

**Electricity
Distribution**

Delivering Now, Thinking Future

Workshop Report
April 2025



nationalgrid ▶ **DSO**

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Introduction

On 20 March 2025, National Grid Distribution System Operator (NG DSO) held a hybrid stakeholder workshop focused on the achievements of its first year and future delivery goals. The purpose of the event was to keep stakeholders informed via a series of keynote presentations and Q&As, as well as to seek feedback on DSO consumer and system value. Additionally, NG DSO hosted three interactive stands: 'A Day in the Life of a Network Planner', 'Flexibility Market Development', and 'Data and Digital', where stakeholders could meet and talk to relevant experts.

The workshop was hosted simultaneously in person in Birmingham and remotely on Zoom. Each session consisted of a presentation given by a representative of NG DSO or a key player in the energy industry (broadcast as a live feed to online participants), followed by a Q&A or a facilitated discussion in real and virtual breakout rooms. The final session comprised a panel discussion, and the interactive stands were run on a drop-in basis. In addition, stakeholders were asked to vote in a series of online polls using Slido.

For the purposes of this report, no differentiation will be made between feedback gathered from the in-person and virtual elements of the workshop.

NG DSO instructed EQ Communications, a specialist stakeholder engagement consultancy, to independently facilitate the event and to take notes of the comments made by stakeholders. This document summarises the feedback received. Every effort has been made to faithfully record the feedback given. To encourage candour and open debate, comments have not been ascribed to individuals.

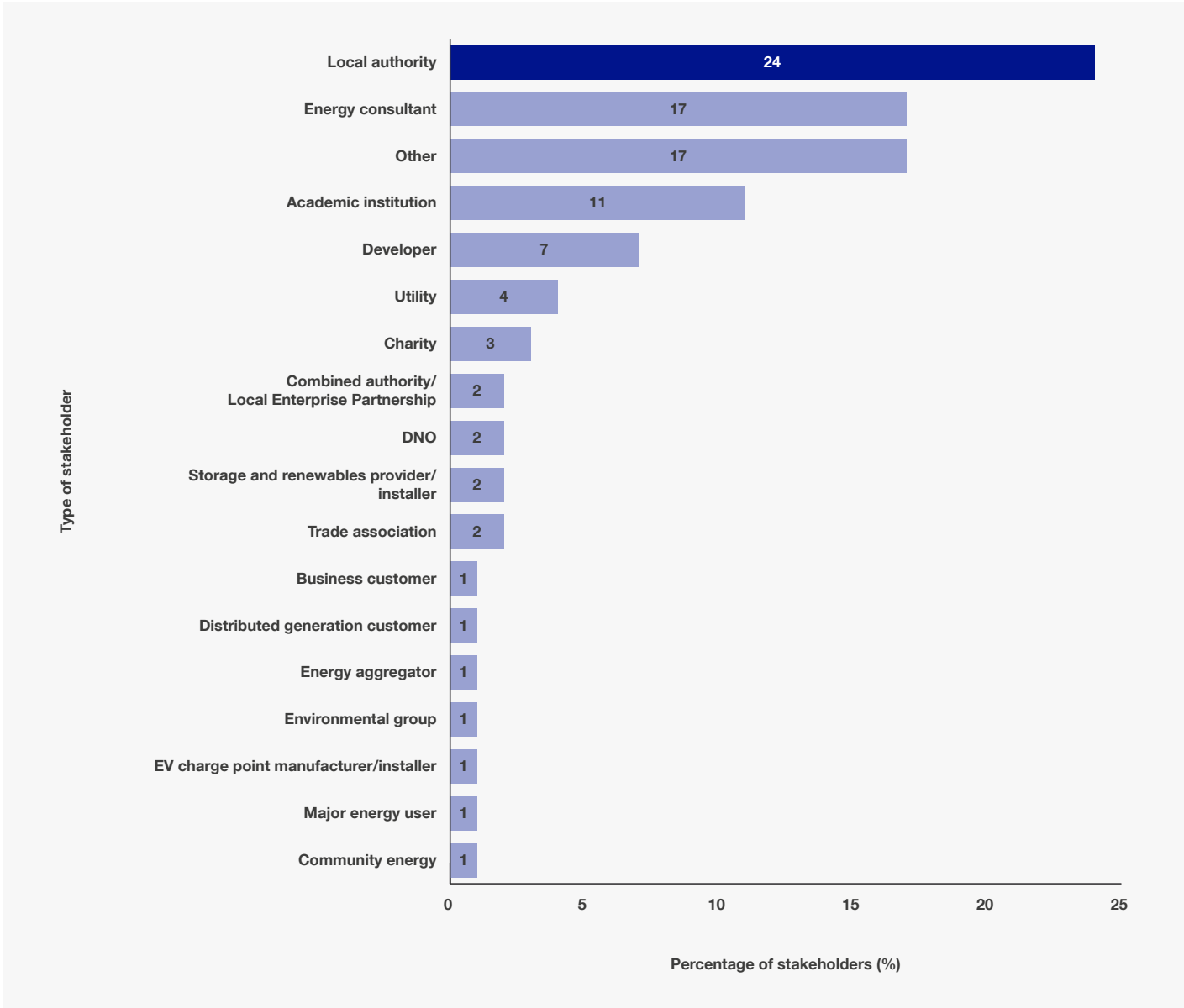
Executive summary



Executive summary

Participants

- A total of 187 stakeholders participated in the workshop, online and in person, representing 131 organisations.
- The most widely represented stakeholder group was local authorities, with 24%, followed by energy consultants and other, with 17% each.
- 90% of attendees who filled out a feedback form told us that they found the workshop either ‘very interesting’ or ‘interesting’. 60% felt that the facilitation of the breakout discussion sessions was ‘very good’, while 35% opted for ‘good’.



Introduction and National Grid DSO, One Year On

Stakeholders were welcomed and walked through NG DSO's Strategic Action Plan and its five core DSO roles: 'Planning and Network Development'; 'Network Operation'; 'Flexibility Market Development'; 'Governance'; and 'Stakeholder Engagement', before engaging in a Q&A.

Following this, they were introduced to the NG DSO panel, whose remit is to provide strategic and unbiased challenge to NG DSO's plans and delivery. Finally, they were updated on NG DSO's progress in flexibility services over the last 12 months. They were then invited to participate in some electronic voting.

- Stakeholders were asked which elements of NG DSO's Strategic Action Plan Update were the most important to them. The most popular choice was 'Planning and Network Development' (3.79/5), followed by 'Flexibility Market Development' (3.02). The least favourite was 'Governance' (1.45).
- Stakeholders contributed to a word cloud with the heading: 'What has NG DSO done well over the last year?' The most prevalent answer was 'stakeholder engagement', followed by 'flexibility development' and 'short-term flexibility markets'.
- Stakeholders added to a word cloud titled: 'What do you think are the most important benefits that NG DSO has delivered?' and the most widely cited responses were 'Distribution Future Energy Scenarios (DFES)' and 'improved flexibility services'.
- Contributing to a word cloud headed 'Where are the opportunities for NG DSO to do better going forwards?' the most prevalent answers were 'AI', 'Regional Energy Strategic Plans (RESP)', and 'whole-systems planning'.

DSO Consumer and System Benefits

Stakeholders participated in roundtable discussions to gather feedback on the benefits and challenges associated with the DSO and its relationship to the consumer and the electricity system. 16 of the 23 tables/breakout rooms discussed system benefits, with the remaining seven discussing the consumer benefits derived through the evolving role of DSO.

Consumer benefits

- There was widespread agreement on the value of expanding access to flexibility to the domestic market. Stakeholders identified several key benefits, including energy affordability, quicker progress to Net Zero, and better engagement on decarbonisation, consumption and retrofitting.
- Stakeholders believed there was untapped potential to involve more low-income and vulnerable households in flexibility services, but said that better education, clearer data, and stronger partnerships between local authorities and the energy sector were needed to make this a reality.
- Stakeholders were conflicted on NG DSO's current data offering. Some felt that their sharing of information and data had exponentially improved, but for others, lack of experience and expertise was a barrier to participation. Simplifying and summarising the data, along with support and training on how to best use it, was advocated in these cases.

System benefits

- Stakeholders were clear that NG DSO was well positioned to deliver huge energy system value by improving coordination, enabling flexibility, and enhancing access to data and network intelligence. However, they identified barriers to progress in an uneven market with inconsistent rules and incentives. There are also unclear roles and responsibilities between DSOs, Distribution Network Operators and the National Energy System Operator (NESO), and a lack of investment clarity, particularly around pricing and curtailment.
- Stakeholders acknowledged that NG DSO had made positive progress in engaging with stakeholders at a local level and tailoring its approach to match its audience. Areas for improvement suggested included better access to hands-on advice, streamlined engagement across NG DSO's regions, and investment in accessible engagement tools, such as a dedicated online portal for local authorities.
- While improvements in data accessibility were recognised, stakeholders argued that fragmented platforms, poor formatting, and navigation issues continued to be a barrier. Calls were made for more joined-up, user-friendly tools, and greater data transparency, particularly to support decision-making by developers, councils, and community groups.

Evolving Value of DSO

The event concluded with a chaired panel discussion populated by high-level figures from government, industry, and the utilities, and attendees were then invited to pose their own questions. Following this, they participated in some online voting, using Slido.

