2025/26

UK Power Networks

DSO Performance Panel Report

The UK Power Networks DSO team at the Port of Felixstowe, the site of Freeport East.

Contents

Introduction

Michael Walsh
Chair, UK Power Networks DSO Supervisory Board

The UK energy sector is operating in a period of profound change. The way in which customers and communities interact with our network is changing with electrification, and they now play a more active role in shaping the energy system. At the same time, wider forces, from Connections Reform and new regional oversight through the Regional Energy Strategic Plan (RESP), to rapid advances in digital and AI capabilities, are reshaping how networks must engage, plan and operate.

In this context, the role of the Distribution System Operator (DSO) is more critical than ever. DSOs sit at the interface between national ambition and local delivery, providing the visibility, coordination and flexibility required to support growth while maintaining reliability and affordability.

Our task, as the Supervisory Board, is to continue to challenge the DSO to find new and innovative ways to fulfil these roles, while always keeping the needs of customers front and centre. We have been impressed with the DSO's progress this year, demonstrated in this report: data has been used to open up network visibility, flexibility has brought tangible benefits to customers, deep engagement has brought more accurate forecasting and better planning, and innovative solutions have maximised network access for generators.

Sotiris Georgiopoulos
DSO Director, UK Power Networks

We have worked hard this year to maintain our position as the best-performing DSO, continuing to set the pace for the sector. As we mature as a DSO, our focus remains clear: continuing to lead by example, responding with agility to customers' evolving needs and delivering impact at both local and national scale.

This has led us to develop more advanced solutions for greater benefits and savings for customers. We have widened participation in our flexibility markets and trialled new use cases, such as voltage management. Two-thirds of EV chargers in our area are now registered for our flexibility services, providing low carbon network services while returning money to consumers. We continue to be proactive in integrating technologies that can help customers save money such as rooftop solar and domestic batteries.

To support Clean Power 2030 and Connections Reform aims, we are maximising all available capacity at every level to facilitate connections: we have delivered an increase in flexible connections capacity, with over 313MW going live this year and are adapting our products for large demand customers such as data centres.

We have also dedicated time and effort to sharing our solutions with others, for wider system benefits. Our ChargePoint Navigator tool is now live in Wales and being adopted in Northern Ireland and SPEN's region. Two other DSOs have launched day-ahead flexibility auctions, and we have collaborated with NESO on various data-sharing initiatives to give distributed flexibility wider market access.

I am proud to present the team's achievements this year and demonstrate the customer value we have delivered.

This year's highlights

1 Benefits

1. Delivered **£223m of benefits** in 2025/26 – a 23% increase on 2024/25 through initiatives such as flexibility, flexible connections and reducing outages.
2. Our innovative products and tools, including day-ahead flexibility markets, demand turn-up services and ChargePoint Navigator have been **adopted nationwide, maximising benefits for customers.**

2 Data

1. Demonstrated sector leadership by **creating, contributing and commissioning open-source software** for Python, one of the most popular programming languages, for wider access to our network models.
2. Responded to new customer needs by creating Opportunity Finder, supporting three NHS trusts and two Community Energy Groups to **streamline the site selection process for rooftop solar.**

3 Flexibility

1. Leveraged our day-ahead market to demonstrate, through over 500 instructions, that **consumer-led response can resolve growing voltage challenges.**
2. **Supported the expansion of NESO's Demand Flexibility Service to include demand turn-up** through network analysis and data sharing across 350,000 flexibility assets.

4 Options assessment

1. Sharpened strategic network planning through the **inclusion of housing development data covering 100% of our local authorities,** enabling earlier, targeted investment where demand is set to rise fastest
2. Energised our **first fully flexible demand customer connecting to an IDNO network,** speeding up the roll out of key EV charging infrastructure with lower reinforcement costs.

5 DER dispatch

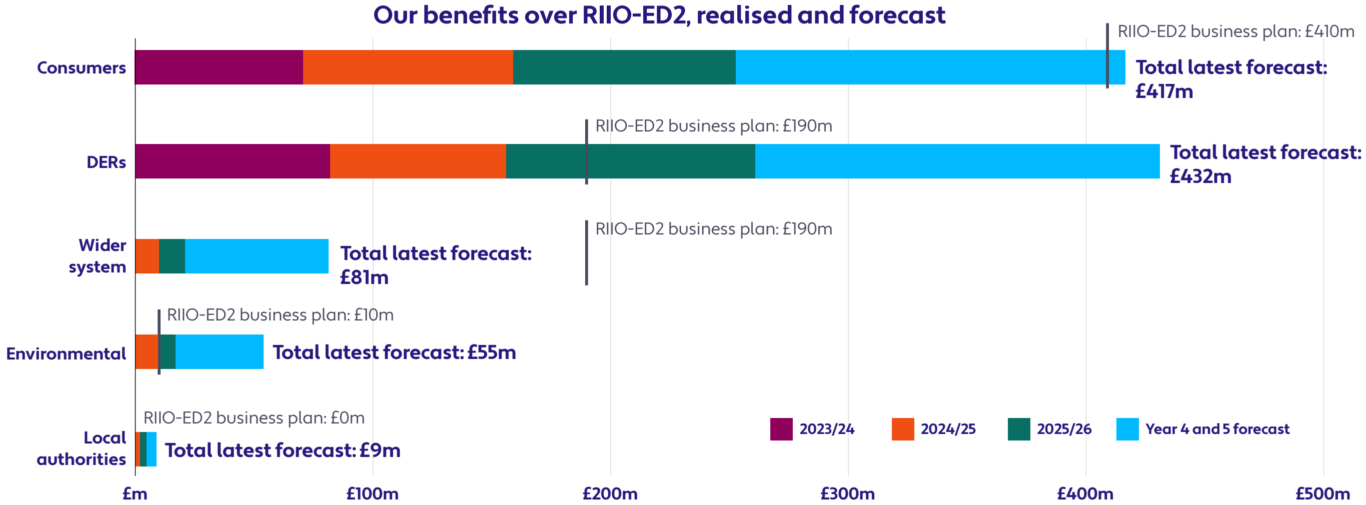
1. **Industry-first use of DERMS to manage a large, planned outage** contributing to 98.6% network availability for flexibly connected customers.
2. Scaled transparent dispatch to maximise market access and trust, **dispatching over 15GWh,** a 9% increase on last year.

1 Benefits

1.1 We have realised £223m of benefits this year

This year, we delivered £223m of benefits for customers and the wider system, a 23% increase on 2024/25. Now that we are over halfway through RIIO-ED2, we have delivered £560m benefits, 19% above our forecast. Our latest forecast for total RIIO-ED2 benefits is now nearly £1bn, 24% higher than our business plan forecast. This is mostly driven by delivering against our flexibility target for benefits to consumers and accelerating connections through flexible connections and reducing outages. This year, in line with the other DSOs, all of these benefits figures are stated in 2020/21 prices.

Our benefits over RIIO-ED2, realised and forecast



2025/26 Benefits					
Consumers £94m (+6% on 2024/25)	**DERs** £106m (+47%)	**Wider system** £11m (+16%)	**Environmental** £8m (+6%)	**Local authorities** £3m (+6%)	**Total** **£223m (+23%)**
Avoided or deferred reinforcement costs from using flexibility, reducing bills	Avoided or deferred reinforcement costs from using flexible connections for connecting customers	Reduced wholesale electricity costs from improved network access for DERs	Value of reduced carbon emissions from improved network access for DERs	Reduced resource costs from decarbonisation planning tools	

Our achievements this year

Our flexibility procurement has avoided reinforcement costs, saving customers £94m this year. This is 6% higher than the savings delivered last year, and keeps us on track to achieve our business plan target of £410m. Unlike other Distribution Network Operators (DNOs), these savings sit outside of our price control allowances and are not subject to the sharing factor. This means that 100% of these savings flow to bill payers.

We have delivered **increased flexible connections capacity this year, with over 313MW going live**. This is an increase on the amount of capacity that we connected in 2024/25, demonstrating the continued and growing value these flexible connection products offer to our customers. We have quantified this value at £104m, based on the amount that Distributed Energy Resources (DER) customers have saved by avoiding reinforcement. We have driven this increase through more targeted, hands-on services for our Distributed Energy Resource Management System (DERMS) customers, such as achieving our first IDNO DERMs connections and the use of new network management devices, releasing even more capacity for customers. We have also brought additional value to our DER customers through The Connections Lab tool, providing fast and free support to customers choosing where and what to connect. Our quantification estimates that this saved DER connecting customers £2m this year. **Together, this brings total benefits of £106m to DER customers.**

For wider system and environmental benefits, our dynamic outage management approach continues to provide benefits by maximising the availability of low carbon generation during outages. Combined with reducing curtailment at high outage sites, this has driven **£11m of wider system and £8m of environmental benefits this year.** Due to the delayed timeline of Connections Reform this year and the impact on receiving connections offers, we have revised our forecasted benefits from products that accelerate connections behind transmission constraints, such as Technical Limits. However, we are still committed to enabling earlier connections with these products, with a pipeline of 2.6GW of projects. We are forecasting 620MW of renewables to connect in the final two years of RIIO-ED2. We have therefore reduced our total RIIO-ED2 forecast for wider system and environmental benefits to reflect this, to £136m (32% below our business plan target).

What this means for customers' bills

We are committed to running the optimal network that enables economic growth and decarbonisation, at the lowest cost for our customers. The total net benefit of flexibility on customer bills over RIIO-ED2 is £160m, leading to an estimated £10 reduction in bills per domestic customer over the period – 2.8% of the average total distribution bill component over RIIO-ED2. In addition, customers who participate in our demand turn-up programme have benefitted, on average, from £18 of free electricity this year, 28% of the average distribution bill component for this year.

1.2. How we measure, evidence and track benefits

1.2.1 We use KPIs to track benefits and proactively course-correct to increase benefits where possible

We publish quarterly performance against our KPIs on our website.

Exceeding target (green) | Below target (orange)

KPI	24/25 performance	25/26 performance	vs target
Year-ahead forecasting accuracy for all our substations	Primary: 90.9% Secondary: 77.3%	Primary: 89.2% Secondary: 67.3%	Below target (1)
Year-ahead forecasting accuracy of our LCT forecasts	BEV: 89%	BEV: 78.3% Domestic HP: 92.6%	Below target (2)
Conversion rate from contracted to onboarded flexibility	31%	70%	Exceeding target
Benefits from flexibility based on contracts to date	£114m	£121m	Exceeding target
Curtailment efficiency of flexible connections	98.9%	98.6%	Below target (3)
Connections unlocked via Technical Limits	0.6GW	-	- (4)
Enhanced network access during planned outages	165GWh	190GWh	Exceeding target
Flexible connections	458MW (55 sites)	853MW (78 sites)	Exceeding target
Customer satisfaction relating to our network planning responsibility	9.64	Results due June 2026	
Overall DSO customer satisfaction	9.59	Results due June 2026	
Instances of non-compliance with DSO: DNO Operational Agreement	0	0 (one instance of non-compliance resolved)	Exceeding target
Year-to-year capacity headroom out performance	108.4%	101.5%	Exceeding target

2025/26 results for the regularly reported evidence (RRE) that are not in KPI form were as follows:

RRE4 Our Distribution Network Options Assessment (DNOA) results signposted capacity needs for 86 sites, with flexibility as the optimal solution for 14 of them.

RRE5 Out of 119,820 transformers, the utilisation for 9,688 was determined using monitoring equipment and 110,132 using smart meter aggregation and advanced analytics.

This year, we have made the following course corrections when issues have been identified through our KPIs:

1 Tightening our Operational Agreement

To address year-ahead network forecasting accuracy, we have added a new service level agreement (SLA) to our DSO/DNO operational agreement (see chapter four for more details). This is to enhance the accuracy and data coverage in the Network Planning Tool.

2 Improving our LCT forecasts

Accuracy of our EV forecasts in our DFES fell due to lower-than-expected EV uptake in the face of economic uncertainty. To address this, we adjusted our EV forecasting to factor in more accurate vehicle stock inputs, supply constraints and consumer behaviour based on current EV uptake incentives. This should lead to more accurate EV forecasts going forward. We also started tracking accuracy of heat pump forecasts.

3 Supporting customer sites with high curtailment

Where sites have experienced higher-than-expected levels of curtailment, we identified this promptly through daily site-by-site monitoring. We worked with the DNO to reduce curtailment through adjusting outage schedules, changing circuit ratings and using dynamic line rating – see section 5.2.2 for more details. As a result, we have been able to recover our overall curtailment efficiency to 98.6%, even with an increase in the number of connected assets.

4 Focusing where we can make the greatest difference to connections

Connections Reform has meant we have been unable to unlock connections via Technical Limits this year. In the context of increasing focus on demand connections, we are adding a KPI to measure our impact in accelerating strategic demand connections.

1.2.2 We have maintained consistency and aligned our approach with other DSOs in measuring and evidencing benefits

We have maintained a consistent systematic approach to reporting benefits that stakeholders can trust. To ensure transparency and robustness, our benefits methodology reports only benefits that can be directly linked to our activities, and avoids longer-term estimates, indirect impacts and speculative assumptions.

The key features of our approach are:

- Each benefit area has a theory of change and quantification methodology, which results in a clear and defensible impact pathway from activities to benefits
- We quantify benefits in line with the HM Treasury Green Book and Ofgem's established cost-benefit analysis (CBA) methodology. This means that we only quantify and account for benefits from DSO activities that we can evidence
- Where benefits cannot be robustly quantified – for example, elements of our collaborative work in local areas – we describe these benefits qualitatively
- Our benefits approach and results are independently assured by an independent provider, Complete Strategy.

Aligning benefits reporting across DSOs

In response to DSO Performance Panel feedback from previous years, this year we have worked with the other DSOs to improve consistency and comparability between DSOs. As part of this work, we aligned on 13 key elements of benefits quantification, including price base, treatment of counterfactuals and how network benefits are shared with customers. Our approach was already largely consistent with these key elements. We adapted in the key areas of difference: updating our price base from 2022/23 to 2020/21, and standardisation of the reporting of net social benefits.

We engaged thoroughly in this work, ensuring our Supervisory Board was up to date with developments and seeking approval for changes. We worked with the other DSOs to make sure that all the benefits agreed upon were to be quantified rigorously, in line with our existing methods. See the appendix here for more detail.

1.3 Quantification of our benefits

1.3.1 We have realised £94m of benefits to consumers this year

Benefits from flexibility are driven by avoided or deferred network reinforcement costs, allowing us to increase capacity on the network and accelerate connection of low-carbon technologies quickly and at the lowest possible cost. Unlike other DNOs, £410m savings from flexibility are assumed within our RIIO-ED2 settlement and are not subject to a 50% sharing factor. This means that 100% of these savings flow to bill payers rather than shareholders.

