	Complete
	2. Deliver our first annual DSO benefits report to the DSO Panel, including SP ENW quantification of benefits	Submission 23/24	Complete
	3. Conduct a collaborative review of DSO benefits in the North West, working with stakeholders across the energy system	Submission 23/24	Complete
	4. Expand LAEP data inputs into DFES from local authorities, with greater focus on granular, lower-voltage projects	Submission 23/24	Complete
	5. Design a seamless data journey linking DFES and NDP to emerging regional whole-system energy plans	Submission 23/24	Complete
	6. Support the ENA Open Networks System Forecasting Working Group to improve alignment of DFES and forecasting across DNOs	Submission 23/24	Complete
	7. Co-create and publish a Social DSO Strategy to set out our ambition and forward focus	Submission 24/25	Complete
	8. Review and update DSO KPIs aligned to our benefits areas	Submission 24/25	Complete
	9. Update our benefits assessment methodology in line with best practice	Submission 24/25	Complete
	10. Lead the industry DSO Collaboration Forum on benefits (Phase 1)	Submission 24/25	Complete
	11. Publish our DSO Benefits Methodology for the first time	Submission 24/25	Complete
	12. Publish our 'You Said, We Did' report	Submission 24/25	Complete
	13. Lead industry-wide standardisation of DSO benefits methodologies through the ENA DSO Collaboration Forum (Phase 2)	New	Complete
	14. Develop and apply a sector-leading Social Cost Benefit Analysis (CBA) framework to quantify societal and distributional impacts	New	Complete
	15. Deliver Social DSO Funding to support community-led flexibility and decarbonisation projects linked to system benefits	New	Ongoing rollout
	16. Expand LAEP support through enhanced training programme and rollout of LAEP+ digital platform across local authorities	New	Ongoing rollout
	17. Develop and submit Strategic Investment Needs to NESO. Aim for high approval rate and recognition in tRESP	New	Complete
	18. Expand outage optimisation through initiatives such as Storm Flex	New	Ongoing rollout
	19. Deliver targeted internal training and process changes to increase uptake of flexible connections	New	Complete
	20. Introduce a common LAEP data request template across network operators, reducing duplication for local authorities	New	Complete
	21. Pilot Smart Street Rural to extend voltage optimisation and flexibility enablement to rural networks, increasing customer bill savings	New	Ongoing development
	22. Seek further opportunities to expand benefits standardisation across the industry	New	Expected 26/27
Data and information provision	23. Deliver a data repository with human-readable visualisations to improve accessibility	Business plan	Complete
	24. Upgrade or replace the existing network planning tool to facilitate enhanced DSO forecasting and data exchange processes	Business plan	Complete
	25. Enhance EHV forecasting capability through ATLAS	Business plan	Ongoing
	26. Develop and embed new HV/LV forecasting techniques	Business plan	Complete
	27. Expand LV monitoring through ongoing deployment of PRESense equipment	Business plan	Complete
	28. Develop processes to extract and convert corporate data into CIM format	Business plan	Ongoing
	29. Launch a Data Learning Hub, including an expanded video library to support stakeholder use of data	Submission 23/24	Complete

Category	Activity	Source	Status
Data and information provision	30. Develop a data journey to inform emerging RESPs	Submission 23/24	Complete
	31. Enhance linkages across data, documents and tools through the SOO	Submission 23/24	Complete
	32. Incorporate data from the LDES NODE platform	Submission 23/24	Ongoing
	33. Share LTDS network data in a standardised CIM format	Submission 23/24	Complete
	34. Expand availability of network data through our data portal, including DFES-based LCT forecast mapping	Submission 23/24	Complete
	35. Publish anonymised smart meter data for time-series domestic electricity consumption	Submission 23/24	Complete
	36. Publish DFES-based maps of electricity demand, generation capacity and carbon reduction data	Submission 23/24	Complete
	37. Co-create user stories, videos and guidance tailored to stakeholder personas	Submission 23/24	Complete
	38. Publish planning and operational data across end-to-end processes through a single Open Data Portal	Submission 23/24	Complete
	39. Enhance visualisations of LCT uptake, distributed generation, energy usage and carbon savings	Submission 23/24	Complete