- Stakeholders were asked to contribute to a word cloud with the title 'What do you think are the most important benefits for consumers and the energy system that DSOs should focus on delivering in the future?' The most regularly cited answer was 'affordability', followed by 'Net Zero'.
- Stakeholders participated in building a word cloud entitled 'Which factors will have the most significant impact in shaping the future role of DSOs?' The most prevalent answer was 'engagement', followed by 'RESPs'.
- Contributing to a word cloud headed 'What do you think are the biggest challenges that we could face in delivering these future benefits?', the most frequently cited answer was 'capacity', followed by 'funding'.
- Stakeholders were asked which DSO topics they were most keen to be informed about in the future. The two most popular, with 53% of the vote each, were 'progress updates against our DSO commitments across our core roles', and 'case studies of leading DSO projects'.

Session 1:

Welcome and Introduction



Session 1:

Welcome and Introduction

Cathy McClay, Managing Director at NG DSO, presented the first session of the day. She reminded stakeholders of NG DSO's vision, which is to enable and coordinate a smart, flexible energy system that facilitates local decarbonisation for all customers and communities, at the right time and lowest cost.

She outlined their Strategic Action Plan, in which NG DSO committed to an ambitious programme of actions against its five core DSO roles: 'Planning and Network Development', 'Network Operation', 'Flexibility Market Development', 'Governance', and 'Stakeholder Engagement'. She explained that while they had delivered on the vast majority of committed activities, they continued to drive improvements across the business, with actions such as deploying day-ahead competitions in flexibility to maximise competition, and actively contributing to local and regional decarbonisation initiatives. Cathy then hosted a Q&A for both the live and the online audience, which has been captured below.

Question

"The GC0117 is about improving transparency and consistency and access arrangements across GB pan-European power station requirements, basically meaning all new power stations above 9.9 megawatts would be a large power station and anything below would be a small power station. One of the reasons for doing that is around access and visibility and forecasting. As a DSO, having that capability with the embedded connections, do you not think actually that shouldn't be in place and actually the DSO could provide much better forecasting and visibility of embedded generation?" **Energy consultant**

Answer

"I don't know about this. I used to run the markets at the system operator for four years. I don't have an opinion on that one, sorry. I'm not trying to duck the issue. I think visibility of assets on the network is important but as we get more and more network assets, being able to see every single one centrally is not the way we should do it going forward in the long term. When I was working at NEOM I was responsible for coming up with the mechanisms for flexibility and we didn't have any thermal generation, and we worked out we wouldn't be able to balance the system centrally down. We were adopting the

bottom-up approach of nodes balancing themselves and coming up, but that's for about 10-15 years down the line on our network. We're not a balancer of the system."

Cathy McClay,
Managing Director,
NG DSO

Question

"What do you foresee as the biggest challenge for the next year, how are you going to tackle it and what place does innovation take in that space?"

Energy consultant

Answer

"Just the general amount of change that's going on in the industry. For instance, the DSO is not responsible for connections, but we're supporting our DNO colleagues a lot. We're responsible for managing the transmission distribution boundary. The amount of work that has to be done to reorder the queue and get the new offers out is massive, so that will be a big challenge. The amount of uncertainty makes it harder to plan, but that's okay as we can keep pivoting. The thing that's really crucial for us is knowing what our big-ticket items are that we want to deliver. We know we have to move forward with our day-ahead trading and getting more assets into the system. In terms of system planning, we have to do our next network plan off the back of the latest DFES, and we'll have to work really closely with the RESP on that. Timescales are very difficult. We need to start that network planning in April or May as it's going to form the foundation of the whole business plan for NGED for ED3 and we have to start that before we have everything from the RESP. The other challenge we have is that the amount of work is increasing, and we are a small organisation. So we're looking very much at how we can drive efficiency in what we do. Some of the work my network planning team do, other companies do that for them out in India. We can look at some of that and free our guys up for the more 'added-value' work as well. So, efficiency is going to be super important, and using AI and innovation to drive our processes."

Cathy McClay,
Managing Director,
NG DSO

Question

"It feels like there's a conflict emerging between the new kind of contention of ED3, thinking about whole-system value and not stopping flexibility from connecting by avoiding network build. And yet the way the DSO is still being asked to evaluate flexibility and essentially just looking at network avoidance. How are you thinking about bringing some of that new whole-system value through flexibility, and what is it that you can and can't do?" **Energy aggregator**

Answer

"We've been running an innovation project called 'Headroom', which is looking at the value to the system of us building wires to allow things to come on earlier in the distribution network but also access the central markets. And we've been looking at the value of building more capacity and what that does to the whole build cost, because at the minute what we do in the cost-benefit analysis is we look at how we change the distribution network part of the build when we use flexibility. I can't tell you all the answers yet but it's really interesting, and we can show value in that. And it's then recognising for the DSO and the DNO the value that they're bringing to the whole system and the whole bill and not just their bit of the bill. It's going to be really important for the next price control."

Cathy McClay,
Managing Director,
NG DSO

Question

"I have a question about Clean Power 2030. There's forecast to be a huge amount of queue change, a lot of batteries on the network, especially NGED's region. Has the change in deployment of these assets been factored into ED3 and how has that impacted the CBA process at all in terms of deploying assets?"

Energy consultant

Answer

"The CBA for ED3 hasn't been decided yet. I think people might have seen the CP2030 report and we've analysed what's in our queue vs what the allocations are. Solar, we're broadly balanced, there's a bit more solar in our queue than has been allocated to

connect in our network, but that's assuming there's no attrition. Because we've had the moratorium, there's a bit less wind than we need so if you have good wind projects in our areas you might be able to connect. Batteries is for sure the interesting thing. I think the allocation across our four regions was 3 GW and with grandfathering that could be about 6 GW and we'll have 22 GW in the queue. So, there will be stuff dropping out. But even with that, to meet those CP2030, things will be connecting to our network four times quicker than they've ever connected before. A lot of those connections will be beyond 2028 just because of the timescale, but by 2030."

Cathy McClay,
Managing Director,
NG DSO

Question

"NESO is publishing their FES and NOA. How does the DSO's DFES programme align with NESO's activities?" **Major energy user**

Answer

"FES is published normally in July and is more of a top-down look, but it doesn't have all the detail. The DFES is aligned with the FES, so we take the outputs from that, but we do an awful lot of detailed analysis. We employ Regen to work on this with us. We go in and look at all the records of planning permissions etc., we're looking at new factories coming online, we're doing forecasts of heat pumps, we're doing forecasts of EV infrastructure, and we bring all this into the DFES. The RESP is going to build on that. We just look at electricity. We'll be working closely with the RESP. For the first round, the transitional RESP, a lot of the data we've gathered will be foundational for that but then as we transition over time, who does what is open. I outsource that first bit anyway, so I'm happy for them to do all that bit. The bit I really want to keep is planning my system, because that's my licence. I don't mind if someone else is telling me at the aggregate level or local authority level where all these heat pumps are going to be, but I want to design the network. Otherwise, we're not fully compatible."

Cathy McClay,
Managing Director,
NG DSO

Session 2: National Grid DSO, One Year On



Session 2:

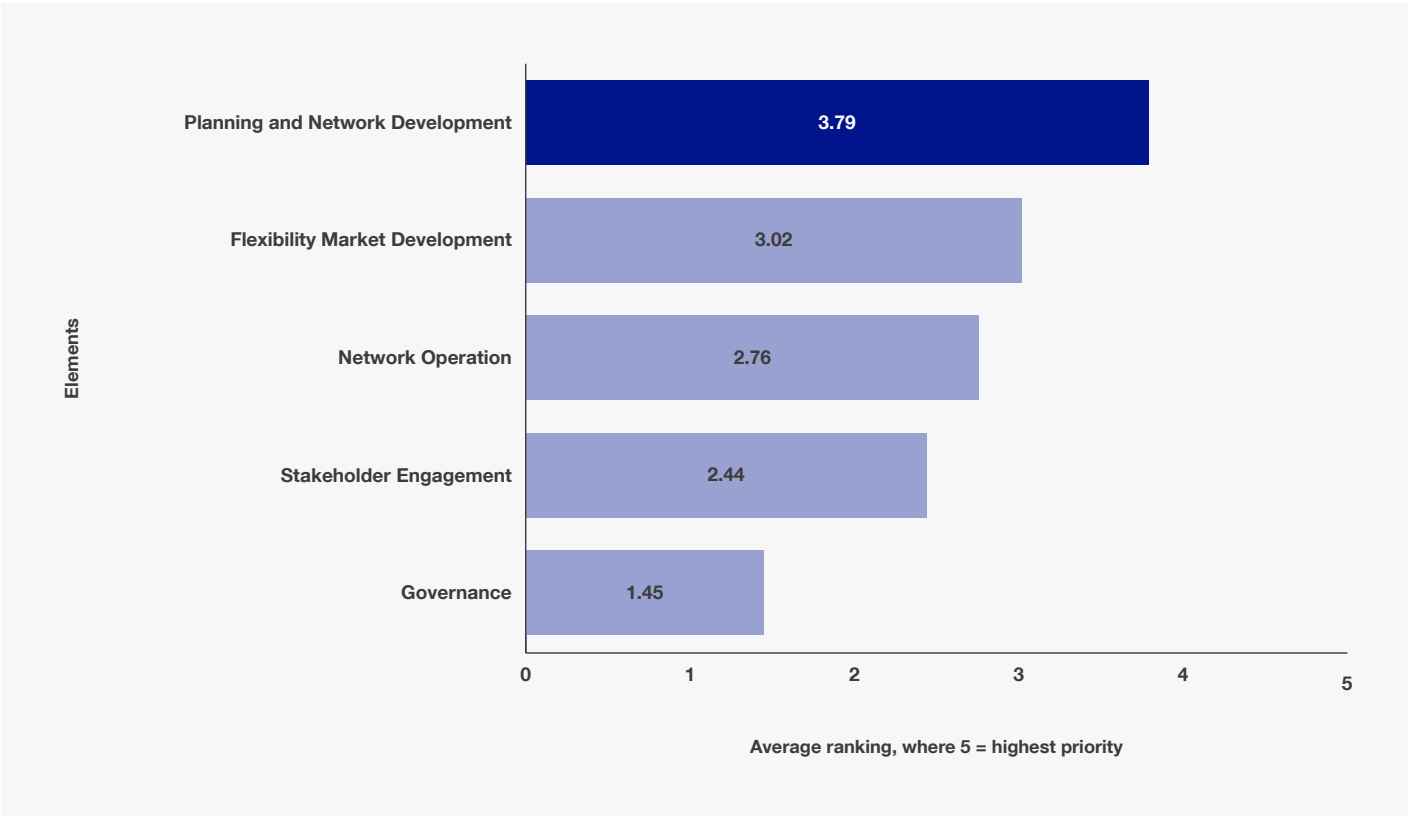
National Grid DSO, One Year On

Nina Skorupska, Non-Executive Director at Great British Energy and NG DSO panel member, opened the second session of the day. She mentioned the rest of the NG DSO panel, comprising Regina Finn, Director at Lucerna Partners and Chair of the LCCC and the Electricity Settlement Company, Janine Michael, Deputy Chief Executive at the Centre for Sustainable Energy, and Doug Cook, Director of Strategy at Ohme, and explained that it had been formed to provide an independent, strategic challenge to NG DSO’s plans and delivery. Reflecting on the progress made over the last 12 months, Nina showed that the panel had seen considerable progress, and also highlighted opportunities for further innovation, such as optimising the use of data and technology and reaching an even more diverse group of stakeholders.

Helen Sawdon, Head of DSO Operations at NG DSO, presented next, outlining a flexibility case study. She showed that in the past year NG DSO has more than doubled the number of registered flexible assets, and that greater visibility of these assets had improved system planning, enabling the DSO to direct investment to build bigger reinforcement schemes. She finished by showing how NG DSO was working to increase access to its flexibility markets, particularly for vulnerable and low-income households.

Stakeholders were then invited to vote on a polling question and contribute to a number of word clouds, using Slido. To read the full report, click here: [Access to Flexibility - Centre for Sustainable Energy](#)

1. Which elements of our Strategic Action Plan Update are the most important to you as a stakeholder?



2. What has NG DSO done well over the last year?



3. What do you think are the most important benefits that NG DSO has delivered?



4. Where are the opportunities for NG DSO to do better going forwards?



Session 3: DSO Consumer and System Benefits



Session 3:

DSO Consumer and System Benefits

Kayte O'Neill, Chief Operating Officer at the NESO, delivered a keynote presentation focusing on the potential benefits and challenges of the energy transition, and how whole-systems working was going to be critical to success. She stressed that value cannot be unlocked by a top-down or one-size-fits-all approach, and that acknowledging regional differences was vital. Meaningful energy planning must bring together the views of communities, local experts, and devolved and local governments, and be delivered through a coherent, joined-up approach. Kayte finished by outlining the delivery of a comprehensive engagement programme across all 11 of the RESP regions to develop tailored visions for each locality to ensure they dock, complement, and speak to the national ambition.

Stakeholders were then invited to give their feedback during roundtable discussions, with 16 tables/breakout rooms discussing system benefits, and seven discussing consumer benefits.

Consumer benefits

Future value and challenges

Stakeholders made it clear that there was a huge amount of flexibility value to unlock from consumers in social and lower-income housing. The challenge was that these consumers were not rich in energy assets, and were the least likely to have LCTs connected to their homes. There was therefore work to be done in ensuring access for these households to flexibility services, and this was seen to have both important social and practical value. Stakeholders saw that the more participants that were involved in flexibility markets, the greater the value for consumers as a whole.

However, there were seen to be challenges in terms of education and implementation. Stakeholders wanted to know if the DSO could take a role in supplying data for housing developers and customers to set them up for flexibility. Others felt that there was a real technical understanding gap between local authorities and the DSO, which was hindering the take-up and rollout of flexibility. Stakeholders cited the need for the

relationship between the energy networks and local government to go from 'parent-child' to 'adult-adult', where local authorities felt confident about network issues and planning, and could have peer-to-peer consultations on unlocking flexibility value across their constituencies. While it was felt that things were going in the right direction, more resources, engagement, training and learning opportunities would enable a faster transition.

For those stakeholders representing energy consultants, improved visibility of asset data had increased the potential value of their flexible assets. Citing that they had previously not calculated that there was much value they could gain from flexibility, these stakeholders pointed out that education in terms of time-of-use tariffs and data analysis was going to be key to unlocking further value. They felt that a lack of understanding in the general population was a barrier, and wondered if a national campaign on flexibility services, coupled with building trust on the local level, was advisable. In terms of their own participation, energy consultants wanted the DSO to be less strict on how it engages with the market, and give it space to hedge and aggregate how it wants. More freedom and more trust to work from different markets simultaneously was sought, which, in turn, would unlock more value for the industry as a whole.

Value of flexibility services

There was consensus on the value of expanding access to flexibility markets to domestic customers. Saving on energy bills was widely cited as a key benefit, along with a parallel expansion in an understanding of low carbon technologies and overall energy consumption. Increasing access to flexibility services was also seen as an excellent way to engage consumers on making energy-saving changes to their homes. Targeting areas with current and projected constraints was also seen as a key benefit of expanding flexibility services. The more that households are familiar with these services, the easier it will be for NG DSO to reflexively benefit and balance the network.

However, stakeholders were also in consensus over the challenges of engaging with low-income and vulnerable customers on access to flexibility services. Those representing energy consultants suggested making retrofit coordinators play a bigger role in providing education to households making changes to their homes, ensuring people have a point of contact for any issues, including making use of flexibility. Stakeholders representing local authorities pointed out that engaging with new technologies and systems, while good in theory, might also be too much for people who are already struggling with other issues. Using trusted, local networks and community energy groups was going to be vital in building trust slowly and gradually.

The creation of energy communities was also seen as a good way to engage consumers, and make sure that all communities benefitted from flexibility, regardless of income or vulnerability. Others suggested that the DSO could create more longer-term flexibility procurements to enable communities to invest in community-owned low carbon technologies like battery storage, which would boost flexibility participation. Stakeholders suggested replicating the identification of constraint management zones to target uptake of flexibility, but instead targeting areas of deprivation. They also felt that there needed to be an innovation trial on the classification of flexible assets, to open up opportunities for participation from customers in rural areas and vulnerable households. Ultimately, stakeholders felt that the flexibility market for domestic customers needed to be uncomplicated and simplified to encourage participation and engagement.

Data and information

There were mixed views on NG DSO's data offering, and its accessibility. The divergence in these views had much to do with prior experience of using and handling energy data. Some local authorities felt that the sharing of information and data from the DSO had dramatically improved over the last few years, but for others, a lack of technical expertise in using the data was a barrier to participation. Many cited struggles with decoding the language of the data and its acronyms, and felt stretched in both time and resources in making the best use of it. For these stakeholders, summarised data so that key points can be extracted and shown to political leaders was key, along with better support, training and resources.

Many stakeholders simply wanted more data. Stakeholders representing major energy users wanted access to data that would provide certainty over a five-to-ten-year investment period, such as available capacity and rates, to make the business case for investment. Those representing the charity sector wanted more data about domestic flexibility and how the system benefits will be distributed, aggregated smart meter data to focus on specific areas, and better data from substation monitoring. For these stakeholders, it was felt that NG DSO were good at sharing the data they do have, but did not publish or record enough data for a good, overall picture.

1. Where are the opportunities for DSOs to deliver additional consumer value in the future? What challenges could DSOs face in creating this value?