This year we have realised £94m of benefits, an outperformance of £11m from our £83m RIIO-ED2 business plan target for flexibility benefits. This outperformance is driven by procuring flexibility at an additional 126 sites, which were identified through our DNOA process. This is a 6% increase on the benefits realised in 2024/25, demonstrating the maturity of our flexibility markets to maintain a steady supply of flexibility from our flexibility service providers. We are forecasting to realise £417m total flexibility benefits over RIIO-ED2, achieving our business plan target of £410m. Our savings have come from 12 high-voltage and 114 low-voltage sites where we have secured sufficient flexibility to meet network needs, reducing the need for load-related reinforcement in RIIO-ED2. These estimated savings have been built bottom-up, based on the site-by-site evaluation in the options assessment process.

Benefits to consumers

2024/25
£89m

2025/26
£94m

£417m
RIIO-ED2 total forecast

Two-thirds of EV chargers connected in our area are now registered to take part in flexibility services, showing how widespread participation has become. This year we signed 24 MW of long-term flexibility contracts in addition to existing agreements. The benefits from procured flexibility are measured at the point when reinforcement spend would otherwise have needed to take place, as outlined below:

How we calculate flexibility benefits

A site is put forward through the DNOA process for flexibility procurement to meet its capacity needs. 1	Counterfactual: the capex cost of traditional reinforcement of that site is profiled over three years. 2	Once 100% of the site's capacity needs are met by procured flexibility, we bank this avoided counterfactual cost as a consumer benefit. 3

Impact pathway: Benefits to consumers

Activities	Outputs	Outcomes	Benefits
• Identifying opportunities for flexibility through DNOA • Running flexibility tenders	Procurement of 24MW of flexibility	Full capacity needs secured through flexibility at 12 high-voltage and 114 low-voltage sites	Consumers save £94m through avoided reinforcement

Considering benefits beyond RIIO-ED2

In the context of Ofgem's guidance for ED3 business plans, we are exploring a broader range of use cases for flexibility: including accelerated connections, curtailment reduction, voltage management, outage management and investment optimisation. In many of these areas we have run existing trials and understand what is required to scale up. Where we have had gaps, such as for voltage management, we have established a proof of concept and initial learning to guide our future decision-making. Across each of these use cases, we believe that there is significant opportunity to build on the experience, momentum and capabilities we are developing during RIIO-ED2, for example in understanding the pricing and reliability of flexibility and utilising it through day-ahead markets.

In particular, we see continued value in optimising our investment programme to 2050, using flexibility to reduce the volume of concurrent network upgrades required and avoid locking in additional costs before the impact of new technologies such as vehicle-to-grid and affordable household batteries on peak demand is fully understood.

As part of the ED3 business planning process, the DSO has led development of alternative investment options which seek to explore trade-offs between ED3 costs, costs to 2050 and uncertainty. In doing so, we have built on our annual forecasting and network options processes to set out criteria for making investment decisions that work for consumers today and in the future.

1.3.2 We have realised £106m of benefits to DER customers this year

We deliver benefits to DER customers, including generators and battery storage, through our innovative connections solutions, which allow customers behind both distribution and transmission constraints to connect sooner and avoid the cost of associated reinforcement while we effectively manage existing network capacity. This year, we have also quantified benefits to DER customers through the use of The Connections Lab, our UK-first, free, publicly available web app that lets customers run detailed pre-application connection assessments anywhere on our network.

The benefits this year come from:

- £104m from connecting 20 customer projects via flexible connections in areas with distribution constraints. We use our DERMS to offer customers an option to connect sooner and without paying for network reinforcement, in return for moderating their output at times of high network constraints.
- £2m of savings to DER customers who used The Connections Lab to avoid the need for multiple speculative connections applications. There is also a significant time saving from this, which we have not quantified yet.

Benefits to DERs

2024/25
£12m T-Level constraints
£61m D-Level constraints

2025/26
£2m The Connections Lab
£104m T- and D-Level constraints

£432m RIIO-ED2 total forecast

We have delivered increased flexible connections capacity this year, with over 313MW going live. This is a sizeable increase in the amount of capacity that we connected in 2024/25, demonstrating the continued and growing value these flexible connection products offer to our customers. We now forecast a total of £432m benefits during the RIIO-ED2 period, which is over double our RIIO-ED2 business plan forecast. This reflects the growing demand for network access from DERs, the maturity of our DERMS system being able to be used at more sites and the tailored, hands-on service we have delivered to our DERMS customers. Alongside new methods we have employed, this has enabled more DERs to connect quicker at lower cost. This year, we have:

1. **Facilitated IDNO customers to access DERMS on our network for the first time,** including for demand-only customers, such as Gridserve's EV charging hub at Cobham Services. An increasing number of demand and generation developers choose to connect through IDNO networks, using DERMS allows these assets to be used more effectively from the outset.

2. **Recommended the DNO rollout of load blinding detection, a smart device that prevents high network loading being interpreted as faults.** By allowing us to tell the difference between a genuine fault and a safe, high-load situation we can safely release capacity that would otherwise be held back.

3. **Introduced profiled connections through our DERMS system.** A profiled connection agrees a minimum guaranteed supply with the customer, while giving them access to extra capacity at off-peak times, facilitated through our real-time network monitoring. The approach cuts connection costs and waiting times for energy-intensive projects, helping customers to get the power they need sooner.

4. **Used DERMS to solve long-standing voltage constraint issues** that limit how much power generators can export back to the network. In its first use, we saved the customer £4m in connection costs and accelerated their connection by several years.

How we calculate DER benefits for a distribution constraint

1. A customer connects flexibly in an area with a distribution constraint, using our DERMS to do so ahead of reinforcement.
2. Counterfactual: the cost of reinforcement to provide a firm connection. We only calculate the proportion of costs payable by connecting customers.
3. Then this counterfactual cost is the benefit we bank. We only count this the first time it is triggered by a connecting customer.

How we calculate benefits from The Connections Lab

1. A customer runs, for example, five studies on The Connections Lab, allowing them to see the time and cost to connect at various sites for optioneering straight away.
2. Counterfactual: the total cost of each of these studies as connections applications (which would also have taken longer).
3. We assume that they do more studies due to the ease of the tool, so savings are downrated by a factor. The total savings are the number of studies run, downrated by this factor and multiplied by the cost of each application, minus the cost of final applications made.

Impact pathway: Benefits to DERs

Activities	Outputs	Outcomes	Benefits
• The Connections Lab	• Customer self-serves connection assessments	• Customer establishes viable connection points before making an application	• Cost savings from reduced number of connection applications
• Facilitating flexible customer connections via DSO solutions in: • Distribution-constrained areas • Transmission-constrained areas	• 20 customers connect flexibility at sites where general or SGT reinforcement would have been required	• Avoided cost of reinforcing the network per connecting customer	• Cost savings for customers connecting flexibly in constrained areas

Last year, we estimated how the take-up of flexible connections was helping us to meet our Clean Power 2030 capacity allocations. We have updated this analysis to take into account our current pipeline and further developments in Connections Reform, which includes a reduction in our capacity allocations as a result of the new connections queue. As a result, we now expect take-up of flexible connections solutions by 2028 to account for 17% of UK Power Networks' capacity allocation under Clean Power 2030.

1.3.3 We have realised £19m of wider system and environmental benefits this year

We enable wider system and environmental benefits by increasing the capacity and network access of renewables connected to our network, which displaces fossil fuels as the marginal generator. These benefits this year are driven by reduced curtailment of low carbon generation. This year, we supported 19 different outages through dynamic outage management, focusing on larger impact outages impacting 36 different DER customers. In total, we enabled an additional 190GWh of generation, resulting in an estimated 33k tCO_2e saving. Using HM Treasury Green Book carbon accounting methods, this carbon reduction is quantified as a monetary benefit of £8m. Since the additional generation has very low marginal costs, by displacing gas generation it will also have reduced the wholesale cost of electricity, with an estimated impact of £11m.

	2024/25	2025/26	RIIO-ED2 total forecast
Wider system benefits – reduced curtailment	£10m	£11m	£81m
Environmental benefits – reduced curtailment	£8m	£8m	£55m

How we calculate wider system and environmental benefits

Reduced curtailment from dynamic outage management, which uses day-ahead enhanced forecasting and data sharing to share available headroom among impacted customers

This increases low carbon generation on the network relative to the counterfactual, in which low carbon DERs would have been curtailed

This displaces fossil fuel generation which leads to...

1. Avoided fuel and maintenance costs of running fossil fuel generation, which leads to lower marginal cost in the system, lowering the wholesale cost of electricity: **wider system benefits**
2. Lower carbon emissions: **environmental benefits**

Our dynamic outage management approach to date has delivered the greatest value when applied to larger outages, allowing us to focus resources where the impact is highest. We have now successfully automated key elements of this (see chapter five), which enables us to extend dynamic outage management to a much wider range of outages in future. This will be increasingly valuable as more outages will be required to upgrade the network in ED3. For this reason, the forecasted benefits from this approach have increased in years four and five, totalling £40m.

Impact pathway: Wider system and environmental benefits

Activities	Outputs	Outcomes	Benefits
• Dynamic outage management • Resolving issues at sites with high numbers of outages	• Reduced curtailment of low carbon generation	• Low carbon generation displaces 190GWh of generation from the marginal generator (generally a fossil fuel generator)	• Wider system: £11m avoided fuel and maintenance costs associated with reduced operation of fossil fuel generation • Environmental: 33,121 tCO2e reduction in carbon emissions

Forecasted wider system and environmental benefits

The delay to Connections Reform has limited our ability this year to connect customers using our innovative solutions such as Technical Limits, and we have adjusted our forecasted number of connections for years four and five to reflect this delay. We are now projecting that only projects with protected status, gate two offers, planning approval in place and clear signs of progress will complete their connections by the end of RIIO-ED2. For this reason, forecast future benefits from these solutions are now £36m for the wider system and £22m for the environment.

Combined, this has taken our total forecast wider system and environmental benefits to £81m and £55m. This is 57% lower than our initial RIIO-ED2 business plan forecast for wider system benefits and 4.5 times higher for environmental benefits.

1.3.4 We have realised benefits of £3m to local authorities this year

This year we have again quantified benefits to local authorities, focusing on benefits delivered by our digital tools, the LAEP+ planning tool and ChargePoint Navigator. These tools support local authorities in developing their LAEPs and EV rollout plans.

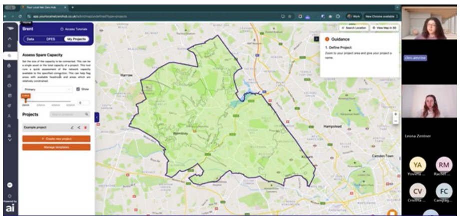
Our Local Net Zero team provides hands-on and bespoke support to the local authorities we serve, enhanced by our digital tools. LAEP+ is a tailor-made, free online energy planning tool that allows users to quickly model and cost a range of decarbonisation strategies. It provides powerful data, scenario modelling and deployment tools in an accessible way. It is in business-as-usual, and this year we have focused on increasing uptake and usability for councils and their collaborators.

Benefits to local authorities

2024/25
£3m

2025/26
£3m

£9m
RIIO-ED2 total forecast



Screenshot of one of our LAEP+ training sessions.

To strengthen our support, we re-focused our detailed, drop-in training sessions to particular use cases, in direct response to feedback from local authority officers that this is what they would find most helpful. As well as live chat within the tool, we now also offer one-to-one support calls, making support more visible for collaborators who have been invited to the tool by local authorities. We have had over 100 live chat enquiries this year, over double the amount from last year. We have supported local authorities served by multiple DSOs through clearer in-tool information. On behalf of the DSOs who use the same LAEP+ platform, we initiated discussions with the vendor of the tool on the feasibility of a single sign-in.

In the absence of this tool, each local authority would have to incur the time and cost of either building or procuring its own LAEP development tools and data. We have conservatively estimated that the LAEP+ planning tool saves 25% of the cost of compiling a LAEP, based on cost data from local authorities and expert interviews.

ChargePoint Navigator is a web-based tool that we developed and launched last year, which supports local authorities to plan public EV charging infrastructure in their areas more quickly and easily. The tool automates the process of site selection and planning public charging networks, increasing access to charging for those without off-street parking. This has been very successful, and is now helping five delivery programmes that have secured £28m of funding to install chargepoints across 32 local authorities with six different chargepoint operators. These five delivery programmes have collectively mapped 72 scenarios covering over 10,000 charge points.

This year we evolved the tool beyond site selection, integrating planning data, rollout monitoring and connections guidance into a single platform, to help with real-world rollout of EV chargers (see chapter two for more details). With 80% coverage within our licence areas, we have quantified the benefits for our local authority customers as the staff time, consultancy and data procurement costs saved by using the tool for planning public charging networks.

Impact pathway: Benefits to local authorities

Activities	Outputs	Outcomes	Benefits
• DSO supports local authorities, including through the LAEP+ planning tool and ChargePoint Navigator	• Local authorities have access to better data, tools and training • Local authorities use tools and data to request LEVI funding and plan the rollout of EV charge points	• Local authorities source external support in producing LAEP efficiently • Local authorities make funding applications and plan EV infrastructure rollout efficiently	• Cost savings to local authorities in producing LAEP • Cost savings to local authorities in making funding applications and planning EV infrastructure rollout

1.4 We worked with local actors to take a proactive role in regional investment planning and deliver additional outputs

We take regional, cross-sector investment planning seriously and work closely with local partners to deliver whole system benefits. This year we strengthened partnerships with local authorities and expanded collaboration with NHS trusts to ensure our support is targeted and effective, as reflected in a 9.64 customer satisfaction score for network planning. Over the past three years, we have built a strong partnership with UK100 to help councils progress their net zero ambitions. Together we provide clear, practical guidance and engage directly with council leaders, MPs and local government officers through UK100's Annual Parliamentary Reception to address challenges and shape effective support.

This year, we have collaborated with UK100 on two further guides for our local authorities and those across the UK:

Powering Local EV Infrastructure: a guide for councils written in collaboration with Cenex and UK100. This is a concise, plain English guide to help local authorities plan the right rollout of EV charging infrastructure for their area. It tackles accessibility concerns, funding arrangements and site selection, allowing all local authorities to support the electrification revolution.

We published our Unlocking Flexibility: A Guide for Local Authorities in collaboration with the Association for Decentralised Energy (ADE) and UK100, building on our earlier guide and refining it for local authority needs. The update was shaped by targeted engagement to ensure the guide reflects real customer experiences and priorities.