	40. Integrate smart meter data into mapping and tabular tools for load and capacity analysis (subject to 70% coverage threshold)	Submission 23/24	Complete
	41. Co-design processes to collect local authority data for sub-primary investment planning	Submission 23/24	Complete
	42. Work with local authorities to refine templates and guidance for project data submission, targeting full regional adoption	Submission 23/24	Complete
	43. Publish our Data Roadmap	Submission 24/25	Complete
	44. Expand data provision by publishing new datasets, all accessible via API to enable automated stakeholder decision-making	Submission 24/25	Ongoing expansion
	45. Develop stakeholder decision-support tools, including the LCT Readiness Checker (2.4m properties)	New	Ongoing development
	46. Expand integration of third-party datasets (e.g. DVLA, MCS, ONS, Natural England) to enable whole-system, place-based planning	New	Ongoing integration
	47. Introduce a Shared Data Licence to provide controlled access to granular and sensitive datasets	New	Complete
	48. Standardise planning data and visualisation across DNOs (e.g. with Northern Powergrid) to support cross-boundary planning	New	Complete
	49. Introduce real-time and high-frequency data updates, including live fault data (10-minute refresh) and monthly operational datasets	New	Complete
	50. Enhance data accessibility through persona-led navigation and AI-enabled search within the data portal	New	Complete
	51. Enhance CIM-aligned network model with additional functionality and datasets	New	Planned (Nov 2026 next release)
Flexibility market development	52. Deliver a platform-based flexibility marketplace	Business plan	Complete
	53. Procure short term flexibility (month ahead)	Business plan	Complete
	54. Procure flexibility to defer connections-driven reinforcement	Business plan	Complete
	55. Transition towards short-term forecasting to support flexible services procurement and dispatch	Business plan	Ongoing
	56. Define and publish market parameters to support flexibility trading	Business plan	Complete
	57. Collaborate with network operators and system partners to standardise flexibility products and agreements	Business plan	Complete but ongoing
	58. Develop and integrate a secure marketplace platform to enable secondary trading	Business plan	Ongoing
	59. Get closer to real-time procurement with a standard offer product	Submission 23/24	Complete
	60. Introduce month-ahead procurement alongside biannual tenders to improve responsiveness and revenue certainty	Submission 23/24	Complete
	61. Shift procurement focus towards LV flexibility, including granular half-hourly profiles and incorporating LV requirements into tenders	Submission 23/24	Complete
	62. Accelerate connections constrained by transmission reinforcement through use of flexibility	Submission 23/24	Complete

Category	Activity	Source	Status
Flexibility market development	63. Deliver small-scale trials of central market facilitation with Northern Powergrid	Submission 23/24	Cancelled –not aligned with industry
	64. Publish our Flexibility Strategy	Submission 24/25	Complete
	65. Publish our LV Flexibility Strategy to provide transparency on how requirements are identified and procured	New	Complete
	66. Reduce the minimum participation threshold to ≥5 kW to enable LV and smaller asset participation	New	Complete
	67. Develop and pilot Passive Flex product to create headroom and manage peak demand ahead of ED3	New	Ongoing rollout
	68. Develop and deploy MPAN-level eligibility validation to automate and improve accuracy of flexibility procurement	New	Complete
	69. Scale MPAN validation to near real-time via API integration	New	Complete
	70. Launch a Flexibility Hub integrating tools, CMZ mapping and eligibility checks into a single platform	New	Complete
	71. Demonstrate the technical capability to support demand turn-up including enabling NESO to trial domestic demand turn-up services safely	New	Complete
	72. Embed demand turn-up as BAU service	New	External dependencies
	73. Engage with a dedicated Flexibility Forum to co-develop market design and reduce barriers to participation	New	Ongoing
	74. Expand flexibility participation to community groups and public sector organisations, linking Social DSO Fund to market entry	New	Ongoing rollout