Verbatim comments

- “For me, it’s about articulating their position to consumers, it needs to be clear what’s in it for me; will it be a big saving or just a pound?”
Energy consultant
- “When I previously looked into our assets it didn’t look like there was much value we could add, but with visibility improvement the value has improved. Because consumers have never heard of being told of specific times when to use energy people are finding it hard to understand what the flexibility market really is. We’re not really participating yet, but this misunderstanding could become an issue in the future.” **Energy consultant**
- “Definitely a gap in the national campaigns. I think we have recognised that over the last four years. It would be good for some consistent messaging to be coming out on a national level. That is then supported by the trust element at a local level. I think people trust local. Whether that is through the local authority, local installers, being able to see and feel things. So, you need that messaging that gets people engaged. But then local trusted bodies that you have got some faith that what is going to happen to your home is a positive experience. Because we see a lot in the press that picks up on the minority of negative experiences, but they are the ones that tend to get escalated.”
Energy consultant
- “How do you educate the customer in terms of time-of-use tariff and using their equipment to the best use? I think that is another challenge. But an opportunity too.” **Energy consultant**
- “There are opportunities but there’s a bit of opaqueness. DSO are blurting out opportunities, but no one really understands them.”
Energy consultant
- “The problem is behaviour, the public work 9-5. But when we move to peaks, one business will have different peak hours to another and we need to find a way to have freedom and aggregate on our own hours. Be less strict on how we engage, let us hedge how we want.” **Energy aggregator**
- “It’s very complex and the market makes it even more complicated.” **Energy consultant**
- “Sharing that across communities instead of those who are more affluent.” **Local authority**
- “Social housing and lower-income housing won’t have things like heat pumps and EV charging installed there in that space.” **Local authority**
- “There is a big opportunity gap where low-income customers are not currently delivering the same flexibility as higher earners, so if we can work to deliver that then there are benefits for consumers and network alike. It’s about increasing accessibility and being fair and just for all energy users.” **Charity**
- “That’s a whole swathe of people that aren’t rich with energy assets that have a lot of potential and value.” **Local authority**
- “There is very little data on how they sweat that asset, to use a technical term.” **Local authority**
- “On a policy perspective how can a DSO supply that data and how can you set a new build up to set them on a pathway that unlocks flexibility?”
Local authority
- “We would like to see more heat pumps and ensue they are set up and in the right way to profit from a flexible asset.” **Utility**
- “In transactional analysis, one studies how you start from a parent-child relationship, and you strive to reach a place where you have the role of adult and your parents treat you like that. The current relationship between local authorities and the energy system is very much parent-child and we want it to become adult-adult. There is a huge gap in our technical understanding. From NG DSO’s perspective, you have your stakeholder events to look at what’s happening on the group, but we on the ground don’t have the ability to look up and know what’s happening in the market. If we operated on an equal footing, we could go directly to the DNO and DSO and understand from there what the network issues are. Finding the resources to do that training and learning ourselves is a challenge, we have some ability to do this but it’s only scratching the surface. We have dozens of people that need to understand how energy systems work, and the trend is going in the right direction, but we need more resources to understand it on a more holistic level.”
Local authority

- “From my perspective, there needs to be better engagement on a one-to-one level from stakeholder engagement officers. This has improved recently, but there still needs to be more work done. I didn’t know who to go to.”

Local authority

- “It should be easier to access info on planning for stakeholders, and the link between the DNO and DSO needs to be clearer.” **Charity**
- “In one of the slides I saw the constraint costs, savings, etc. I think DSO probably will be able to help quite a lot because we are renewable developers. What we are mainly hit with is constraints and access to the network. I know there are A&M schemes and infrastructure schemes. Would you let us connect earlier? But then we are curtailed a lot. So probably refining the study methodologies and also improving how the current market is evolving and enacting the study methodologies for the new market that we are going to operate in. Unnecessarily causing constraints and limiting the generators coming online is probably one of the aspects where DSO can help.” **Major energy user**

- “I think flexibility on the grid is absolutely crucial for decarbonisation and resilience going into the future, but in terms of consumer benefits, I just see absolutely enormous potential benefits for consumers being able to benefit from smart tariffs and things like that in terms of bringing their household and energy costs down. Especially shifting to more electrified heating solutions where the electricity costs are quite high: it will be crucial for them to manage what they’re drawing from the grid and the costs therefore of that power in ways that suit their consumption patterns. The flexibility has enormous potential to benefit local people.”

Local authority

2. What are the most important benefits of expanding access to flexibility markets to domestic customers? How can NG DSO better engage low-income and vulnerable customers on access to and value of flexibility services?

Verbatim comments

- “I think for the benefits for the domestic customer it has got to be cost and savings. Whether that is through the deployment of a heat pump or battery or solar PV, is to actually see some tangible benefits on their bills. I think we all know the energy price pressures are a pinch point. It is also a really good way to engage people into making those changes in their home. What we need to make sure is that engagement from the retrofit coordinator is also providing sufficient education to those households on how. Leaving them with a point of contact for when they get stuck. Utility picked up on the one-stop shop. There would be good places for people to be able to drop into a local area to really understand how best to use their kit.” **Energy consultant**
- “I think we are entering into a time where consumers will need to be much more familiar and have a better understanding of technology and their consumption, which from a decarbonisation PoV can only be a fantastic thing. But the engagement to achieve that and to make it really accessible is going to be a challenge when people have so many other challenges on their plates, especially those living in deprivation. The engagement piece is potentially enormous but using local networks and community energy groups is going to be the way to assist in getting the messaging out there.” **Local authority**
- “Knowing the future areas of where you’re going to consistently need energy in a constant location. We could target future housing areas where we know there will be heat in the future, work closely with councils to make sure there are assets there and make sure the consumer has access to those assets.” **Energy consultant**

- “Create more energy communities, picture a group of people. Homes that are actively participating, have the money to support themselves and can afford low carbon tech. Then you have people who can’t afford low carbon tech, so they supply their data to this community to participate. An active member and a passive member both benefit from this market. It will benefit whole neighbourhoods.”
Energy consultant
- “In our report, we recommended something around encouraging more participation from non-traditional flexibility service providers to take part through investing in a large community-owned battery storage that residents could benefit from. DSO could look into more long-term flexibility procurements to help facilitate this, and this is an action that they can actually take to make things easier.” **Charity**
- “This goes back to the question on consumer value but also transparency. If low-income customers are not participating in flexibility and extra grid generation, are they also not getting value from the savings generated? Looking at getting more people to participate, it was about people who can’t access the funding schemes through things like installing an EV charger or producing grid capacity to sell back to the grid. One thing we’ve been doing is working with users to produce Smart Energy Action Plans. These involve talking one on one with consumers and putting in place a plan for engaging with flexibility services with the resources they do have.”
Charity
- “We can look at the constraint management zones where NGED is producing flexibility, but can we target more deprived areas with this?” **Charity**
- “There needs to be an innovation trial on the classification of flexible assets. This would enable us to open opportunities up for more customers in rural areas and vulnerable households.” **Charity**
- “More vulnerable customers need to be integrated into flexible services. Smart home energy systems need to be in place from the beginning and training how to use them effectively from the beginning. These services also need to be more linked up with government schemes.” **Charity**
- “One of the biggest challenges we face is that there is not much opportunity for flexibility in rural areas.” **Local authority**
- “We’d like you to make flexibility more available for small businesses who may not have enough time to undergo a lengthy process.”
Combined authority/Local Enterprise Partnership
- “The best thing you can do for us is to provide a service for a collection of small businesses, to express a collective interest in flexibility.”
Local authority
- “Overall, you just need to break down all the processes for domestic customers to encourage engagement.” **Local authority**
- “There needs to be more trust in flexibility markets for customers, so a simplification of costs and processes will allow for this.” **Energy consultant**
- “I think there needs to be greater investment in supply chains for home energy storage solutions, to lower the costs of installing these technologies. A challenge we have is introducing viable, but more ambitious, building standards for new buildings, and pushback from developers and building firms who don’t want to deviate from the Building Regulations baseline.” **Local authority**
- “It’s so technical and the suppliers, as a customer, aren’t giving us the support we need. There needs to be more work with the electricity suppliers about how customers can involve themselves in the flexibility services. It’s quite important that the DSO engages with smaller domestic suppliers early so that customers don’t get confused.”
Local authority
- “There is a real need for a national communications campaign because there is such a gap in understanding, and you also have to fight the disinformation. Having really clear messaging is really important. The whole question of control of energy for local people, people feeling a sense of control, that question extends out into other areas. E.g., feeling in control of finances, which is an issue for so many people. It’s important in that respect but also in terms of climate anxiety and feeling like you’re making a difference and able to make a contribution and reduce your impact. In so many ways it’s important, but you have to take in the context of everything going on in people’s lives. Finding the key to what’s important. The communications campaign is essential.”
Local authority

3. From your perspective, to what extent does NG DSO present and provide data and information in a useful and accessible way? How could NG DSO make its tools and information more accessible to enable further consumer value?