This year, following requests from local authorities to expand our support to other local organisations to access GB Energy's new solar funding for schools and hospitals, we partnered with NHS England and community energy groups to accelerate solar deployment. Following on from our ChargePoint Navigator approach, we developed Opportunity Finder with three pilot trusts and two community energy groups. The tool combines public and proprietary data to provide early digital pre-connection support, helping users quickly identify the best buildings for rooftop solar and navigate directly to the next steps with our connections team. Co-design with pilot trusts and community energy groups ensured a simple, practical tool that speeds up project planning, reduces effort for trusts and improves the quality of projects reaching our teams. The proof of concept was launched in March 2025. When fully launched in summer 2026, it will help more organisations cut carbon, lower energy costs and deliver benefits.

We have worked closely with local authorities, other local actors and NESO to ensure accurate local inputs were reflected in the transitional Regional Energy Strategic Plan (tRESP). We also worked to ensure the most mature areas, such as Freeport East, were progressed into Strategic Energy Needs. We undertook joint option development, shared modelling assumptions and collaborated on refining key uncertainties to make sure the best possible regional information has been used in NESO's centralised planning process.

We expanded our Local Authority Common Ask this year, partnering with National Grid Electricity Distribution (NGED), Scottish and Southern Electricity Networks (SSEN) and SP Electricity North West (SPENW). The Common Ask standardises how councils share LAEP information, making local energy planning faster, simpler and more consistent nationwide. We have now partnered with all networks in or neighbouring our area, including gas network operators Cadent Gas and SGN.

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

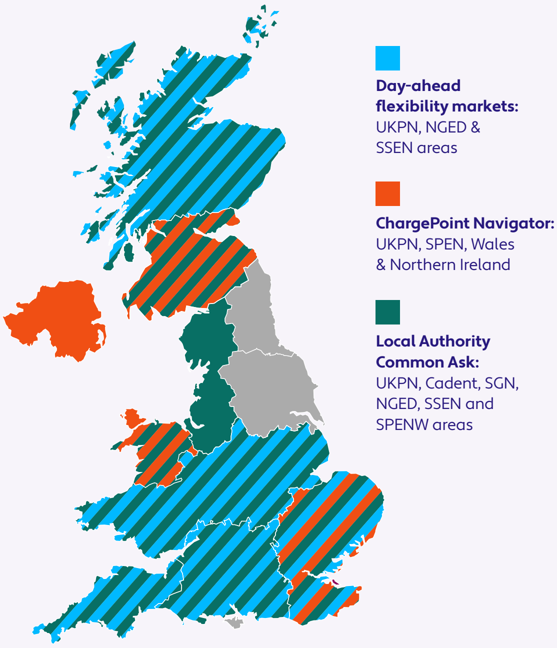
1.5 Maximising benefits nationwide

With our support, a wide range of our tools and solutions have now been adopted outside our region and even our sector. These include:

1. We supported NGED and SSEN in introducing **day-ahead flexibility markets** in their areas by sharing the best practices and lessons learned from our experience, increasing the potential coverage from 28% to 67% of Great Britain. We also saw wider adoption of demand turn-up within NGED's area.

2. **ChargePoint Navigator** has now been rolled out across Wales by Transport for Wales. It has also been adopted by Northern Ireland Electricity Networks and is being rolled out by SPEN.

3. Last year, we launched the **Local Authority Common Ask** with local gas networks Cadent Gas and SGN, to standardise the data shared as an output of LAEPs. This year, we have expanded this to include three further DSOs, NGED, SSEN and SPENW.



1.6 We have accelerated strategic demand connections for wider system benefits

We have worked with NESO and National Grid Electricity Transmission (NGET) to unblock demand connections that are stuck behind transmission constraints. While accelerating generation connections remains a strategic priority for the sector, the growing volume of demand connections has become an increasing area of focus. Both Ofgem and DESNZ have taken action: Ofgem published a consultation on demand connections reform in February 2026, outlining its intention to enable faster connections through regulatory reform, and DESNZ launched the Connections Accelerator Service (CAS) to boost support for strategic demand projects. We have actively engaged with this work. We received pilot projects through the CAS, and through collaboration and innovative connections support we have been able to accelerate connections at:

1. **West Suffolk, Hinchingbrooke and James Paget hospitals:** We found that for all three sites, we could already offer them a pathway to their full needs (up to a six-fold increase in one case) through an annual ramp-up of available capacity, bringing forward their connection dates to between 2028 and 2030, to align with their build programmes.

2. **Freeport East:** Last year, we began engagement with Freeport East to help them plan for 500MW of additional capacity. As a result of this engagement, Freeport East were able to understand and communicate their requirement and successfully communicate this to the RESP. CAS then designated their initial 40MVA connection as one of strategic demand. Initially, this had an expected connection date in the mid-2030s due to transmission constraints. We are working extensively with NESO and NGET on a solution using a new Grid Supply Point (GSP) to relieve constraints in the area, and are working with the customer to explore the viability of an interim non-firm connection managed by DERMS to bring forward the connection in the meantime.

We are working with data centres to accelerate their connections

In parallel with our work with DESNZ on CAS, we are exploring further new tools that could increase access for new demand connections that are held up behind transmission constraints. Data centre operators told us that while they have large expansion plans, they are facing up to ten-year connection delays in some areas due to transmission constraints. In response, we are developing a new flexible connection approach.

Once implemented, this will deliver wider system benefits by making better use of existing network capability, reduce the need for 'worst case' capacity assumptions, and help manage constraints through more active, data-led operation. By enabling earlier, flexible access where it is safe to do so, we can support timely investment and growth while longer-term reinforcements are delivered. We are planning to implement this new approach this year in coordination with NGET and NESO, to demonstrate a practical and investable interim solution.

At the same time, we have provided data centre developers with earlier and better visibility of network capacity and constraints. Led by the DSO's Regional Development team, we were the first DNO to sign up as a strategic partner of the Data Centre Alliance to strengthen engagement with the sector, and have used this engagement to share network data and information to help developers navigate the connections process effectively (see chapter two for more details).

2 Data & Information Provision

2.1 Our strategy: proactive data and digital tools for customer benefit

Our work is grounded in proactive and continuous engagement with customers and stakeholders, ensuring our priorities respond to the challenges they face, including Connections Reform. We focus our efforts where they will deliver the greatest value, balancing customer-led requests with strategic oversight through our portfolio board to ensure effective resource management and maximum system-wide impact. We assess our activities on immediate customer benefit, wider contribution to the energy system, and maintaining leadership within the sector. Our success stems from our dedicated in-house DSO data team who bring core digital competencies and the latest AI technologies the DSO.

Priority

Customer-led delivery with strategic prioritisation to tailor the scope and accessibility of data provision.

Key achievement

Responding to new customer needs by creating Opportunity Finder to support NHS trusts, community energy groups and schools access solar funding and build credible plans.

Priority

Sector leadership through broader system impact and openness.

Key achievement

We have contributed, created and commissioned open-source software in Python – the world's most popular programming language – for wider access to our network models.

Priority

Continuous improvement of granularity, accuracy, systems and capabilities.

Key achievement

Our new Network Planning Tool improves connections queue data quality going into The Connections Lab, supporting customers with Connections Reform.

2.2 We are leading the sector in promoting comprehensive planning, operations and market data availability

Building on our extensive data offering, we have expanded and strengthened our data releases this year. We have introduced new datasets and enhanced existing ones to support comprehensive planning, operations and market activity:

Initiative	Type	Customer impact	API accessible	Methodology and data quality statements	New or upgraded dataset
Network Planning					
Opportunity Finder	Software	Users can compare locations, build stronger funding cases and plan projects more efficiently, self-serving for DNO pre-connection support for PV rollout	N/A	✓	New
The Connections Lab	Software	Better reports for customers due to internal and external interoperability and improved planning data quality, new features and performance enhancements	N/A	✓	Upgraded
ChargePoint Navigator	Insights	Now includes clear, actionable data on costs, eligibility and timelines as well as enhanced site selection functionality	N/A	✓	Upgraded
Regional Energy Dashboard	Insights	Brings all essential datasets into a single, personalised view for each geographical authority district	✓	✓	New
Large Demand Lead Times	Dataset	Indication of potential lead times when requesting to connect very large demand sites, such as large data centres, that will have an impact on both the distribution and transmission network	✓	✓	New
Long Term Development Statement (LTDS) Common Information Model (CIM)	Dataset	Our first fully digitalised LTDS gives customers consistent and machine-readable access to the data they need to plan and connect low carbon projects	✓	✓	New
Network Operational Data Dashboard (NODD) enhancements	Dataset	Expanded to enhance transparency and usability during Connections Reform, integrating new data sources and forecasts to provide clearer GSP- and local authority-level insights into queue outcomes, demand, and renewable capacity to better support customers and net zero planning	✓	✓	Upgraded
Secondary Site Transformers	Dataset	Provides network transparency with geospatial mapping of our transformers	✓	✓	New
Operational Data					
Customer Interruptions	Dataset	Provides clear, verifiable evidence of how reliably the network performs and how outages are handled	✓	✓	New
Power Quality Data	Dataset	Provides credible, long-term evidence of the actual quality of electricity supplied across the network, using consistent, industry-recognised statistical methods	✓	✓	New
Market Information					
Flexibility Dispatch Data	Dataset	Provides comprehensive flexibility dispatch data daily on on where we dispatch, under what product, for how long, and the size and price of the dispatch	✓	✓	Upgraded
Other Service Offerings					
Pandapower	Software	Enables customers to run detailed, licence-free power-flow simulations and advanced network analyses	N/A	✓	New
Python Toolkit	Software	Sharing methodologies, tutorials and examples as well as access to our API so our transparent data quality methodology is available to all users	N/A	✓	New

Software Insights Dataset

2.3 We have improved our services and built a strong data culture

Our in-house development model with a specialised data science team within the DSO continues to give us the flexibility to deliver improvements rapidly and ensure alignment with data best practice. We were pleased to see Ofgem's support for in-house capabilities in the Sector Specific Methodology Consultation for ED3. This embedded resource is delivering further benefits by upskilling the wider DSO team to create a strong data culture. For example, a member of the DSO regional development team created the UK's first large demand insights dashboard (more information below) with the in-house data team and AI support.

2.3.1 We have improved standards through data quality, processes and standardisation

This year we strengthened our data quality through automated quality control, improved metadata completeness and more reliable network models and power quality datasets. These improvements mean customers can access information that is more accurate, easier to interpret and better suited to real-world planning and operational needs. By increasing the granularity of key datasets where it adds genuine value, we are giving both our internal teams and external users clearer, more actionable insights, to help them make faster, better-informed decisions. This reflects direct feedback from our customers and Ofgem.

Targeted improvements to data quality and completeness across key operational datasets

The Network Planning Tool (NPT) centralises all connection and planning data into a single, modern platform, replacing three legacy systems and introducing automated quality checks and consistent data governance. It provides more consistent inputs to planning tools such as The Connections Lab. This leads to a more resilient and efficiently planned electricity network.

Enhanced the processes that identify gaps and prioritise improvements

Our process automatically identifies data issues, avoiding the need for our previous manual ad hoc quality checks. This assessment enables us to carry out improvements where our customers need them most. All of our datasets are now processed through the same system for enhanced security, reliability and resilience. The same framework will apply across the Open Data Portal (ODP).

Worked towards top cyber security industry standard

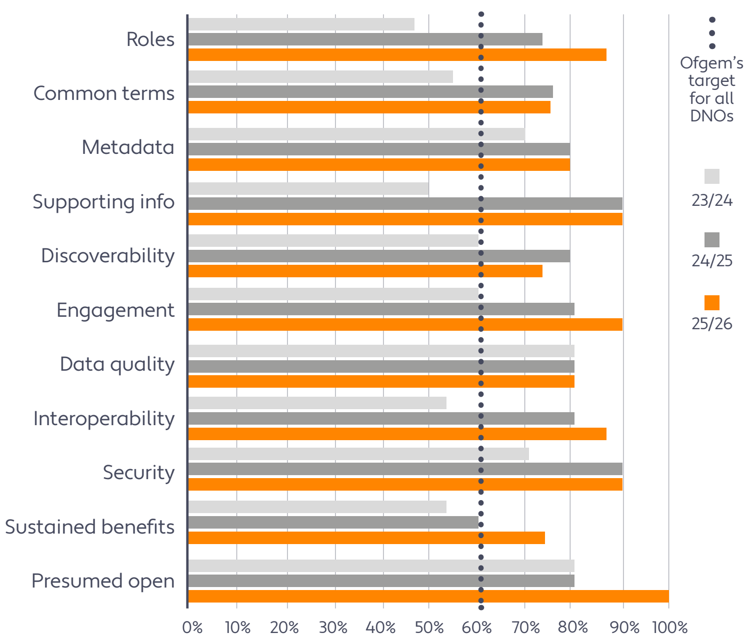
We have worked to achieve the top cyber security industry standard, Cyber Assessment Framework Enhanced Profile. We have had this work independently assured and are on track to achieve the standard two years ahead of schedule. This strengthens protection of operational systems as our digital services, DER integration, flexibility markets and data sharing continue to grow. Aligning with the Enhanced Profile under RIIO-ED2 and NIS will ensure our systems remain resilient amid an evolving threat landscape.

Together, these advancements provide a more accurate, consistent and trusted data foundation, improving user confidence and supporting better planning, decision-making and system resilience.

Our industry-leading Ofgem Data Best Practice maturity score improved from 62% in 2023/24 to 84% in 2025/26, demonstrating that customers are benefitting from our more robust processes, clearer documentation and stronger user guidance. Customers can now navigate our datasets with more confidence. We also contributed to Ofgem's work on applying this approach more widely, which is helping make energy system data more consistent and easier to use across the sector.

We reviewed and updated our own framework this year to cover gaps that we identified and made sure that we are continuously striving to improve. In doing so, an extra criterion was added to discoverability, which now includes extent of data sharing. While this reduced our score in this criterion, it encourages us to proactively share our datasets.

UK Power Networks' Data Best Practice score year on year



Wider sector benefits

UK Power Networks continues to chair the Open Data Working Group, attended by most DNOs and gas networks, to drive sector-wide standardisation and peer review. This has led to tangible progress, including agreeing standards for data licences and targeted ODP improvements with our common vendor such as download speeds.

2.3.2 We have demonstrated sector leadership in providing open source and easily accessible data

We continue to lead the sector in data and information provision, guided by ongoing customer engagement. Customers highlighted technical and cost barriers to accessing our APIs and network models, and in response we have gone further by contributing to, creating and commissioning open-source solutions that improve accessibility for all users.