	75. Enhance ElectronConnect platform to enable API-driven dispatch, asset-level registration and improved availability refinement	New	Complete
	76. Progress secondary trading from trials to scalable market capability (BiTraDER readiness)	New	Expected completion 2026
	77. Transition to near real-time procurement (week ahead and day ahead)	New	Ongoing
	78. Establish an ICCP link with NESO to enable real-time data exchange	New	Complete
Options assessment and conflicts of interest mitigation	79. Enhance the ROBCA tool to incorporate micro-scenarios, full carbon impact assessment, asset management interventions and whole-system outcomes	Business plan	Complete
	80. Publish first annual DSO governance and compliance report demonstrating how conflict management operates in practice	Business plan	Complete
	81. Advance the CEM by enhancing automation within decision-making processes in partnership with other networks	Submission 23/24	Complete
	82. Publish data on load indices	Submission 23/24	Complete
	83. Improve the DNOA report in response to stakeholder feedback and stakeholder personas	Submission 23/24	Complete
	84. Introduce a new panel meeting format focused on themed sessions, standard reporting and regular publication cycles	Submission 23/24	Complete
	85. Embed the DSO Panel in the review and refinement of the DSO strategy and assessment of progress against the DSO transition plan	Submission 23/24	Complete
	86. Implement a single, integrated options assessment framework linking DFES, DNOA, CEM, ROCBA and ODMF	Submission 24/25	Complete
	87. Publish a transparent and accessible suite of decision-making methodologies and outputs (DNOA, ODMF, CEM datasets)	Submission 24/25	Complete
	88. Publish our DSO–DNO Governance Framework	New	Complete
	89. Introduce independent annual reporting from the DSO Stakeholder Panel to strengthen scrutiny and transparency	New	Complete
	90. Commission independent PwC review of DSO–DNO governance and implement priority recommendations	New	Complete
	91. Implement a rolling programme of internal and external assurance to continuously strengthen governance and conflict management	New	Ongoing rollout

Category	Activity	Source	Status
Options assessment and conflicts of interest mitigation	92. Enhance conflicts of interest framework with formal policy, live risk log and structured identification, scoring and escalation processes	New	Complete
	93. Formalise and enhance data-sharing protocols between DSO and DNO functions to strengthen transparency and conflict mitigation	New	Expected 26/27
	94. Deliver targeted governance and conflict management training to ensure consistent application of controls across operational teams	New	Expected 26/27
DER dispatch decision making framework	95. Introduce curtailment liability trading	Business plan	Ongoing
	96. Publish ANM zones and constraint information	Business plan	Complete
	97. Deliver flexible services dispatch using an API	Business plan	Complete
	98. Consult on potential for third party management of MOM	Business plan	Complete
	99. Complete the development of ICCP links between the control room and other licensees (including curtailment)	Business plan	Complete
	100. Integrate the ANM system into business-as-usual operations	Business plan	Complete
	101. Integrate MOM into standard operational processes	Business plan	Complete
	102. Consult on any updates required to the Operational Decision Making Framework and publish update	Submission 23/24	Complete
	103. Scale ANM deployment across multiple GSP groups, enabling rapid activation of constraint management zones	New	Ongoing
	104. Deliver first live whole-system ANM connection, demonstrating accelerated connections, reduced curtailment and avoided reinforcement	New	Complete
	105. Strengthen dispatch verification and performance monitoring using MOM as a system historian to validate outcomes and support continuous improvement	New	Complete
	106. Implement a defined dispatch decision hierarchy aligned to emerging ENA and Elexon primacy principles	New	Complete
	107. Implement transparent curtailment methodologies for DER and distribution constraints in response to stakeholder feedback	New	Complete
	108. Expand ICCP data exchange and primacy coordination across all GSP groups to support system-wide dispatch integration	New	Ongoing
	109. Expand industry best practice sharing in areas where we lead, including Active Network Management	New	Expected 26/27

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