Verbatim comments

- “The sharing of information and data has dramatically improved over the last few years, and that is a great help. What we are finding is that some of the other information that is sent through is very good for stakeholder engagement and communication that has then kind of switched a lot of the layers off. So, either you get a lot of the raw data or something that is very suitable to put into the public domain. What we are looking for is something in the middle. To maybe present in a different way when we are dealing with some of our stakeholders.” **Local authority**
- “For us, any data that provides certainty over the next 5-10 years to make investment, like whether there is enough capacity to plug into the grid, will be crucial. We need to know what rates we can reliably get to make the business case for investment. There’s a lot of work to be done on how the grid intends to use battery storage. For us, it’s an unpopular policy to share this capacity, because we’re going to want to sweat those assets as much as possible. If the grid is going to be passing on the capacity, that makes our business viability more difficult.” **Major energy user**
- “I’m currently having to sit and understand the acronyms and translate it into a language that politicians can understand to get buy-in. We also struggled to get a contact and representative from NG DSO, we had a contact for West Midlands, but I’ve had to be badgering the person from East Midlands since they left their role. The last 12 months we really struggled with that and I’m getting questions from the Levi department and other areas which I don’t know how to answer.” **Local authority**
- “We need better data about domestic flexibility and how the system benefits will be distributed. This requires greater visibility of who’s going to share in the benefits that are produced when these flexibility services are made use of.” **Charity**
- “I can’t access the necessary data as I am pushed for time and the processes are too complicated.” **Local authority**
- “Community groups want data from substation monitoring, so the data needs to be made available in an accessible form.” **Charity**
- “There needs to be increased visibility of the network to allow for informed decisions, as well as more investment in LV visibility.” **Energy consultant**
- “I’d like to know more about the data we don’t have. There is inconsistent and patchy data from monitoring substations. DSO’s are good at sharing the data they do have, but they don’t publish or record enough data for a good picture.” **Charity**
- “The lack of access to smart meters, or the fact that many clients have broken smart meters, is restricting flexibility engagement. We need to see aggregated smart meter data to focus on specific areas. The fact is that people can’t participate in flexible markets without a smart meter.” **Charity**
- “Speaking of curtailed wind data, is it accessible or does it even exist?” **Local authority**
- “We don’t have the resources or time to look in detail at the data. The data needs to be more summarised so we can take key points to directors to show them the potential.” **Local authority**
- “There needs to be support for helping people to understand the data. The issue is that big companies can understand it, but smaller customers cannot.” **Charity**
- “The data needs to be broken down and linked to real-life impacts.” **Local authority**

System benefits

Future benefits and challenges

Stakeholders discussed the opportunities for NG DSO to deliver whole-system benefits. Pointing to the DSO's position in the system as both operator and convener, with access to network-level intelligence and relationships across regions, stakeholders argued that NG DSO was well positioned to unlock significant whole-energy system benefits by enabling flexibility, improving data access, and strengthening coordination between national and local actors.

To capitalise on this, stakeholders urged NG DSO to play a more proactive role in driving local flexibility markets, reducing curtailment, and helping to unlock investment in low carbon technologies. Many highlighted the value of the DSO's growing role in data provision, particularly in providing high-quality, reliable data, mapping constraints, visualising capacity, and forecasting future needs. They felt that enhancing access to this data would accelerate successful connections and make the system as a whole more dynamic. Stakeholders also saw opportunities for NG DSO to support decarbonisation through smarter use of digital tools like AI and digital twins, which could enable more efficient system planning across sectors such as transport and heating.

Stakeholders also highlighted a number of challenges that might prevent NG DSO from delivering on these opportunities. A fragmented market landscape, with differing rules, platforms, and incentives across zones and regions was cited as a major issue, as was inconsistent communication and unclear responsibilities between DSOs, DNOs, NESO, and Ofgem. Many stakeholders felt that a lack of investment certainty, unclear market signals, particularly around pricing and curtailment, and skills shortages were delaying progress. Local authorities especially noted the difficulty of navigating technical language and acronyms, calling for more accessible engagement and clearer alignment with their own planning processes.

Collaboration

Stakeholders were clear that NG DSO had made welcome and positive steps towards engagement, particularly through increased visibility at forums and availability for local-level discussions. Many recognised recent efforts to build partnerships, and noted examples of productive collaboration with NG DSO representatives. Stakeholders singled out flexibility in market development, involvement in local area energy planning, and the willingness to tailor communications to different types of stakeholders from large developers to small businesses as areas for specific praise.

However, significant areas for improvement were identified. Chief among these was the need for clearer communication and consistent engagement processes across regions. Stakeholders representing local authorities reported struggling to identify the right points of contact or to access relevant data in formats they could decipher and use. Many called for more practical, hands-on engagement, such as surgeries for specific projects and workshops to learn and share feedback, along with more structured ways to share best practice between regions.

There was also concern about data credibility and transparency, with multiple stakeholders suggesting that existing forecasting and planning mechanisms, such as DFES and Local Area Energy Plans (LAEPs), were undermined by inconsistent or incomplete local data submissions. Stakeholders representing developers and energy consultants felt that better collaboration and visibility would stimulate investment and growth. They wanted the DSO to include an element of price discovery on potential assets to provide more certainty for investors and customers. They also wanted to improve clarification so that consumers know whether they should deal directly with the DSO or go straight to the market. Similarly, better engagement with stakeholders on where and how to invest was also sought, especially for those who were newer to the process.

Looking ahead, stakeholders urged NG DSO to invest in more systematic, inclusive, and accessible engagement tools. Suggestions included a dedicated online portal for local authority data access and submission, clearer guidance on roles and responsibilities within the whole system, and support for under-resourced councils. Tailored engagement for customers who don't have much experience of the industry or industry-specific knowledge was advocated, looking at small businesses like hairdressers, salons, and dry cleaners to unlock untapped flexibility benefits. Stakeholders also reflected on the importance of maintaining lines of communication through uncertainty in the energy industry, particularly as the effects of RESPs and NESO unfold, and efforts to reform the connections queue and locational pricing become a reality. In the words of one stakeholder: "A lot of change is involved and it's important to go hard on communication and collaboration. We're at a relatively early stage of this journey."

Data and information

Stakeholders acknowledged that NG DSO has made clear improvements in data and information transparency, particularly through tools like the Network Opportunities Map and the DFES. However, many felt that access and usability remain

inconsistent. Data was often spread across different platforms, requiring users to know exactly what they are looking for to find relevant content. Navigation issues, such as broken links, nested downloads, and non-machine-readable formats like PDFs, were frequently cited as roadblocks. Stakeholders recommended consolidating information, reducing login barriers, and creating a single, intuitive entry point to NG DSO's data. There was strong support from developers for publishing more data in CSV format and expanding access to fresh, real-time data, especially for capacity, curtailment, and flexibility data. These stakeholders wanted more access to historic data, seeking the ability to forecast future revenue based on historic performance. Wider visibility of the procurement trends for flexibility was also advocated. In these cases, the ability to have a better economic read of the data would stimulate investment and build confidence in the market.

There was broad agreement that the current offer could be made more accessible to non-specialist users. Some stakeholders cited that the language and complexity of the data tools assumed advanced technical understanding, which could alienate local authorities, domestic customers, small businesses, charities, and community groups. Better contextualisation, clearer definitions, and visualisations that help all users understand what the data means and how it can be applied were advocated, such as use cases, simplified dashboards, and explanatory guides. Standardisation across DSOs was a strong theme, with many frustrated by regional variation and calling for consistent language, formats, and user experiences. In terms of best practice, UKPN's Open Forum data offering was singled out for praise.

Stakeholders from academia highlighted that NG DSO's datasets, while improving, still lacked clarity on assumptions and uncertainty, particularly within scenario-based modelling. Concerns were also raised about data quality, accuracy, and the timeliness of updates. Inaccurate, hard-to-find or out-of-date data was said to lead to poor decision-making and lost opportunities, especially for developers and local authorities working to tight funding deadlines. A key comment here was: "We only have 10 minutes to do a funding application, so easily accessible data is crucial."

Regional Energy Strategic Plans (RESP)

Stakeholders emphasised that close, early and continuous collaboration between DSOs and RESP was going to be essential to deliver the best value for the energy system. Stakeholders stressed the importance of building partnerships now, rather than waiting until structures are fully formed, so that RESPs can meaningfully influence DSO planning assumptions and vice versa. Maintaining a whole-systems perspective was seen to be critical, with DSOs contributing their deep understanding of network data and constraints, while RESPs bring local strategic insight and decarbonisation ambitions. Local area energy planning was seen as a helpful foundation for this dialogue, particularly in Wales, where all areas have such plans in place. Stakeholders advised that DSOs and RESPs would need to work together to understand each other's roles, align plans to long-term system needs, and build shared governance and accountability structures.

Communication emerged as a core theme, with stakeholders calling for a standardised, shared language to avoid misinterpretation and ensure clarity across organisations with different levels of technical expertise. Both DSOs and RESPs would need to improve how they translate complex data and processes into actionable insights for local authorities, community energy groups, and businesses. Suggestions included simplifying messaging, improving visibility of grid constraints and opportunities, and ensuring that local actors know where to go for support. There was also a strong emphasis on improving trust, transparency, and inclusivity, particularly around smart meter data and flexibility services, which many stakeholders noted were not yet well understood or trusted by the wider public.

Some stakeholders voiced concern about the current regulatory uncertainty DSOs face, and how this limits their ability to act in support of regional strategies. Several energy consultants urged Ofgem to clarify expectations for DSOs so they can invest with confidence and take calculated risks. For these stakeholders, enabling connections with greater efficiency from constrained assets was a key deliverable of the DNOs and RESPs working together. Others highlighted the need for market facilitators to independently assess opportunities and support flexible grid operation. Community engagement was also seen as critical: stakeholders called for efforts to bring in currently disengaged users and make regional planning more accessible to diverse groups.

1. Where are the opportunities for DSOs to deliver further whole energy-system benefits in the future? What challenges could DSOs face in realising these future benefits?