Contribute: delivering sector-wide value through readily available open-source contribution

Our data science team contributed to the open-source delta-rs project, a widely used open-source data technology that supports large-scale data platforms operated globally by major technology companies. Our contribution improved data storage efficiency by 80%, reducing the DSO data team's annual data storage costs and enabling longer historical weather datasets to be retained for model training. The same improvement is available to other users of the open-source software, helping reduce the need for additional data-centre infrastructure.

Create: UK Power Networks' Python Package – customer-led open-source innovation

Our public code repository began as a customer-led idea from power system data users at the University of Birmingham. Through ongoing collaboration with the university's master's students, we were asked to build and openly share reusable methodologies that save time, avoid duplication and unlock insight. The resulting Python toolkit, ukpyn, handles the API calls on behalf of the user, and has methodologies available with detailed code examples and practical tutorials and how-to guides.

Commission: pandapower – open-source network modelling supporting DSO leadership

We've demonstrated leadership in increasing the accessibility of network models through the use of pandapower, an open-source Python tool that enables advanced, automated modelling and analysis of electricity distribution networks. This allows customers to access our network models without having to pay for proprietary software (see 2.5.2), which gives them clearer insight into network constraints and opportunities, improved planning confidence and more effective use of flexibility solutions.

These examples demonstrate how we have embedded investment in open-source and API-enabled capabilities into our approach, to give customers access to high-quality data and modelling tools.

2.3.3 Our approach to data provision is tailored, transparent and grounded in engagement

Our Open Data Portal (ODP) continues to scale rapidly with dataset volumes, API usage and visitor numbers all increasing year-on-year. More than **19,000 registered users, 9.2 million downloads from APIs, and 1.1 million manual downloads** show how quickly stakeholders are turning to our data to inform planning, investment and operational decisions. This growing demand demonstrates the value of making high-quality data simple to access and sets the foundation for the next part of our work: tailoring this information to different customer needs.

Simplifying energy planning for local authorities

Building on our unique LAEP ODP page and feedback from local authorities and LAEP practitioners, we created a Regional Energy Dashboard on our ODP that brings all essential datasets into a single, personalised view for each geography or local authority area. Local authorities and LAEP practitioners benefit from a streamlined, accessible view of network headroom, constraints, flexibility services and connected technologies, helping them plan more effectively without navigating multiple tools.

Getting the data customers need, quicker

In direct response to feedback from the DSO Performance Panel last year, we challenged and worked very closely with the ODP provider, Huwise, to dramatically improve performance on large datasets with new 'static downloads'. A new high-speed download feature reduced the time needed to access our largest dataset from four hours to four minutes. This improvement will now benefit all Huwise customers, including four other DNO groups and one Transmission Network Operator (TNO), giving stakeholders across multiple networks much quicker access to information. This performance improvement has also allowed us to introduce AI-enabled search functionality.

Delivering more insight for customers through the NODD

We have significantly expanded the NODD. In response to Connections Reform, we now provide a transparent view of NESO's queue formation outcomes alongside observed attrition across key technologies, giving customers a clearer, GSP-level understanding of what is genuinely progressing. We have streamlined and integrated data sources, incorporating large demand data into a single transmission-interface view and publishing our Week 24 demand forecast for each GSP to improve usability and insight. We extended the NODD to include local authority-level views to support councils and local actors in net zero planning.

2.4 We continue to create new products and collaborations to deliver stakeholder value

Over the past year, we have continued to expand and improve our digital tools and collaborative approaches to deliver wider value for developers, local authorities, charge point operators and system partners.

2.4.1 We have supported Connections Reform by enhancing The Connections Lab

Understanding and preparing for Connections Reform remains a major priority for us and our customers. The scale of change means customers need clearer insight into where and how they can connect, along with faster, more consistent assessments. Developers, consultants, local authorities and other emerging groups are all relying on better data to make decisions earlier in the process. In response, we've focused on strengthening the tools, datasets and guidance that sit at the heart of the new reform framework. By improving network models, publishing higher-value datasets and enhancing customer-designed tools, we are helping customers navigate the new system with greater confidence, clarity and control.

From the largest strategic developments to the smallest individual applications, we are ensuring every connection journey benefits from clearer data, better insights and faster decision-making.

We enhanced The Connections Lab to facilitate new connections offers

Since 2023, we have been working with developers, consultants, IDNOs and other interested parties to provide the data and insights needed to arrive at realistic curtailment estimates. Last year, we created The Connections Lab, our UK-first, customer-designed software. Since we launched The Connections Lab, we have had many rounds of customer feedback, including a deep-dive workshop at our Connections Roundtable. Using this feedback, we enhanced it further this year to support Connections Reform and offer leading insights on demand applications. This will allow us to rerun all 184 gate two offers in a single month, which is nearly 20 times as many as we normally get in in a year.

Jamie Bright, Data Science and Development Manager, with data customers at our Data for Connections Roundtable in October 2025.

We have introduced features most highly prioritised at our user webinar last year:

1. We introduced an identification system allowing any user to load any study using a unique configuration ID. The critical benefit of this is that all the settings used by the DNO planner during the formal curtailment analysis can be repeated and reproduced by the applicant. This means customers can refresh their curtailment estimate their offer using the latest data on the queue and the network model itself at any time.

To date, The Connections Lab has seen:

- **169** Companies registered
- **3.1k** Studies run
- **105GW** Analysed

2. We now allow users to replace our standard planning profiles – designed to evaluate network risk – and instead replace them with any scenario or their own bespoke operating profile. This means they can leverage the power of The Connections Lab algorithm to test any number of scenarios.
3. We have improved the reliability of outputs from The Connections Lab by strengthening the quality of the demand data and queue data that sits behind it. Through the NPT, all three licence areas now use one shared planning database with consistent standards and automated data checks. This reduces errors, removes inconsistencies and ensures studies are based on the most up-to-date information.

We have also introduced a clearer assurance process with network planning engineers to review data and modelling assumptions before results are shared. For customers, this means greater confidence that network study results are accurate and fair. It supports better investment decisions, clearer connection options, and reduces the risk of delays or unexpected costs later in the process.

2.4.2 We have supported data centres through data and tools

1. We have **provided data centre developers with earlier visibility of constraints**, clearer signals on viable locations and greater confidence to navigate the connections process effectively. We were the first DNO to sign up as a strategic partner of the Data Centre Alliance to strengthen engagement with the sector. We developed a connections guide to share with members.

2. We worked on a collaborative model with the Greater London Authority (GLA) and Essex County Council to provide them with **the spatial and capacity information they needed in the form they needed it** to access government funding and plan for data centre deployment. We also expanded this approach to our support for data centre developers.

3. Working with Regen, we **mapped optimal regional development zones** for data centres, **aligning network capacity insights with emerging development clusters.** This gives developers a clearer view of where capacity is more likely to be viable and where investment can be prioritised.

4. To further improve transparency, we **published the Large Demand Lead Times dataset at GSP level.** This provides an early indication of **potential timelines** for large demand connections, helping developers understand likely programme implications before entering the formal process.

2.4.3 We have grown ChargePoint Navigator to meet customers' evolving needs

Our DSO Local Net Zero team launched ChargePoint Navigator last year to help councils with the rollout of on-street EV charging. Today, 106 local authorities in the UK Power Networks area (80% coverage) are using the tool and satisfaction has remained exceptionally strong, rising from 91% to 94% in the most recent survey cycle.

This year, we improved it with additional functionality for our customers. We listened to stakeholders, who fed back that while the tool had been invaluable for planning, the next stage needed to support real-world rollout. This insight shaped the tool's rapid evolution, including our pivot from large-scale webinars towards one-to-one bespoke engagement with Local Electric Vehicle Infrastructure (LEVI) leads (those councils leading the funding bids and in charge of deployment), enabling personalised support that responds to local needs. With 70% of LEVI leads sharing their data with us through the tool, we are also able to include their deployment pathways into our network planning methodologies and forecasts.

Enhanced site selection functionality to enable faster, more confident, data-driven decisions.

We added an automatic RAG assessment to give local authorities an immediate view of connection viability. This early signal gives a consistent benchmark they can trust and has helped to streamline early pre-application conversations, improving expectation setting from the start.

Enabling local authorities and charge point operators (CPOs) to collaborate.

We have integrated site selection, planning data, rollout monitoring and connections guidance into one single digital tool. This has reduced the administrative burden and improved coordination between local authority teams and the CPOs they use, with everyone having access to the same information in one place.

Clear, actionable data on costs, eligibility and timelines to pinpoint the best sites to fast-track.

We added new connections data and information to ChargePoint Navigator. This gives local authorities a new level of detail on likely connections costs for individual charge points, helping them move faster and with greater confidence.

> "The upgrades made to ChargePoint Navigator this year have made our site selection significantly quicker and easier. Having the local authority and CPO working from the same tool and dataset helps keep the rollout on track. The new connections functionality alone saves us a huge amount of time – with costs, eligibility and guidance all in one place, we can quickly identify which sites are feasible and work far more efficiently with our partners."
>
> **Kent County Council, working with CPO Urban Fox**

In addition to the depth of work ChargePoint Navigator has facilitated within our licence areas, its adoption across the sector in other geographies demonstrates its maturity and value in promoting the rollout of public charging for EVs. Northern Ireland Electricity Networks, SPEN and Transport for Wales have all begun rolling out the tool.

2.4.4 We created Opportunity Finder, a new tool to help customers deploy rooftop solar

We built Opportunity Finder to support new customer groups, in response to GB Energy's c.£180m funding for PV for hospitals and schools. The tool builds on ChargePoint Navigator to provide early, simple pre-connection insights to help users identify viable rooftop solar sites and submit stronger, more realistic applications. The tool brings together a wide range of datasets to help these users explore their estates and receive digital pre-connection support to choose the most suitable site available for solar deployment.

Screenshot of the new Opportunity Finder Tool

It simplifies the creation of evidence-based low-carbon plans and business cases through three simple steps:

1. **Define:** Review and set criteria
2. **Shortlist:** Explore and shortlist buildings
3. **Evaluate:** Assessing deployment costs, benefits and other considerations

To make sure the tool meets real-world needs, we have carried out research interviews with five customers and are now piloting it with three NHS trusts, Community Energy England, Community Energy Pathways and Greater South East Net Zero Hub. They are helping us shape the tool through one-to-one feedback sessions, monthly check-ins and hands-on testing of early wireframes and the beta version.

INTRO BENEFITS DATA FLEXIBILITY OPTIONS DER

2.5 We have deepened and broadened our provision of network data and insights

2.5.1 We have harnessed smart data for greater network insights

Smart meter data, AI-driven analytics and real-world trials form a core part of how we plan, operate and forecast the network to ensure that the increasing number of low-carbon technologies (LCTs) can connect to our network easily. This year, we have focused on using these data sources to improve voltage management, and give customers and partners more accurate insight into how the network is performing today and how it will behave tomorrow.

Real-world trials for voltage management

Voltage has become more visible and material for customers, largely driven by the rapid growth of domestic EV charging. Because EV chargers are required to disconnect outside statutory voltage limits, excursions can prevent charging altogether, directly impacting customers' daily lives. These challenges are projected to increase as installations continue to rise. Reflecting the proposed ED3 DSO role for voltage management, we are moving from reactive response to proactive management. Our automated smart meter voltage monitoring system allows us to pinpoint faults at feeder or substation level and analyse data instantly when complaints arise, significantly improving response times.

Building on this capability, we developed a voltage forecasting tool using smart meter data to predict where issues may occur. Working with AMP and Octopus, we progressed the concept from theory to live operational trials, demonstrating that distributed flexibility can be used through our day-ahead market to prevent voltage excursions (see chapter three). Our next step is to assess the technical and commercial pathway to scale this approach towards full deployment.

Whole system collaboration with NESO

We have collaborated with NESO to help ensure the wider system can accommodate growing volumes of LCTs with confidence. It has been assumed by some parties that LCT growth is overwhelming the grid and directly causing an increase in reactive power, but our joint work does not support that conclusion. By combining UK Power Networks' smart-meter power-factor data, cable information and reactive power modelling with NESO's system-wide view, we found that LCTs have not driven changes in reactive power at our network boundaries. By replacing assumption with evidence, this work supports a fair, proportionate connections reform that accelerates low-carbon connections for customers. Knowing that LCTs are not causing reactive power issues means their adoption will be not be blocked for this reason. We are continuing to work together to identify the real drivers of reactive power issues.

2.5.2 We are democratising the provision of network models for wider accessibility and usability

We published our LTDS in a fully digital, machine readable Common Information Model (CIM) format this year.

In a step change in the modernisation of access to network models and a shift to standardise interoperable network data, developers, local authorities and energy innovators can now plug this data directly into their own planning tools to quickly identify viable connection locations. However, the format requires proprietary power-flow software to be accessed.

Challenge:

33% of our customers told us they don't have access to power-flow software due to restrictions by commercial or academic licences.

We enabled our network models to work seamlessly with the open-source power-system analysis tool pandapower:

Solution	**We funded targeted improvements so that the software could accurately represent our network**	**We released Python tools and helper notebooks**	**We strengthened the quality, accuracy and consistency of the models themselves through enhanced asset data validation and automated checks**
Outcome	Enables customers to load, analyse and test scenarios using freely available tools	Makes it easier for all users to validate assumptions, visualise models and explore different scenarios	Gives customers more accurate, trusted and easy-to-use models

Since launch, 42 different institutions have downloaded and interacted with the LTDS CIM data. This gives customers clearer insight, reduces manual processing, and enables faster, evidence-based investment decisions.

> "We value UK Power Networks' publication of their LTDS in CIM format, an improvement in data accessibility that provides a machine-readable view of the network. We look forward to future profile releases, which will increase its value for developers."
>
> **Alex Ross, Director, Pathfinder Clean Energy**

3 Flexibility market development

3.1 Our strategy: leading by example

UK Power Networks has pioneered the use of flexibility on the distribution network, including through the launch of demand turn-up in 2023/24 and the growth of day-ahead flexibility markets from 2024/25. As described in chapter one, growing the scope and effectiveness of flexibility is translating into consumer benefits, with a net cost reduction of more than £250m since 2023. We continue to share our experience with other DSOs, both within the UK and overseas, and are pleased to see other DSOs following in our footsteps, such as the launch of two other day-ahead flexibility markets in Great Britain this year.