Verbatim comments

- “One blocker to our assets providing flexibility services to parts of the grid is zonal positioning: if you’re not in the right zone, your services won’t be bought.” **Developer**
- “More certainty about connections would also be massively helpful for us in getting investment for our assets. DSO revenues are a nice add-on, but they’re not going to provide the sole basis for building an asset. We need to know how much you need and where you are going to need it, for example.” **Developer**
- “I would say that the volume is there and we can make money from them when we stack the opportunities in different markets. Some of our work is in wholesale trading as an aggregator and it’s tricky, as you need to have bespoke approaches to unlock value for each customer. For example, we can save big law firms 2% off their energy bills per year, but it’s small fry compared to their huge revenues. In particular, short-term flexibility opportunities are being missed at the moment.” **Energy aggregator**
- “AI is changing the landscape, and I can see a number of ways to use it, especially for predictive analysis and forecasting, network planning and demand management.” **Energy consultant**
- “There is a great opportunity to use AI for the optimisation of systems.” **Energy consultant**
- “Market design is important, and I would like to see the DSO engage more around local flexibility.” **Combined authority**
- “Reducing curtailment would be a big one. Just the number, if we organised flexibility, it would promote more connections and people wouldn’t need to worry about power being lost.” **Energy consultant**
- “I think on the grid connections point, where we are aware of where the constraints are, but can someone who can provide flexibility manage that constraint? Grid chargers to some extent visualise where the system constraint is, so how can we have a more dynamic network to provide the support it needs?” **Developer**
- “How do you maximise the whole-system value, is there value in reducing flexibility for the whole-system network? You want to reduce curtailment but how much? There comes a point where there is an official level and an unofficial level, and how do you determine which to use?” **Energy aggregator**
- “Industry is not sure about what to invest, as they need more clarity about the future.” **Energy consultant**
- “This country does not have precedents of doing big things or investment well.” **Energy consultant**
- “Investment has to be more joined up. There is a plan for a new cable factory underpinned by three offshore windfarms, if this does not happen then there is a risk of stranded assets which do not benefit the customer.” **Developer**
- “They have to find equilibrium as investing at the right moment in the right manner, tension between forecasting of future needs and building for this, but then not overbuilding capacity.” **Distributed generation customer**
- “Flexibility markets need better visibility and transparency.” **Distributed generation customer**
- “We need to help consumers understand flexible markets.” **Energy consultant**
- “Consumers have no idea what flexibility markets are.” **Energy consultant**
- “Touching on the benefit side of things; that’s key for all the DSOs. I want to say, ‘What are the activities and how do they benefit the consumers?’ I think that’s really been lost, particularly for the end consumers, and it’s a common challenge. The opportunity is that you could increase the participation in the energy system, for example customers could be engaging with the flexibility market. I think this will naturally aid the transition to Net Zero.” **Energy consultant**
- “NG DSO is very helpful in putting granularity on curtailment. Its work on the map is quite detailed and we couldn’t have got that from a DNO. It helps to show what curtailment means and what influences it has. The challenges are finding the right person to talk to. I’ve been able to get to the right person, but I can imagine that it might be impenetrable for someone from a local authority, for example, who is not familiar with this topic. This is a challenge for DSOs to overcome.” **Developer**

- “Opportunities would relate to engagement. It’s a very complex landscape and the challenge is figuring out how we can get in touch with people and how they can get in touch with us.” **Utility**
- “DSOs can play a pivotal role in solving connection issues at the local level, using a data-driven approach. The map is a great critical step. Outside the DSO ecosystem, the challenge is that the distinction between DNOs and DSOs is blurry. It’s difficult to know who we should talk to. Clarity would be really helpful.” **Energy consultant**
- “It’s encouraging seeing the steps taken since last year, especially in data visualisation. Hopefully this will help other stakeholders. I’d like to see how this is being implemented and more transparency on that. NG DSO is leading the way in terms of connections, but there’s a mismatch with other operators. DSOs could learn from each other so that they all have the same amount of tools available. The biggest opportunity could be in identifying the lessons learned.” **Academic institution**
- “Opportunities would be speeding things up, data exchange, bringing in data-sharing infrastructure, and benefiting from this so that things can happen faster in a very slow-moving industry.” **Energy consultant**
- “Navigating external factors like government decisions is a challenge.” **Utility**
- “Priority must be common across DSOs and DNOs. We need standardisation, repeatability, a technology focus and a clear plan. Progress with the ENA is one piece of the jigsaw. I want to understand where high potential and high impact is. The role of NESO in orchestrating these events needs to be clear. We talk about coordinating, but what’s the overarching need for Net Zero by 2030? Drill down to key priorities.” **Storage and renewables provider/installer**
- “We’re running flexibility markets, but there are barriers to getting involved. It’s hard to keep track of everything due to inconsistent messaging.” **Energy aggregator**
- “We need multi-vector insight with all providers joined up.” **Local authority**
- “The technology across DSOs is different, so that means a barrier to entry every time. This requires consistency.” **Energy aggregator**
- “There is a real opportunity to bring along local authorities, as the top-down approach is not working any more. We have to bring people along, to increase engagement. We are going to need a lot of support with budget constraints, and need to bring threads together, to upscale. From the planning perspective, if we were brought on early enough and able to help to create the roadmap, it would ease the process and help us to clarify what the overall roadmap is, as well as promote a more efficient and precise definition of everyone’s role.” **Local authority**
- “In the light of event days such as this one, dedicated to energy efficiency, we should increase community engagement at grassroots level. In system planning, with links to investment opportunities and growth, it is important for all to understand how much we can tilt towards flexibility, and how we bring more green energy into the network. It is essential that we start bringing people together, even if their individual contribution is small. Local communities should be involved and have an opportunity to share their concerns etc. Shifting those numbers could be vital, in my opinion.” **Energy aggregator**
- “In my view, the challenges are illustrated by all these acronyms we use, such as the ones we hear today: SSEP, DFES...so many acronyms!! How are local authorities supposed to understand all these acronyms? It is not a criticism of the DSO, as I completely understand they have to be involved in a process. Considering these kinds of challenges can be useful to understand how the process could be streamlined.” **Energy consultant**
- “There is a huge skills shortage. I was working in the NG a few years ago, and they were begging people to help build infrastructure. The system allows putting a price forward but, down the line in the process, there are issues with skills shortage. People can talk about these things, but at the end of the day, we need to get the infrastructure where it is needed, and we are not in a position to do that due to this skills shortage.” **Energy consultant**
- “It’s about the opportunity for partnership delivery. We’re really struggling with the NG’s environment policy. I don’t feel like it’s been considered properly from the top down. There’s all these skillsets that are completely disregarded. We get really frustrated where community energy projects are trying to deliver clean energy, but they’re told they can’t connect till 2030. There are people on the ground itching to make this decarbonisation happen, but NG are not adequately facilitating this.” **Local authority**

- “DSOs and DNOs have made good strides in recent years in making data available. But there is headroom to get further benefits from data, such as dispatching assets and procuring them. There’s a huge pitch there that could build on what is not being currently done. Although there is positive movement in that direction, there is further to go.”

Energy consultant

2. What do you see as the strengths or areas for improvement going forwards of NG DSO’s approach to collaborating with local and regional stakeholders to deliver system benefits?

Verbatim comments

- “Clarifying individual roles within whole networks is key to promote reliability and trust between stakeholders and consumers, this is something that comes up a lot in developing charging and development innovation with customers and local authorities.”
EV charge point manufacturer/installer
- “Local places. Local faces. Local politicians, local people and stakeholder communication is key to being in the trifecta and improving understanding and access to information that helps whole-network engagement.”
EV charge point manufacturer/installer
- “Benefits for the future would need to include an element of price discovery. Customers and investors need to know that it’s worth it. Consistency, clarity and liquidity are key.”
Developer
- “Although lots of work is done to speak with local area energy planners, there could be a lot more done to drive home benefits for people who don’t have any idea about the industry or industry-specific knowledge. It’s taken for granted that a business is automatically plugged into the system (major domestic), massive opportunity for commercial users to be more involved with education and outreach; e.g., hairdressers use a lot of electricity but have no clue about underpinning area growth and development and how this can benefit them.” **Energy consultant**
- “In terms of the benefits delivered by the DSO, there needs to be clarification for investors and potential customers on how much the DSO needs to deliver, so that consumers know whether they should deal directly with the DSO or go straight to the market.”
EV charge point manufacturer/installer
- “Communication is important to understand where and how to invest. That information isn’t always readily available. It’s better if you already have connections and knowledge. But if you’re new to things like solar and energy storage and don’t already know them it’s a bit of a minefield.”
Storage and renewables provider/installer
- “We need more consistency between the DSO and the DNO, it would be good to have more forums like this so that we can improve framework standardisation and allow for more bilateral framing. Also allows for team building and helps us to ensure that as stakeholders we are all on the same page.”
NESO
- “We need to ensure knowledge of potentially differing privacy policies when working alongside each other, and acknowledging overlap within industries and floating tariffs and looking at how flexibility can challenge standard technologies.”
Energy consultant

- “There is a need to develop frames for engagement to figure out staffing and projecting for projects moving forwards. Looking at how different stakeholders can operate and how they ensure efficiency within such a complex market. When we look at and stack up stakeholder coordination, we need to look at how specific turnaround can be utilised by NESO to follow up with growth projects, and stakeholder engagement needs to be emphasised and encouraged around this.” **NESO**
- “Access needs to be coordinated in a more organised and collaborative fashion, building local networks with the grid via DSOs to decongest the grid along local authorities, it’s important to involve both community members and politicians.” **Energy consultant**
- “We are doing an energy infrastructure deep dive and building a patchwork of deep knowledge to hand to NGED, but there are questions about how robust and credible that data is, and how much resource is needed to build that data.” **Combined authority/Local Enterprise Partnership**
- “When the data differs or there are discrepancies, it is very difficult to find a consensus point as to the credibility of the data, and the work we have done so far has taken a lot of work from both sides, we cannot do that for every piece of data, so we need to look at how we use our data and data tools to have these discussions in a much more systematic way.” **Combined authority/Local Enterprise Partnership**
- “I think the DSO should have more influence on regional plans. It’s not on the validation checklists. We always educate clients to include utilities as part of that but it’s more focused on the water side than electricity and gas. It’s key to the early stages of the masterplan and the local development plans. From small developers to huge industrial ones, utility is the elephant in the room at the beginning. It’s about conversations and making the plans feasible.” **Energy consultant**
- “They have been incredibly helpful. They’re always available.” **Utility**
- “National infrastructure should share data so that companies can collaborate and discuss. There are some open-source things happening, but more networking is needed, like today.” **Energy consultant**
- “Engagement can be a competition of how many people you’ve engaged with but it’s so much more meaningful to actually see what someone has actually said. You don’t know if it is really stakeholder led or if it’s a tick-box, validating thing for the company.” **Energy consultant**
- “I know that collaboration and engagement are really important to NGED DSO so I’m really glad to hear that. I haven’t really had first-hand experience, however. You’ll have to ask me in a year’s time. We need to speak to those in our local authority further to get a better idea of what the area needs.” **Local authority**
- “There need to be enough bottom-up communications through local authorities and LAEP. You need to balance that with the top-down approach. From my engagement, I think the local authorities would like more communication to know their needs are being accounted for. It’s not just about how investment is made. An online platform for data for local authorities would be extremely helpful. A really promising development.” **Energy consultant**
- “I’ve not engaged with DSOs. With DNOs it’s very transactional. There are lessons that can be learnt from the engagement NESO and Ofgem do. I think their engagement is very successful. I really like the idea of this data-sharing portal for local authorities, but it can be very difficult to get permission from them to share the data. If the local authority rejects a request, then it’s just a waste of cost and time. It would be helpful if local authorities had a good knowledge of why the data is required.” **Energy consultant**
- “Do you find it challenging with the six DSOs and the different ways in which they share data?” **Energy consultant**
- “It is. Sometimes there isn’t even a commonality of what a term means and how it’s used. In NGED’s region it’s not so bad. In some regions, you just get a CSV file with loads of numbers.” **Energy consultant**
- “Communication through uncertainty and reflecting on the impact of this change is key. Being undercooked on wind, having too much battery and with locational pricing on top of that, what is the impact of it all? A lot of change is involved and it’s important to go hard on communication and collaboration. We’re at a relatively early stage of this journey.” **Developer**

- “The two-way aspect is that you’re going out to ask about development plans and what your local plans are, but there’s also the question of what will help the network and where work will be done, such as heat pumps and EVs. The DSO could feed back more into local communities over what would help, rather than gather information on plans.” **Academic institution**
- “For me, it would be the sharing of best practice. There is no need for everyone to learn from scratch. If we were able to learn from what is working in other places, it would be good, rather than starting at bottom. Also, at local authority level, we need to see more engagement opportunities. We are limited with our time, and we need more hands-on engagement on more practical activities. For example, that could take the form of surgeries where we could talk through specific projects, with a view to moving onto longer-term support for them. It could also be useful to have templates, to work through some aspects of forthcoming projects. LAEP work has been good...but, for example, how do we know, as a local authority, that we are actually adequately engaged? What information is needed when planning starts, for us to engage more meaningfully in the conversation? A large amount of information tends to be requested, and it can become overwhelming. More guidance and support are definitely needed.” **Local authority**
- “My perception for us in local government is that straight answers quickly would be very useful as things are slow anyway at local government level. If that’s not possible, then rough ideas of network capacity quickly as else it’s hard to build business cases. We get caught having the money to do investigations vs is grid cost too high; It’s hard to do that option’s appraisal.” **Local authority**

3. What do you see as the strengths or areas for improvement going forwards of NG DSO’s approach to collaborating with local and regional stakeholders to deliver system benefits?

Verbatim comments

- “It’s great that NG DSO is making so many datasets available, but I feel that uncertainty is lacking from these conversations and these different uncertainty scenarios need to come through much more strongly.” **Academic institution**
- “While the website currently available under the NG DSO is greatly improved from previous offerings if the focus is purely on data, as it was shocking before, the data and accessibility of it is still so far behind what is currently available elsewhere. Data is mainly available as PDFs and not totally machine readable. There are still links within links and messy Excel documents, which is off-putting to stakeholders, not just the average consumer. It isolates the potential success of the DSO.” **Energy consultant**
- “The data variety we are seeing on a day-to-day basis between DSOs and DNOs is wild. There needs to be huge improvement in the consistency of the data between DSOs and DNOs.” **NESO**
- “Ensuring that data is both informative for those within the industry who have good knowledge but not isolating for customers has to be a priority. Customers just want reliability and reduced cost; a mess of data, spreadsheets and information is putting customers off engaging in clean power opportunities.” **EV charge point manufacturer/installer**
- “You need to embrace agile thinking and commit to delivering quickly in stages so that there is confidence in both the data governance and the decision-making.” **Energy consultant**

- “I do not have any complaints about the current support from the distribution systems operator so far, they’ve come in with all guns blazing and we have some great and concrete links with the DFES.”
Combined authority/Local Enterprise Partnership
- “At the moment, the data coming in from the distribution systems operator is helpful and accessible.”
Combined authority/Local Enterprise Partnership
- “There is always more to do, but the new DFES and the focus on opportunity areas is really helpful, especially when we get short-term funding opportunities from central government, we are able to go into the maps and overlay that with all the other data formats, and triage very quickly to respond to those opportunities.”
Combined authority/Local Enterprise Partnership
- “We only have 10 minutes to do a funding application, so easily accessible data is crucial.”
Combined authority/Local Enterprise Partnership
- “Our teams use the capacity-mapping tool day in and out. It’s great, but the conversation today is whether it is real-time. It’s not, as it’s updated quarterly. Is there headroom and committed capacity in that data? There’s work the DSO can do in terms of providing real-time data. If there’s headroom in that local authority and you can look at the local plan for the next 15 years you can plan for that.” **Energy consultant**
- “To publish the clear-view format in CSV format so I can use it myself instead of just viewing it on the website, especially with connections reform and CP30.” **Developer**
- “To publish sensitivity factors to do with curtailment, which enables us to do our own assessment so that we are not reliant on a third party doing curtailment assessments.” **Developer**
- “We can take our own assumption based on the data if you share it with us in a CSV format.” **Developer**
- “Seeing a use case for the types of data and how to use it would be useful.”
EV charge point manufacturer/installer
- “A forecasted future revenue based on historic performance would be useful.” **Developer**
- “If a contract is made, seeing data that it gets delivered would be helpful.” **Developer**
- “The data is not managed very well, it seems to exist in different cupboards, so to speak.”
Academic institution
- “It would be really great if you could see, say if they procure flexibility for November 2025, I want to see how much was procured so I can start to assume if they fulfilled their requirement or not. Sometimes it has shown at a big aggregator level, but we operate more on the short term to decide whether or not we integrate. You want to have a good a view as possible of the trends and what happened and when to decide if that is a good opportunity for you.”
Developer
- “The challenge is making the most of the capacity we have on the grid, we struggle with data with forecasts from NG, we get a long-term outlook but not a medium- and short-term view, which would help us react in terms of equipment etc.”
Storage and renewables provider/installer
- “Curtailment data is something that we have looked at. It’s more about timely access of it, a lot of it is quarterly or years old, so it is trying to get that data as up to date as we can because things change quickly, and seeing what capacity becomes available.” **Energy consultant**
- “Be more like UKPN.” **Developer**
- “UKPN Open Forum - transparent with information, outages, planned maintenance, really good data, easy to understand, easy-to-follow schedule for planned maintenance, they share data, they have increased planned maintenance and reduced non-planned. Could they cross-pollinate ideas with NG DSO?” **Developer**
- “Quality of data; there needs to be sense-checking of the data, users are doing the sense-checking rather than internal checks.”
Distributed generation customer
- “Please stop publishing bad data — capacity data on the visualisation map is not correct.”
Distributed generation customer
- “I mentioned to the capacity team next door that I have been having some issues with the capacity maps. Something where you could search for a specific postcode would be invaluable. I’ve had so much trouble with this in the past.” **Developer**
- “Trying to chase grid supply points is really difficult. A few months ago, I was online trying to find a substation in my area. I only knew where it was because I physically know it’s around the corner from me. There needs to be a commonality of data.”
Energy consultant