2025/26 has brought the formal appointment of Elexon as Market Facilitator, along with new licence requirements to adopt standard approaches to procuring flexibility. At the same time, industry-wide discussions on ED3 imply a significant evolution in how flexibility is valued and used, while the Clean Flexibility Roadmap has underlined the importance of flexibility to the wider system. While these changes support the long-term growth and impact of flexibility, they have also introduced short-term uncertainty. We have worked closely with flexibility providers to navigate this, while maintaining the momentum we have built to date. Our strengths continue to lie in our ambition, practical experience and understanding of flexibility providers. We have applied these in 2025/26 to demonstrate what more is possible for distributed flex (e.g. managing increasing voltage volatility) and to influence wider change (e.g. ensuring that the Market Facilitator's initial rules make things easier for providers).

Priority

Making it easier to participate in flexibility markets.

Key achievement

Implemented standardised processes while growing the number of operational flexibility providers from 19 to 28.

Priority

Supporting growth in nascent use cases and market segments.

Key achievement

Demonstrated how flexibility services can help manage customer voltage issues.

Priority

Aligning with wider markets to unlock whole-system optimisation.

Key achievement

Enabled NESO to use demand turn-up on the distribution network by introducing daily checks on 350,000 meter points.

3.2 We are making it easier to participate in flexibility markets

3.2.1 We have sought out and acted on stakeholder feedback

We continue to work hard with flexibility providers to develop a deep understanding of their needs. We hosted two in-person Flexibility Forums during the year, engaging with over 125 stakeholders. These sessions engaged a broad range of stakeholders and included additional support options for nascent customer segments and stakeholders with limited knowledge of flexibility. Alongside these forums, we maintained our regular Flexibility Council meetings – now bringing together more than 20 operational providers – for more detailed discussion. The table below highlights the key recurring themes from stakeholder engagement this year:

Stakeholder issue	Our response
Stakeholders asked for UK Power Networks to play a leadership role in developing greater clarity on the long-term value and nature of DSO services	• Demonstrated new uses and value drivers for flexibility (e.g. in managing local voltage fluctuations driven by increased adoption of LCTs) • Proposed allowed expenditure, use cases and incentives for flexibility in ED3 to support market confidence and momentum
Stakeholders expressed interest in clear investment signals to deploy new flexibility, such as batteries	• Collaborated with flexibility providers on the business case and location for strategic batteries. As a result, Octopus plans to deploy batteries to households connected to our Hendon Way substation over summer 2026
Stakeholders reiterated that while DSO revenue can be critical to their business case, wholesale and ancillary services make up the bulk of revenue	• Supported growth of new NESO services within the capacity of the distribution network: Demand Flexibility Service (DFS) and Demand for Constraints • Worked proactively with the Market Facilitator to help shape their approach to improved coordination and revenue opportunities

3.2.2 We are leading the industry in developing standard approaches to flexibility

Most of our flexibility providers work across multiple markets and want to see a standardised approach to flexibility in order to simplify their participation. The Market Facilitator's success – in simplifying participation across DSO and NESO flexibility markets – will be critical to our success as a DSO.


Our Flexibility Council in October 2025.

Having led five of the ten Open Networks workstreams which are transitioning to Elexon as the Market Facilitator, we have played a key role this year in ensuring the smooth handover to Elexon and continued progress towards a standardised approach for flexibility – spanning products, contracts and processes.

We have drawn on our market-leading experience of working with more than 25 operational flexibility providers and dispatching over 36GWh during RIIO-ED2, to ensure that standardisation will meaningfully support improved participation in flexibility markets.

We used our Flexibility Council to raise awareness of the draft 'Day 1' flexibility market rules with operational flexibility providers, validate our views and gather feedback. As a result, we were able to propose to Elexon alternative solutions for metering and implementation of the standard contract, which they accepted. Once the initial set of flexibility market rules was agreed, we shared a simple summary of changes with providers and hosted an Elexon stall at our Flexibility Forum for existing and new flexibility providers.

We are proud to say that UK Power Networks is one of three DSOs represented on the Stakeholder Advisory Board, reflecting the value placed on our experience and approach. In addition to this formal role and participation in working groups, we have met regularly with the Market Facilitator on an informal basis to identify and resolve emerging issues.

3.2.3 We have implemented the flexibility market rules

The table below shows our implementation of the standard flexibility market rules as of 1 April 2026.

	Status	Notes
Sub-market definitions	✓ Compliant from 02/26	
Product definitions	✓ Compliant from 02/26	Led Open Networks working group which informed market rule
End-to-end process	✓ Compliant from 03/26	Collaborated with Elexon to refine data template for other DSOs
Pre-qualification criteria	✓ Compliant from 02/26	
Baselining	✓ Compliant from 03/26	Collaborated with Elexon and flexibility providers to clarify process for nomination baselines
Verification and settlement	○ Will be compliant from 07/26	Granted temporary derogation to manage potential negative impact on flexibility providers
Carbon reporting	✓ Compliant from 02/26	Led Open Networks working group which informed market rule
Revenue stacking	✓ Compliant from 02/26	Led Open Networks working group which informed market rule
Primacy rules	✓ Compliant from 02/26	Led Open Networks working group and helped define low-regret trial of improved coordination
Glossary	✓ Compliant from 12/25	

3.2.4 We have opened up flexibility through our use of non-proprietary systems and open data

As in previous years, we rely on non-proprietary systems for all market interaction. In particular, we use the Localflex system provided by EPEX SPOT to communicate requirements and operate the market. Through this partnership we continue to explore opportunities for improved market integration, such as with the intraday wholesale market.

Transparency is fundamental to building trust and liquidity in flexibility markets. Building on our monthly dispatch data, this year we responded to stakeholder requests for more frequent data by releasing dispatch data every morning. This aligns our dispatch data with the publication frequency of other major flexibility markets, making it easier for third parties to integrate DSO opportunities into their wider market dashboards, and helping flexibility providers to optimise their commercial strategies.

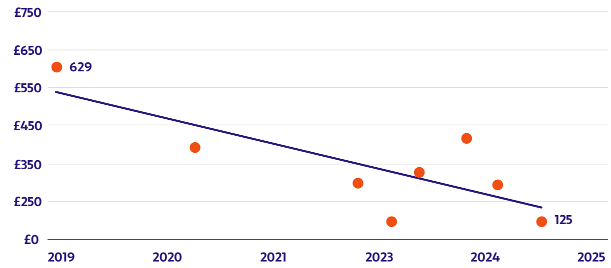
3.2.5 Our analysis shows that we have increased participation to the benefit of all consumers

We have analysed data from the past seven years of our flexibility markets to learn from our use of flexibility and ensure our actions to widen participation are working. By delivering efficient flexibility markets and growing competition, we have driven sustained price reductions in flexibility products, driving further savings for end customers.

While flexibility prices remain highly locational, our markets are delivering materially lower costs for consumers. Over the past six years, average utilisation prices under long-term flexibility contracts have fallen by 53%, driven by increased participation and stronger competition enabled by our proactive approach to flexibility. A similar trend is evident in the day-ahead market, where average dispatch prices have reduced by 63% despite short-term volatility. This accelerated cost reduction reflects the impact of regular, repeated competitions, transparent market rules, and our publication of daily utilisation data – demonstrating clear value for money as the market matures and competition deepens.

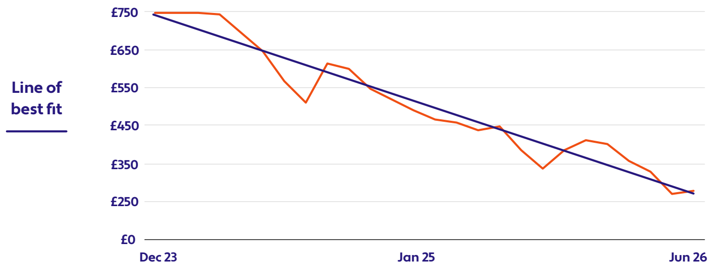
Nonetheless, there have been some zones where prices have remained stubbornly high. In these zones we have worked with providers during the year to highlight opportunities, increase participation and help them understand how the market clearing rules work. These interventions have driven sustained price reductions in some of our most expensive flexibility zones, for example, there has been a 14% reduction in prices at Bramford over the past year, increasing the net benefits of flexibility to customers.

Average accepted utilisation fees
(Long-term contracts with availability and utilisation)



The reduction in average utilisation fees paid under long-term flexibility contracts over time reflects improved participation and competition, resulting in greater value for money.

Average £/MWh for day-ahead dispatches



The downward trend in average day-ahead flexibility dispatch prices, despite short-term volatility, reflects a maturing and more competitive market.

3.3 We are supporting growth in nascent use cases and market segments

In the context of uncertainty surrounding the use of flexibility in ED3, stakeholders told us they expect UK Power Networks to draw on our RIIO-ED2 experience to provide leadership on the DSO's evolving needs for flexibility. As input to an updated cross-DSO CBA, we prioritised, codified and quantified new use cases for flexibility – from improving network resilience to accelerating demand connections and reducing volatility in customer voltage. Where we saw particular potential, we also took steps to demonstrate the use case in practice and validate its benefits to customers.

The Clean Flexibility Roadmap was published by DESNZ in July 2025, setting out the key actions to enable 12GW of consumer-led flexibility, along with 23GW of battery storage. While DSOs do not have formal actions within the plan, we believe the DSO has a key supporting role here – in helping these technologies to connect and operate to maximise whole-system value from day one.

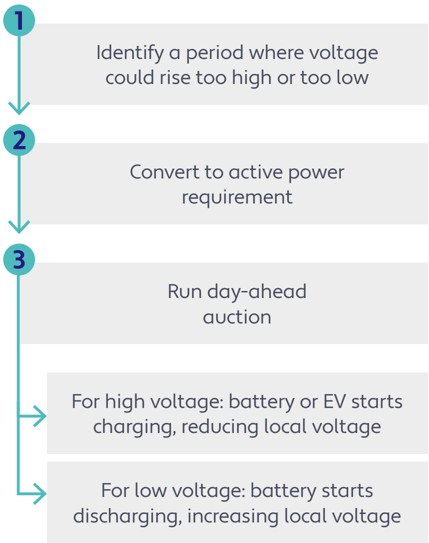
3.3.1 We are demonstrating flexibility for voltage management

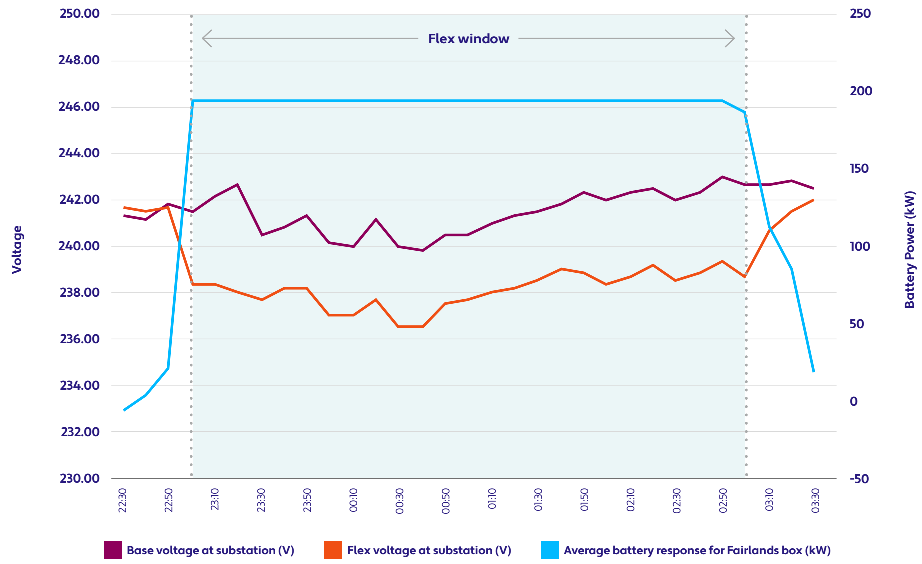
As consumers increasingly adopt flexible and low-carbon technologies, it is becoming more challenging to manage local fluctuations in voltage. These fluctuations can cause disruption or additional cost to consumers, for example, by interrupting their car charging.

Over a three-month period, we trialled the use of flexibility for voltage management, aiming to demonstrate the technical and commercial feasibility of using customer-led flexibility alongside network tap changers to minimise disruption and cost to consumers. Leveraging our strong relationships with flexibility providers, day-ahead markets and data analysis within the DSO, we could introduce and test this new use case far faster than relying on a formal innovation project.

We worked with 30 Octopus EVs and six AMP battery boxes connected across seven LV substations. We were able to model the relationship between flexibility and voltage, procure flexibility in day-ahead markets and resolve temporary voltage excursions. Based on the results of the trial (one site of which is reproduced overleaf), we developed an initial cost-benefit analysis and fed this into cross-DSO work on use cases for flexibility in ED3. We also used the trial to identify next steps to ensure the use case could be efficiently scaled up.

> “We were delighted to work with UK Power Networks to explore a new use case for flexibility. Our Battery Box portfolio is a highly effective and low-cost tool for the DSO, enabling voltage stability and reducing bills for customers.”
>
> **Caspar Ruane, Group Head of Asset Management, AMP Clean Energy**





The chart shows the response of one battery site during the trial. We see that when instructed to charge, this consistently resulted in lower voltage levels compared to baseline.

3.3.2 We are leading the evolution of demand turn-up

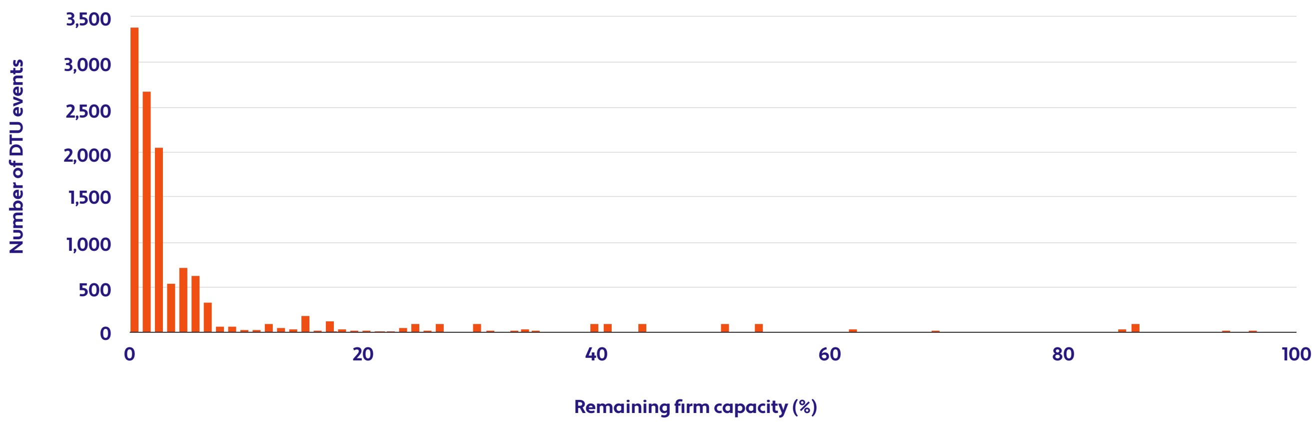
In November 2023, we launched our first tender for demand turn-up, using it to manage rates of curtailed generation ahead of network reinforcement. Since then, two other DSOs have followed our lead. Having operated the service for two years, and with greater proactive network investment likely in ED3, this year we reviewed options to evolve the service:

Willingness to pay: We engaged with generators to understand their willingness to pay for, or contribute to, the costs of demand turn-up. This ranged from £10/MWh to £200/MWh depending on timing and likelihood of curtailment, technology type and presence of co-located demand.

Practicality: We demonstrated that our forecasting system and market platform could accommodate bids for flexibility from third parties, which would allow DERs to procure flexibility to reduce their curtailment, facilitated by the DSO.

Efficiency: We analysed how successful our demand turn-up has been in reducing curtailment of flexibly connected generation. The chart below demonstrates that in the vast majority of cases where we have used demand turn-up, the resulting level of firm capacity is within 5–10% of its limits. This indicates that the increase in demand was useful in reducing curtailment of generators and that it is being used where it is needed.

Demand turn-up events have been well targeted to reduce curtailment



We also supported wider discussion and evolution of demand turn-up through:

- Facilitation of the extended Demand Flexibility Service (see 3.4.3).
- Raising flexibility providers' awareness for NESO's Demand for Constraints project to locate demand turn-up in priority areas and sitting on the working group to ensure alignment with distribution network needs.
- Engagement with Ofgem in the context of the Clean Flexibility Roadmap ('Explore DTU barriers and solutions').

3.3.3 We are continuing to monitor the need for secondary trading

Since the start of RIIO-ED2 we have engaged regularly with stakeholders to review the case for introducing secondary trading of flexibility requirements. As in previous years, stakeholders have encouraged us to focus on improving the value and accessibility of primary markets. While it may not be a secondary market, our exploration of demand turn-up models has shown that where the main beneficiary is neither the DSO or flex provider, there could be local markets with the DSO as facilitator and a third party acting as the buyer.

3.3.4 We are enabling improved market access and simpler participation for consumer-led flex

Engaging with households

In 2024/25 we communicated the potential benefits of flexibility to more than 50,000 new owners of LCTs, with more than 20% clicking through to learn more. This year we contacted 50% more households and used AI to analyse hundreds of responses to our communications. We applied this insight to refine our approach, providing clearer and more actionable information at a timely point in the customer journey.

Customer insight	DSO response
Customers expected more tailored advice, depending on the type of device and whether they were already on a smart tariff.	We expanded our advice to cover different types of flexibility and remove assumptions about particular devices.
Customers were waiting for DNO letters or export MPANs.	We provided links for consumers to find their export MPAN.
Some customers wanted more help on how exactly to get started and advice on who to work with.	We updated the wording of our email and website, using messages tested and refined through consumer focus groups.

Building trust in consumer-led flexibility

We know that some consumers are not yet confident engaging in flexibility. Ahead of a mandatory compliance scheme for aggregators expected to be introduced from 2027, we supported Flex Assure to consolidate voluntary standards for domestic and business flexibility, providing consumers with a single authoritative list of trusted aggregators. We provided financial support for Flex Assure to grow the scope of the scheme and collaborated to attract new members, including by directing SME networks towards the scheme and promoting through our interactions with flexibility providers. During the year we saw growth of registered aggregators from five to seven.

Making it easier for Vehicle-to-Grid to connect

Vehicle-to-Grid (V2G) is estimated to contribute around 1GW of flexibility towards 2030 targets, with a potential of 40GW by 2050. This would have a profound impact on the operability and capacity of the whole electricity system, particularly the distribution network.

While V2G activity has previously been seen as innovation, this year we saw a wave of commercial interest from manufacturers and energy suppliers preparing for V2G deployment. We subsequently engaged more widely and developed a proactive plan to facilitate V2G growth and participation in flexibility markets. As a result, this year we:

- Supported initial V2G deployments and introduced automated connection assessments.
- Worked with ENA, DESNZ and international DSOs to scope out an innovative approach to type testing which would allow for cars and chargers to be tested independently and then used together by customers.

We continue to work with V2G stakeholders to ensure our connection and flexibility options maximise the potential value of the technology.

Supporting strategic deployment of batteries

1 Challenge	2 Approach	3 Results	4 Why it matters
The cost of batteries is falling, but limited investment signals from DSOs on where they should be deployed	We worked with multiple providers to refine the business case, understand the addressable market and identify supporting regulatory changes	• Octopus plans to deploy batteries to customers connected in Hendon Way over summer 2026 • We will be able to connect more customers in the area ahead of reinforcement and explore ways to manage clustered deployments of flexible assets	If battery costs continue to fall and network infrastructure costs rise, the approach could be used more widely across our network

Supporting local authorities in engaging with and benefiting from flexibility

This year we built on our partnership with ADE and UK100 to accelerate local authority engagement in flexibility markets. Working with local authorities, aggregators and NESO, we identified key barriers to participation, including limited awareness, perceived market complexity and procurement constraints. In response, we published practical resources and case studies to demystify flexibility and show how local authorities can use their assets and champion flexibility locally, supported by wide ongoing dissemination through partner channels, webinars and events. Following this engagement, we were pleased to award flexibility contracts in relation to two local authority-operated schools.


Launch of Unlocking Flexibility, our guide for local authorities, with ADE and UK100

3.4 We are enabling whole system optimisation with NESO

We continue to see the efficient integration of DSO and NESO services as fundamental to system efficiency and consumer value. We have sat on NESO's Electricity Markets Advisory Council since 2023, representing the position of DSOs and highlighting opportunities for better alignment of NESO–DSO market design. Our flexibility contracts avoid exclusivity clauses and enable data sharing with NESO. We have worked with the Market Facilitator and directly with NESO to improve market coordination during the year.

3.4.1 We have accelerated market coordination through thought leadership

At the end of 2024/25 we published our [Project Harmony report], which took our experience of flexibility coordination and dispatch and proposed a roadmap for how this should evolve to improve shared NESO–DSO situational awareness, open up new revenue stacking opportunities for flexibility providers and drive down costs for consumers. This year we worked with stakeholders and the Market Facilitator to feed our proposals into the Market Facilitator's Delivery Plan for 2026/27. While we continue to push for greater focus and accelerated progress in this area, we were pleased to note that two of our current commercial arrangements were highlighted by Elexon within their plans: the release of unneeded DSO flexibility at day-ahead and publication of daily utilisation data.

3.4.2 We assessed the initial impact of operational data sharing through MW Dispatch

Having implemented the MW Dispatch service in collaboration with NESO in 2024/25, the service was dispatched operationally from September 2025. We worked with NESO to evaluate the first ten dispatches and the accompanying exchange of operational data via ICCP and API links. We found that:

For 99% of the time, UK Power Networks imposed no constraints on how NESO used the service to manage transmission constraints, i.e. all registered assets were available for dispatch.

For the remaining 1% of the time, UK Power Networks imposed some limitation on the availability of DERs to NESO, as a consequence of planned outages on the distribution network.

3.4.3 We enabled the expansion of the DFS to demand turn up through wider-system optimisation of 100,000s of assets

Since 2022, the Demand Flexibility Service (DFS) has mobilised millions of households and businesses to turn down demand during the winter peak. This year we worked with NESO to enable the service to be expanded for demand turn-up from spring 2026 by putting in place a process to identify 'risks of conflict' with operation of the distribution network. Through this process, NESO provides regular data updates on the 350,000 customers registered for the DFS across our regions. We review where these customers are connected, and how demand turn up in these areas could interact with planned outages, active network management and network congestion on the LV network. This allows us to generate a daily risk of conflict report, building upon the primacy work we have led through Open Networks.

Having developed an initial process, we broadened its scope and improved its efficiency:

- We extended our assessment to consider risks at different voltage levels within the distribution network.
- We introduced automation, allowing us to run assessments daily, enabling more households to participate in DFS.
- We took into account our live forecasts of active network management, enabling more households to participate in DFS when the likelihood of curtailment is low.

Based on our enhanced process, we have flagged risks of conflict associated with less than 1% of capacity, supporting the other 99% to participate in and benefit from opportunities for demand turn-up.

How we generate our daily risk of conflict report for NESO:

1. NESO MPANs
   Outage plans, DERMS curtailment forecasts, flexibility plans
2. Daily risk of conflict report to NESO, flagging MPANs of at-risk assets with time windows
3. NESO takes action based on improved distribution network insights

4 Options assessment and conflict of interest mitigation

4.1 Our strategy: evidenced-based planning and decision-making for maximum customer benefit

Our vision is to ensure that the right level of network capacity is provided to our customers, in the right place, at the right time, and at the lowest overall cost to customers. Our strategy to deliver this challenges traditional DNO ways of working through independent decision-making, better use of data, active network management and the use of flexibility to provide lower-cost, quicker and more dynamic network capacity. Now, three years after launching the UK's first independent DSO, we're still driving the best outcomes for today and tomorrow, supported by robust governance and cross-industry leadership that delivers whole system benefits.

Priority

Planning the right network for today and tomorrow.

Key achievement

Improved planning and forecasts by embedding 15 LAEPs covering 66 local authorities and collected housing data covering all 133 local authorities we serve.

Priority

Delivering trust and confidence in decision-making.

Key achievement

Delivered transparent decisions by market-testing £244m and awarding flexibility to avoid or defer reinforcement.

Priority

Sharing insights for collaboration and whole system benefits.

Key achievement

Exchanged best practice with 36 global peers to enhance whole system planning.

4.2 Our approach to planning the right network is clearly defined

Our approach to planning the right network is clearly defined, robust and comprehensive. The diagram below identifies the key steps, which we discuss in more detail in the subsequent sections. The approach combines engagement, analysis and evaluation to ensure economic and efficient decision-making in the best interests of our customers.

Forecast & need identification (Section 4.3)

DNO input
- Connections
- N Asset condition
- E Planned outages

NESO input
- FES
- N tRESP
- Generation CP2030
- N Strategic investments

Local input
- E LAEPs
- N Housing data
- Industrial customers

Options (Section 4.4)

Flex - emerging use cases beyond RIIO-ED2
- N Voltage
- Accelerate connections
- Reduce curtailment

DNO input - network options
- Reinforcement
- Operational

Flex
- Standard products
- N N/A at single transformer sites

Evaluate (Section 4.4)

Site-by-site optimisation
- E Touch network once
- CEM CBA

Portfolio optimisation
- Deliverability beyond RIIO-ED2
- Headroom KPI

Recommend & approve (Section 4.5)
- Supervisory Board
- Portfolio board

Signpost (Section 4.5)

System needs register
- N Sites with potential for beyond RIIO-ED2 flex

Implement (Section 4.5)

Flex
- Tenders
- Dispatch

Network solution

Reporting and tracking
- E DNOA report
- E KPIs and benefits

Key

E Enhanced N New

4.3 We base our network options assessment on robust and wide-ranging forecasts

Our approach starts with forecasting and need identification using internal projections, local inputs and wider system forecasts to build a more accurate picture of future network needs. We combine detailed load forecasts, local spatial data, smart meter data insights, flexibility market trends, distributed generation growth and scenario-based modelling. This multi-input approach helps us understand how different factors interact, such as the rate of electrification, evolution of the connections queue and changes in usage patterns. This ensures our decisions remain efficient over time.

This year, we ensured all NESO inputs, including tRESP and strategic investments, were incorporated into our forecasts. We strengthened our EV forecasts using refined supply-chain modelling, adjusted our PV assumptions to reflect the Future Homes Standard and Warm Homes Plan, and improved our data centre demand forecasts through extensive engagement with developers. In our recently published 2026 DFES we incorporated the tRESP Pathways, making us the first and only DSO to do so. This translated the regional forecasts into local LCT and network insights for our customers.

4.3.1 We use proactive engagement to ensure all network needs are considered

Our forecasting is strengthened by proactive engagement with local actors. LAEPs now play a central role in validating, challenging and/or accelerating our internal view of demand growth. This has broadened our understanding of emerging clusters of LCT deployment, changes in heat zoning and the likely pace of electrification.

LAEPs

This year, we integrated six new LAEPs in our forecasting process, covering 36 local authorities. This brings us to 15 LAEPs across 66 local authorities, creating the broadest and deepest LAEP integration in the sector. This enables us to target early investment, improve whole system coordination and respond to local priorities more effectively. This progress has been enabled by our dedicated Local Net Zero team and their proactive, personalised engagement with local authorities, LAEP practitioners and regional planning bodies. These LAEPs have been instrumental in revealing local future demand growth that traditional top-down forecasting methods would not have identified. London now has full LAEP coverage, with the GLA leading the UK's first sub-regional approach that we have supported through our 'share once' approach.

6

new LAEPs integrated this year, accelerating investment out to 2050 at 130 primary substations by an average of 2.1 years.

Housing data

Local authorities told us that national housing datasets alone did not sufficiently capture the scale, timing, or confidence levels associated with local delivery plans. Recognising the importance of housing development as a key driver of future load growth, and the new national policy emphasis on accelerating home building under the government's Plan for Change, we developed an enhanced approach.

This approach integrates local authority housing trajectories in addition to Office for National Statistics housing projections, ensuring our forecasts better reflect local ambition, delivery constraints and pipeline maturity. Our engagement also surfaced insights such as areas where local policy ambition may outstrip practical deliverability. As a result, we collected housing development data across all 121 planning authorities, achieving 100% coverage for our 133 local authorities. After quality assuring this data, we brought forward need dates in areas with accelerated housebuilding timelines, targeting flexibility zones where growth was uncertain but potentially clustered and shaping reinforcements to align with expected build timelines.

100%

coverage of housing development data integrated this year, accelerating investment out to 2050 at 40 primary substations by an average of one year.

Large-scale regional needs

This year, we have replicated our approach to integrating local inputs via LAEPs into our forecasts for large-scale regional needs. We commissioned Regen to undertake a confidence assessment for key sectors, including data centres, ports, rail and industrial electrification. This work enables us to characterise different sectors' network capacity needs, so that we can be more proactive with customer groups. It has also given us the basis to engage with a broader set of customer groups and ensure there are no gaps.

Helping NESO with whole system decision-making: We have shared our forecast and need identification data with customers and NESO to help them with whole system decision -making.

1 Strategic Energy Needs:

In response to NESO's request for information, we used our existing relationships and trusted status to work closely with local actors in our region to submit their needs to NESO and articulate these clearly.

We raised questions from local actors directly with NESO, and had extra meetings to validate and confirm their assumptions. We undertook joint option development, shared modelling assumptions and collaborated on refining key uncertainties.

This helped NESO to progress the most mature of these areas into Strategic Energy Needs, such as Freeport East.

2 Connections Reform:

Our insights and engagement have also benefited our connecting customers going through Connections Reform.

Our continuous engagement with generation customers through the provision of datasets, our customer portal and 24 customer engagement sessions, gave a clearer view of connection timelines and needs, enabling more of our customers to progress with confidence.

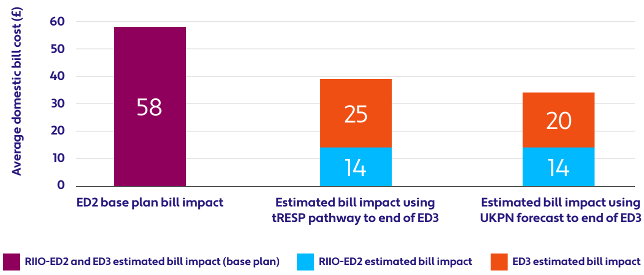
As a result, 80% of our eligible customers met the readiness criteria and submitted their evidence to NESO.

4.3.2 We account for uncertainty in our forecasts, with realised option value savings for customers

Peak demand continues to come in at the low end of industry forecasts and remains below our RIIO-ED2 business plan assumptions. As a result, we are delivering more flexibility and less reinforcement than expected, creating additional option value and reducing costs for customers.

Our original RIIO-ED2 Business Plan included a high demand pathway which, if we had reinforced against during RIIO-ED2, would have resulted in an average total domestic customer bill impact of £58 between 2023 and 2033. Thanks to the DSO's flexibility procurement, local intelligence of customer-led connections and forecasting improvements, we are now projecting significantly lower spend compared to this original base scenario, while maintaining network capacity headroom levels at the same level as they were at the start of the RIIO-ED2 period, as tracked by our KPI. This results in an estimated RIIO-ED2 bill impact of just £14.

Bill savings from option value reducing load-related reinforcement endures into ED3



Looking into ED3, the DSO-led option benefit continues to 2033, as we continue to avoid part of RIIO-ED2 base capex. Under the tRESP Holistic Transition pathway this would mean a bill impact of £25 per domestic customer in ED3 (total bill saving over both periods of £19), but if demand outturns according to our forecast, which uses current demand trends, then the bill impact would be even lower, at £20. This would result in a total bill saving of £24 (41%) between 2023 and 2033.

4.4 Our options assessment and evaluation approach assesses a wide range of system options to resolve network needs

The next stage in our process is evaluating the options available to us. Our optioneering and evaluation methodology provides a clear, consistent and transparent framework for assessing options to address identified network needs. It is published online through the DNOA methodology ensuring it remains fully accessible to all stakeholders and allowing them to understand how decisions were made. We follow a robust, repeatable and technology-neutral process that evaluates reinforcement, flexibility, hybrid solutions and, where relevant, energy efficiency signals. This includes the use of detailed load forecasts, cost–benefit analysis, local spatial data and sensitivity modelling under different development scenarios.

4.4.1 We plan for the long term to ensure solutions are economic and efficient

Following consultation with our stakeholders, we have updated our DNOA methodology this year, in the context of planning for ED3 and to 2050. The updates ensure that we consider the most economic and efficient network solutions over the long term, while continuing to deliver against our RIIO-ED2 commitments. The methodology provides a clear steer on where we should invest in the network with low regrets, and where we believe flexibility is a more economic option. The key improvements are:

Incorporating our forecast, which is a more accurate view based on our monitoring to prioritise reinforcement where there is greatest confidence of needs.	Considering long-term demand needs out to 2050 when assets are being replaced due to asset condition to make more efficient decisions.	Publishing an updated System Needs Register that signposts flexibility potential out to 2050 by evaluating substation capacity needs.	Moving from site-by-site evaluation to a portfolio-level assessment, to proactively facilitate the tRESP's Net Zero pathway cost efficiently.

4.4.2 We validate and improve our approach with stakeholder input

We regularly seek further feedback and input on our approach through direct engagement, events and roundtables. This engagement is continuous throughout the year and customised by segment to maximise usefulness for stakeholders. This includes DER customer forums, Flexibility Forums, local authority-focused sessions and specific events targeted at IDNO customers. At our DNOA Roundtable this year, a key message we received was from flexibility providers on the impact of uncertainty around the long-term policy direction of distributed flexibility. When this affects investment in flexibility assets, it has an impact on our current network planning options. We have worked to address this uncertainty both for our planning and for informing our stakeholders:

The DSO team with our customers at the DNOA Roundtable event in March 2026.

- We are exploring a broader range of flexibility use cases for ED3 and beyond, with ongoing engagement with providers and policymakers through this process.
- In our most recent flexibility tender round, we invited flexibility providers to provide details of all of their flexible assets within our licence areas, not just those with an immediate requirement. Over 50,000 assets were uploaded, helping to map out the full scale of flexibility in our region and build the case for its enduring importance for the network.
- To provide a view for flexibility providers of where flexibility is more or less likely to be needed in the longer term, we updated the System Needs Register. This provides a high, medium or low confidence level of flexibility requirements based on forecast capacity needs.

4.5 Our approach enables robust and transparent decision-making to deliver identified needs at lowest cost

The outcomes of our DNOA approach are published on our website every year, ensuring that this process is fully transparent and open to challenge from stakeholders.

Outcomes of our 2025/26 assessment: Our DNOA market tested £244m of investments in 2025/26:

No new major reinforcement for upcoming needs recommended this year.	£1.2m of flexibility was awarded, delivering 30MW of capacity and deferring £55m of traditional network reinforcement.	We reinforced 345 LV substations, future-proofing capacity requirements to 2050 and delivering an average capacity increase of 163%.

4.6 Our DSO approach is backed by compelling evidence and support

4.6.1 We have a clear governance model to support our separate DSO model

Our legal separation of the DSO has now moved beyond its initial set-up phase to delivering a more mature and collaborative operating model while maintaining clear, independent DSO decision-making. Separation has enabled us to formalise how the two groups work together, with the Operational Agreement (OA) providing a formalised DSO–DNO relationship and a living framework that is updated as processes evolve and new system needs emerge. The strength of this framework, alongside the culture and principles we have built since separation, means the model is working effectively.

DNO: Core network

- Ensures network reliability and resilience
- Delivers new network assets efficiently

Checks & balances

DSO: Active DSO

- Delivers innovation and digital tools to support decarbonisation
- Accurate forecasting and adaptive planning processes that factor in how DERs can contribute to system optimisation

Legal separation with:

1. Executive level accountability
2. Independent Supervisory Board
3. Operational Agreement
4. External assurance

Key areas of conflicts of interest addressed from the start:

1. Investment vs flexibility
2. Markets vs assets
3. Control room

Our definition of our active DSO above comes from the University of Cambridge's Energy Policy Research Group's work in this area. This work has developed and defined metrics and outcomes to assess DSO performance.

Confidential reporting to Ofgem confirms that our DSO-related costs for 2024/25 were £1.29 per domestic customer, outperforming the industry average of £1.94. We continue to lead on customer experience, achieving a satisfaction score of 9.59 in 2024/25 – the highest of all DSOs. Delivery has exceeded expectations, with realised benefits to date reaching 19% above our business plan forecast, and we remain at the forefront of industry innovation. Strong governance underpins this performance, with our Supervisory Board providing rigorous challenge that drives further efficiency, transparency and innovation for customers, including enhanced disclosure of our benefits methodology and robust scrutiny of our flexibility tendering approach, for example for single transformer sites.

> "The UK's regulatory framework has encouraged UK Power Networks to create a unique independent DSO model, which has contributed to greater transparency for their customers and UKPN being rated as a top performer based on our evaluation of publicly available information.
>
> **Michael Pollitt, Professor of Business Economics, Judge Business School, University of Cambridge**"

The OA has been in place for over three years and has matured significantly, with robust controls and monitoring mechanisms now embedded. This year, we evolved the OA further, expanding it to reflect the way our planning, control and data functions interact through the inclusion of three new SLAs on curtailment, long-term forecasting and DNOA input data. These new SLAs, alongside the existing 14, will continue to be reported back to the Supervisory Board quarterly. The Supervisory Board's annual report for this year can be found here.

4.6.2 We have worked to understand the impact of new conflicts arising from changing roles and responsibilities in the sector

With the evolving roles within the sector, especially of NESO, the Market Facilitator and GB Energy, we wanted to make sure we understood the implications for our governance and any new potential conflicts. We commissioned one of our expert Supervisory Board members to investigate these institutional roles and responsibilities, governance structures and conflict mitigation arrangements. The report can be found here.

The work sought to understand if external changes and new governance arrangements introduce pressures on the DSO–DNO relationship and whether new conflicts of interest are introduced for the DSO. It established a new process for identifying and addressing conflicts. This is outlined below, with centrally determined planning assumptions used as a specific example to demonstrate the approach.

Review on significant industry change:

Horizon scan of potential conflicts against customer priorities → **Shortlist** conflicts that need to be proactively managed. Reviewed with Supervisory Board

Annual process for each specific conflict:

Risk mitigations proposed
↓
Engagement with involved parties to review and acknowledge
↓
Track and review conflicts register with Supervisory Board
↓
Escalation and resolution where required

Conflict: RESP sets planning assumptions and pathways but DNO accountable if wrong

Risk mitigations:
- Transparency: published forecast and pathways in System Needs Register
- Collaboration: worked with RESP to refine and update forecasts
- DNOA: published approach in methodology

↓

Engagement:
- Discussed with NESO at DNOA Roundtable in March 2026
- Feedback provided through RESP consultation and bilateral meetings
- Incorporated tRESP pathways into this year's DFES

Key
Process steps
Specific case

4.7 We collaborate and share insights for improvements across the sector

4.7.1 We have proactively worked with other network operators to find innovative solutions for customers to connect sooner and more cheaply

Working with IDNOs to expand DERMS

We have led the ENA G113 Working Group, engaging closely with IDNOs to understand their needs. We have given IDNOs clear, nationally consistent rules for managing flexible connections at DNO–IDNO boundaries, removing barriers to accelerate flexible connections at scale. We have also opened access to our DERMS platform for customers connecting via IDNOs, enabling flexible connections for both generation and high-demand projects. This supported the accelerated connection of a first-of-its-kind smart EV charging hub at Cobham Services, the UK's busiest motorway service area – the first fully flexible demand customer to connect via an IDNO network, speeding up key EV infrastructure delivery while reducing reinforcement costs.

Coordinating with transmission

We coordinated with NGET to reduce costs for connections that would have required a new super grid transformer (SGT) due to import constraints. At a site with a number of connection requests that were triggering a new SGT, we identified the potential for flexible connections to manage this new load instead. Through extensive collaboration with NGET, we developed an approach to manage forward power flow with a limit at the transmission level of how much sites can import at any given time. This allows for the new sites to connect at a significantly lower cost, without the need for a new SGT.

4.7.2 We have engaged extensively with international networks to share and apply best practices

We continuously engage with networks in the UK and internationally to share experience and learn from others, particularly in managing emerging conflicts. This year, we engaged with 36 international utility companies, building a broad peer network for sharing lessons, challenges and solutions.

Seeking insights from international DSOs

SA Power Networks is the principal DNO for Southern Australia. We had knowledge exchange sessions to learn from their experience managing high levels of domestic solar in their area and the resulting voltage excursions. They have used smart inverters to locally control the network, and stressed the importance of having a solution ahead of the problem manifesting. We applied these learnings by developing a flexibility market-based solution to manage voltage, which we trialled successfully (see chapter three). By analysing smart meter data at LV level, we are proactively identifying and addressing areas where increased solar PV could create network issues.

Sharing our experiences

Alliander is a Dutch DSO experiencing significant grid bottlenecks. Alliander is developing digital platforms, improving network visibility and is seeking to use more customer flexibility to manage constraints. We shared our experiences of all three to help them with this. As a result of As a result of our engagement, a partnership of the largest DSOs and suppliers has been established to expand the use of flexibility across the Netherlands. With our support, they intend to run their first UK Power Networks-style tender in 2026.

5 DER dispatch decision-making framework

5.1 Our strategy: facilitating maximum network and market access for DERs

Our approach to DERs remains to enable them to connect when and where they need and are needed, with minimal curtailment, maximum market access and exceptional customer service. Our priorities have remained consistent with last year, and we have continued to innovate with new solutions to achieve high outcomes in support of these aims while DER volumes grow.

Priority

Delivering exceptional customer service and very high levels of network access for DERs.

Key achievement

98.6% generation availability across our licence areas (98.9% in EPN and 94.3% in SPN).

Priority

Scaling our transparent dispatch approach to maximise market access and trust.

Key achievement

Over 28,000 dispatches for over 36GWh over RIIO-ED2.

Priority

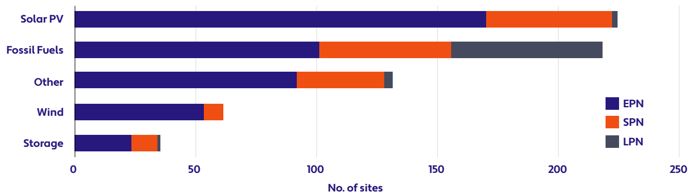
Whole system coordination to enable cross-market DER participation.

Key achievement

Industry-first use of DERMS to manage a large, planned outage, allowing managed export during the outage.

5.2 Comprehensive visibility and understanding of our DER customers and their needs

We have nearly 10GW of DER capacity installed on our network, from nearly 700 DER sites above 1MW. This makes up 24% of GB's distribution connected generation and storage, and 9% of total national generation capacity (at transmission and distribution level). This is a 5% increase in installed capacity compared to last year.



As well as these larger DERs, we have c.290k household-level flexible assets approved for participation in our flexibility markets. We remain the only DSO to be fully embedded in the DNO control centre, and we have dedicated staff engaging in continuous and proactive communication for all our DER customers, seven days a week. This gives us detailed visibility of the network and connected DERs while giving customers unparalleled support and information. As a result, we achieved a 9.38 customer satisfaction score in our 2024/25 Ofgem CSAT survey for delivering outstanding customer outcomes.

Some key service enhancements that we have delivered this year include:

Proactively contacting DER customers ahead of potentially disruptive weather events and providing personalised contacts in case of issues.

Ongoing engagement with customers to allow for continuous improvements year-round, always aligned with DER customer needs.

Providing yearly curtailment reports to flexibly connected customers as well as near real-time data, giving customers individualised data to help them plan their business.

5.2.1 We use reporting metrics to increase focus on customer outcomes

We have continued to pioneer and roll out the use of our generator minutes lost (GML) and generation lost (GL) metrics, to maintain focus on service performance for DER customers. These metrics mirror the customer interruptions (CI) and customer minutes lost (CML) metrics used by DNOs to measure performance due to interruptions to supply.

This focus has brought about a tangible improvement in outcomes, with generators now only being impacted by outages for two hours a year on average:

	2024	2025
GMLs	156 minutes	121 minutes (↓ 23%)
GLs	32MWh	9MWh (↓ 73%)

By reviewing all outages with higher GML and GL values, we identify the underlying cause of each interruption. Where an outage is driven by a fault on our network, the DSO works closely with DNO colleagues to understand what is preventing restoration and to accelerate the return of supply. In parallel, we engage directly with the affected customer to keep them informed of progress and proactively chase updates on their behalf. In this way, the DSO acts as a clear advocate for DER customers, ensuring faster resolution and better communication during outages.

In July 2025, through our GML reporting, we identified a solar farm in our EPN area that had been disconnected from the network due to an issue with the batteries feeding the circuit protection. The DNO had not identified this as a priority, but we were able to help them understand the implications of the outage on the customer. By pushing for a quicker resolution, the DER was reconnected up to two days sooner.

Given the increasing impact of planned outages on generation customers and the value of these metrics to customer outcomes, we have proposed their adoption industry-wide in our ED3 proposals. Customers have told us they support this proposal, noting that it has improved the service we offer them.

5.2.2 Reducing curtailment through active management

Our network availability for flexibly connected customers in 2025/26 was 98.6%. While this is a slight decrease on last year, we had some challenging conditions and large planned outages that we dealt with effectively to achieve this availability. We actively monitor curtailment on a daily basis to ensure maximum access to the network, and for large curtailment events we always review to make sure they are reasonable and due to normal constraint events. We now have 500MW of generation under DERMS control. This includes more sites in already congested generation areas, and so we also regularly review the network to make sure we are minimising curtailment levels. Our key achievements this year:

- An industry first, we expanded the use of DERMS, which can usually only be used on an intact network, to manage a large, planned outage. This allowed us to manage export while the outage was taking place, maximising benefits to DERs.
- Where we identified a site with high curtailment, we actively reviewed the settings in DERMS to make sure they were still relevant to current operating conditions.
- We invested in our people and systems. For example, one of the team, as part of a digital apprenticeship, developed a data-driven alarm tool to alert curtailment events earlier and allow for quicker resolution.
- In one area with higher curtailment, we added a temporary network running arrangement over the summer to add load. This helped to reduce generation curtailment (see box below for more details).

Innovative network management to reduce curtailment

High curtailment in a Peterborough DERMS zone was caused by strong wind and solar output on a constrained network. With DNO colleagues, we temporarily moved a normal open point at a nearby 33/11kV substation to shift demand onto the generation-rich circuit. This added around 5MW of summer load, meaning generation could be used locally. This reduced curtailment and helped generators export more and protect revenue. The arrangement will be repeated each summer to continue reducing curtailment and improving network value for customers.

5.3 We have automated dynamic outage management to increase DER participation and ensure consistent dispatch

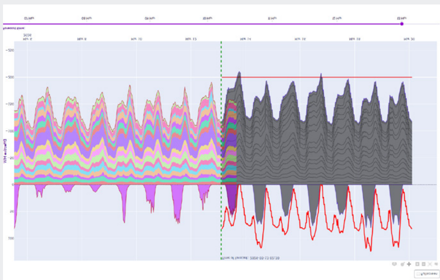
Outages occur on our network to enable essential work such as upgrades, maintenance and new connections. As our network grows to meet increasing demand, we will need to undertake more planned outages. By minimising the impact of outages, we are making DERs available to NESO for whole system optimisation, increasing their participation and revenue generation opportunities. In the first instance, our DSO control room works closely with the DNO outage team to minimise the outage windows, making sure they are no longer than they need to be.

In February, we tested being able to provide notice of larger outages for the 2026 summer period. This is the first time we have been able to give advanced notice months ahead, and we have worked to achieve this to enable DER customers to plan around outages, minimising disruption and lost revenue.

Previously, only outages at 33kV and above received automated notifications as standard. This meant at lower voltage levels, if customers were not at their DER sites, they may miss manual notification of an outage, as this was sent by post, and be unaware of it in advance. This year, responding directly to customer feedback, we have worked to improve the process at lower voltage levels too. We now automatically notify at the 11kV voltage level, improving visibility for customers, and allowing them to plan for outages more effectively and easily.

For necessary planned outages that do need to occur, in the first instance we minimise the size of the outage. Our dynamic outage management approach has then brought significant financial benefits to DER customers. This year, **we released 190 GWh of capacity across 19 outages, impacting 36 DER customers**. This contributed to £8m of environmental and £11m of wider system benefits, as described in chapter one. This brings a total release of 363GWh of capacity and £39m of savings over RIIO-ED2 to date. Acting on customer feedback, we have shared this approach with other DSOs to help others roll it out.

We have expanded the service this year by automating aspects of it using an app-based approach that uses forecasts developed in-house by our data science team. This new app, Restore, allows us to deliver dynamic outage management on a daily basis, on any size of outage, with plans to automatically select outages and prepare all the data for the decision-making team in the control room. They can now access this information at any point to see what restrictions are in place and minimise disruption to our customers. We developed the tool over the winter of 2025/26, to test it ahead of the summer outage period. We therefore expect to see a larger uplift in capacity release and benefits to DER customers from 2026/27 onwards.



Screenshot of the Restore tool, with red line showing capacity it has released

5.4 We ensure our dispatch logic and decision-making framework is clear, consistent and adhered to

Our dispatch decision-making framework is transparent and robust. In 2025/26, we have dispatched over 15GWh of flexibility through c.16k dispatches, bringing our total to over 36GWh through c.28k dispatches over RIIO-ED2.

We worked this year to ensure our dispatches were targeted and accurate, based on our in-house forecasts. This has meant that we have only dispatched where there is a high confidence of need, optimising our spending. This experience has allowed us to test and refine our framework, to optimise processes for customers and the network.

We continue to update our framework annually to reflect evolving best practice, stakeholder feedback and our own experience. This year, we validated our approach with customers at our Flexibility Forum.

They confirmed that it remains clear, comprehensive and transparent, and so we have kept our framework consistent and further embedded good practice.

15GWh Flexibility dispatched

16k Dispatches

Our dispatch framework:

- Network forecasts identify requirement for flexibility services
- Services checked against relevant primacy rules
- Auction is raised on the EPEX SPOT platform
- Most cost-effective flexible units chosen
- Service dispatched by 1.30pm day-ahead to facilitate participation in NESO markets

5.4.1 We have automated processes for efficient, scalable dispatch infrastructure

We completed the automation of our flexibility dispatch last year. This enables more efficient dispatch and increased trust in the process for flexibility service providers that dispatch logic is being applied consistently. 97% of day-ahead markets were dispatched on time by 1.30pm this year, an improvement from 95% last year.

In 2025/26, we have been able to fully realise the benefits of automated dispatch, beyond the process itself. The automated dispatch process has now reached a level of maturity that means we are able to free up resources from the team to focus on other services for our DER customers, such as the service enhancements in the previous page. This makes time for personalised, tailored support for customers that has helped us to achieve and maintain high satisfaction scores.

	1 Identifying dispatch needs	2 Deciding which units to dispatch	3 Sending dispatch instructions
Maintaining a consistent process from 2024/25	Probabilistic forecasts based on real-time network data and local weather forecasts	Clearly documented automated market clearing, optimised across long and short-term flex contracts	API dispatch via Localflex or STRATA (same system as MW Dispatch)
Improvements in 2025/26	Calibrated zone-specific rules based on forecast performance	Improved consistency of market clearing, from 95% to 97% ahead of NESO markets	Published daily dispatch data Led the Open Networks working group on the standard dispatch API, which is due to be launched in 2027

Increasing transparency of our dispatches

Last year, our stakeholders told us that they valued the monthly publication of dispatch data, but would like to see it updated more frequently, and we committed to publishing it weekly. In September 2025, we started publishing our dispatch data daily. This is automatically uploaded to our open data portal the following day.

This gives all current and prospective flexibility service providers transparent information on where we dispatch, under what product, for how long, what technologies and the size and price of the dispatch. As well as building trust and confidence in our flexibility markets, it also helps providers to optimise their business strategies.

To support transparency and help flexibility service providers optimise their bidding strategies, we have published the auction logic on our website.


The DSO Operations team engaging with flexibility customers at the Summer Flexibility Forum

5.5 We are optimising whole system coordination and market participation through enhanced communication channels with NESO

5.5.1 We are using MW Dispatch to resolve conflicts of services with NESO

With the ICCP link in all licence areas and our MW Dispatch service now fully operational, we have reached a major milestone with first live dispatch of local flexible energy to support the transmission network. This is one of the first real-world implementations of advanced transmission–distribution (T-D) coordination and ENA primacy rules, enabling smaller generators and battery storage connected to local networks to support national supply and demand in real time. By joining up national and local networks in a smarter, more integrated way, the service provides a faster and lower-cost route to connect clean energy. For customers, the impact is significant as clean energy projects can now connect to the network much sooner, sometimes up to ten years earlier. The first dispatches enabled AMP Clean Energy to earn NESO market revenues from four generator sites totalling 15MW, and the service is creating a repeatable solution to reduce connection delays. **Overall, MW Dispatch is helping 47 projects connect earlier, unlocking enough clean energy to power around one million homes.**

Following ten successful NESO dispatch events, we undertook a joint operational assessment with NESO to assess the performance of the service and identify areas for service improvements. This operational assessment addressed issues including safety margins, service delivery performance and the out-of-hours support process. As a result, the service has now been fully integrated into business-as-usual processes. Operational data sharing and dispatch through MW Dispatch enables DER flexibility to be used where it is most valuable in the wider system, by creating an effective and innovative route to market for DERs to participate in NESO flexibility. This allows DERs to seamlessly participate in both transmission and distribution markets easily, with our data sharing notifying of conflicts automatically to prevent issues.

10 Total successful dispatch events

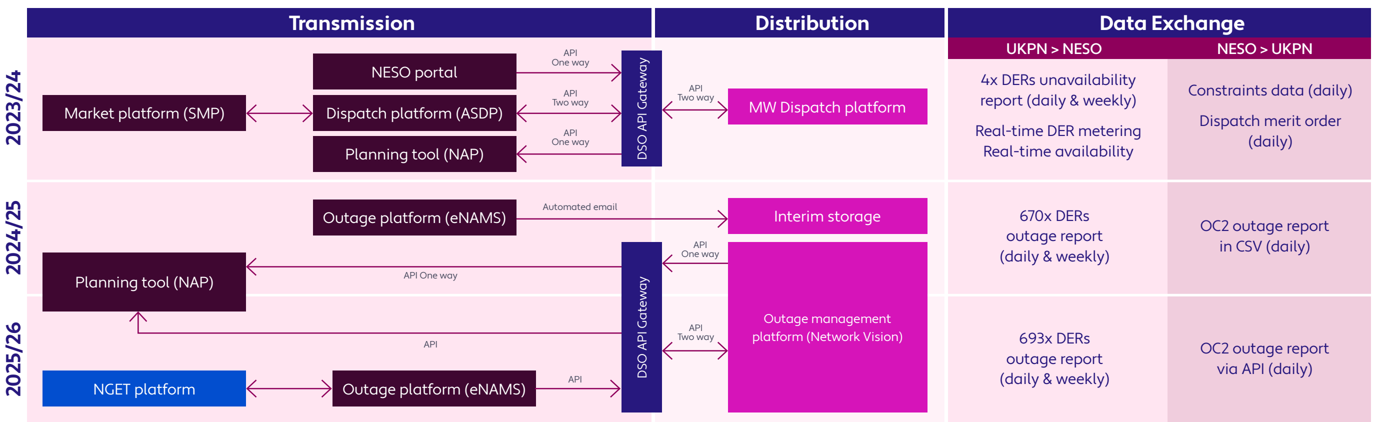
23.9MWh Total energy dispatched

56MW Connected in RIIO-ED2

5.5.2 We are building data sharing infrastructure to increase both coordination with NESO and DER market participation

We extended our pioneering T-D data exchange solution beyond MW Dispatch sites to the wider network, incorporating planned and unplanned outage data sharing in both directions through NESO's Planning and Operational Data Exchange (PODE) programme. This involved turning what was initiated and tested last year into a fully automated and operational solution this year, for use by the NESO planning and control teams. The fully automated and API-based outage data sharing for all DERs above 1MW from the DSO to NESO went live this year and data is now being shared daily. This year, we have made significant strides in automating the utilisation of NESO outage data. Building on last year's transition from PDF-based to structured CSV outage data transfers, we have now taken a major step towards whole system optimisation using digitalisation. As one of the first adopters of NESO's new Global API, we have directly integrated NESO's outage planning tool (eNAMS) with our own outage planning tool (Network Vision). This enables seamless visibility of transmission outages for DSO operational teams. We are seeing the benefit of this with more coordinated and accurate outage plans that are helping to stretch generator export windows and associated revenues.

> "We are really excited to have this automated link setup between both of our outage management tools to automate the manual T-D outage coordination process using our new Global API. This development is the first step in working with the industry to align processes and automate whole electricity system interactions through successive incremental changes.
>
> **Keith Parker, MW Dispatch and PODE Product Manager, NESO**"



This diagram demonstrates the complexity of this system integration. Given the importance of distributed flexibility for whole system optimisation, we are proud of progressing this unprecedented system-to-system integration, improving data-sharing timelines from multiple days to an instant view. This benefits not just DER customers through increased participation in flexibility markets but all customers through lower system costs.

Our journey this year reflects our commitment to a smarter, cleaner and more resilient energy future. Together with our stakeholders, we continue to innovate and collaborate to deliver meaningful progress for customers and the communities we serve.

A big thank you to everyone who contributed to this year's achievements – here's to another year of progress, collaboration and delivering even more for our customers.

The DSO team at UK100's annual parliamentary reception with Katie White OBE MP

Supervisory Board members and the Flexibility Team at the Summer Flexibility Forum with our flexibility customers

The Network Access team with ESP and EXTRA at our first IDNO flexible DERMS connection site, Gridserve at Cobham Services

The Regional Development team visiting the Little Horsted GSP construction site

Lynne McDonald, Head of Local Net Zero with Ben and Tim from Kent County Council at our Local Net Zero Forum

The DSO team with visitors from the Indonesian DNO, PLN

Thank you for reading this report.

dso.ukpowernetworks.co.uk