- “The progress made by the DSOs, in terms of data, is quite significant, and good to see, and some is really helpful. There also are more datasets on diagrams and models, and it is a challenge to find diagrams, and we have to specifically request them. It would help if we could get data across individual circuits as opposed to having to specifically request something when it is not available. Overall, I can say that I am pleased with the progress made so far, and the frequency of having to make these specific requests has decreased.” **Energy consultant**
- “It’s already happening, and companies like Octopus are doing it. It’s moving in the right direction and from my point of view, the DSOs are doing the right thing. One of the big barriers is the complexity of data they receive. We need data and we know there’s a challenge with data quality as well as data structure.” **Energy consultant**
- “If you are outside the industry, the terminology is very difficult to understand. From the perspective of whole-systems providers, this needs to be more user-friendly.” **EV charge point manufacturer/installer**
- “A lot more of the data is in the same place but you still cannot follow the journey easily. It is spread across multiple different websites. You have to really know what you’re looking for to stand a chance of finding it. It is not user friendly. There should be a single document needed that points you to stuff. Creating an easier route.” **Business customer**
- “I suppose in terms of data, flexibility data and contracts are the main aspect. One of the challenges comes from DSOs offering this information in a different way and not being consistent with their approach. So, whenever contracts are updated, there’s a lot of labour and manual work. Standardisation across the whole system would be great.” **Developer**
- “NG DSO have done a massive piece of work on a local authority workbook. It’s on the DFES site with energy projections etc. It is comprehensive, the work they’ve done. All the data is in one place.” **Combined authority/Local Enterprise Partnership**
- “Why do you need to log in? That is a barrier to entry. Some will think ‘I can’t be bothered to sign up for an account.’ There might be good reasons why it is required as you might need to monitor who is accessing data, not that it is sensitive or personal. However, it may be useful to remove those barriers so people can interact with data as straightforwardly as possible; this is another good principle.” **Energy consultant**

4. How should DSOs work alongside incoming RESPs to deliver best value for the energy system?

Verbatim comments

- “I think that, from my perspective, in the strategic approach for markets, we’re going on a fantastic journey to create DSO flexibility markets and dive deeper with more granular data when needed. Based on the consultation work being done, DSO planning assumptions will be critical to providing clear data for the RESPs.” **NESO**
- “For me, the most important thing is beginning to lay down some roots for collaborative partnership immediately. At the moment, we’re running the risk of getting lost in talking about the theoretical (which is obviously a good starting point) when we actually need to take some action to work together from a whole-system perspective.” **NESO**
- “There is also something that needs to be addressed around bringing in customers that don’t already engage. Lots of customers don’t know what flexibility services are and many grid managers just want a three-to-five-year fix.” **Energy consultant**
- “It is a rapidly changing environment and there is a distinct difference from last year to now; distribution systems operators can only operate within the constraints they are given, and the distribution systems operator needs to push back to Ofgem and ask for greater clarity on what the expectations are of them, and what they need to deliver.” **Energy consultant**

- “I have huge sympathy with the distribution systems operator, it is a very unclear landscape they are working in, and I am impressed with how much they have taken the ambition and embraced it without any clear guidance.”

Energy consultant

- “Connections with greater efficiency out of constrained assets is where I expect to see the big step changes, and some bravery is required as without that clear guidance from Ofgem there is an element of risk.” **Energy consultant**
- “I would say we’ve come a long way in the last two years. Compared to where we were two years ago, what’s changed is that local area energy planning. I think the RESP puts Wales in a good position because we have LAEPs in every area, so we have a basis to work towards it. For others it will be more of a challenge. For NESO the challenge will be getting the right people in the room and engaging with people such as politicians and strategic directors on different levels.”

Combined authority/Local Enterprise Partnership

- “We’re in a transition phase. Local authorities know their constraints but not how to solve that. It’s maintaining dialogue and being clear to stakeholders where to go and who to get to. These forums over the next few weeks are critical to the RESP to work out where those stakeholders are.” **NESO**
- “From a flexibility point of view, it is maturing away from reinforcement deferral and moving into the use cases that are nearer to real-time, which helps to allow flexibility providers to optimise against other markets as well.” **Energy aggregator**
- “We are going to have a whole system of localised heat grids that means you need layer cakes of digits, heat networks, and electricity, but where is that happening?” **Energy aggregator**
- “I’d like to bring community energy here, which clearly has huge political implications.” **Academic institution**
- “Community energy as a start needs to have a lot more effort in order to engage in a meaningful way.” **Academic institution**

- “There is an expectation for local government around anything to do with Net Zero. There is a lot placed at the local level and a lot of people I work with who work on LAEPs. I don’t know the role of the DSO versus the role of the RESP. I haven’t got the time and it’s complex, so we need to work regularly together, and it’ll probably evolve as we go along. We have a role, but we need to be careful we don’t step too far into it.”

Combined authority/Local Enterprise Partnership

- “Finding a common language is key. We may be talking about the same thing but perceive it as totally different. Standardise language and find a common platform for stakeholders.”

Storage and renewables provider/installer

- “Language plus narrative and knowing your audience is crucial. We understand our specialist areas, but we must make it comprehensible to someone else.” **Local authority**
- “Pull together stakeholders and identify high-energy users. You need this visibility in a straightforward language, such as just a few images.” **Local authority**
- “Interpret data in a way that we can make it accessible and comprehensible. Currently, it’s like talking in hoovers and vacuums. It’s the same thing, but the terminology is different.” **Storage and renewables provider/installer**
- “I’m sure there is a win-win situation for end users and DNOs in pushing for smart metering. There are big opportunities to reduce energy consumption by collectively gathering and openly sharing smart meter data across the industry.” **Energy consultant**
- “There is still so much negativity and misinformation and mistrust around smart metering. We will need a huge amount of community engagement to see the benefits of smart meter data analysis.” **Local authority**
- “They should be able to facilitate information, this is a key aspect. We need to be informed about the connectivity and the capacity of the network, as well as climate change adaption. Lastly, prices need to go down at some point for our customers, so they can afford housing and energy. In conclusion, we need more options and more flexibility.” **Local authority**

Session 4: Evolving Value of DSO



Session 4:

Evolving Value of DSO

In the final session of the morning, Dermot Nolan, Senior Adviser at Fingleton, Advisory Board Member at Brevia Energy, and former CEO of Ofgem, chaired a panel discussion. First, Dermot introduced the panel, which comprised Oli Spink, Head of System Planning at NG DSO, Marzia Zafar, Deputy Director of Digitalisation and Innovation at Ofgem, Kayte O'Neill, Chief Operating Officer at NESO, Kate Ashworth, Energy Infrastructure Lead at West Midlands Combined Authority, and Karl Bach, Co-Founder and CEO at Axle Energy. Dermot then posed some of his own questions to the panel, before inviting questions from the audience.

At the close of this session, stakeholders were asked to vote on a polling question and contribute to a number of word clouds, using Slido.

Introductions

"I'm Chief Operating Officer at NESO. My role covers everything from real-time operation of the electricity transmission system through to design and delivery of NESO's markets, and our reflections on wholesale markets and where gas markets are going as well. And I'm also accountable for strategic energy planning of the system, including all the work we're doing on connections reform."

Kayte O'Neill,
Chief Operating Officer,
NESO

"I'm Head of System Planning at NG DSO. I lead that role of planning and network development you heard about this morning. I think you've heard a lot about NG DSO as a whole, so I'll move on to Kate."

Oli Spink,
Head of System Planning,
NG DSO

"I am Energy Infrastructure Lead at Energy Capital. We're part of the West Midlands Combined Authority, which is an interesting organisation to work for because it is the energy team at WMCA, so I'm here representing local government but we're also a wider partnership. Recognising that across our region it's wider local actors than just local government. But local government in itself is an interesting representation here because actually local government doesn't have a statutory responsibility in the energy space, but it is critically important to get democratic accountability

into energy system planning. We know there's a real challenge around how we overlay data together, and when we say whole system we mean energy and transport and housing and all the other things that affect our local communities and businesses. So that's our version of whole system."

Kate Ashworth,
Energy Infrastructure Lead,
West Midlands Combined Authority

"I'm co-founder and CEO of Axle Energy. Axle is a flexibility provider, we focus on distributed assets, EVs, batteries, heat pumps, and we participate in a range of flexibility markets. So that's NESO markets, capacity market, wholesale, and the six DSO markets in GB. Most relevantly here, Helen told us earlier that we have the most connected assets in NGED's DSO, so we will happily wear that mantle for as long as we can."

Karl Bach,
Co-Founder and CEO,
Axle Energy

"I'm one of the Deputy Directors at Ofgem, and my team has been working with NESO and the DSOs to deliver the Regional Area Strategic Planners. And then my other job is to clear out as much as I can of the system to enable any type of flexibility to be able to be traded as soon as possible."

Marzia Zafar,
Deputy Director of Digitalisation and Innovation,
Ofgem

"I'm currently an adviser at the consultancy Fingleton and on the board of Brevia Energy, which is another set of advisers. However, inasmuch as any of you know me, it's probably from my time at Ofgem, which was a number of years ago now, but today, because of sins in a previous life, I spent six years as CEO of Ofgem. I'm going to give a little context about what we thought the DSO was at the time. About 10 years ago, I started using the phrase DSO during public speeches while I was at Ofgem."

Frankly I had no idea what I was talking about. No idea what a DSO looked like, all I knew was that it was probably going to be important and there should be more of that sort of thing. I remember on various occasions, once actually in Church Hall on the grounds of Westminster Abbey, threatening various CEOs of the DNOs that they'd better produce DSOs because, if they didn't, they would need the prayers

that would be said for them in Westminster Abbey at the time. But again, I wasn't really sure what I was looking for. We knew there were going to be more flexibility services needed.

We knew there were going to be more and smaller generators, but that's all we knew, and we didn't really have a very strong sense at the time what the system was going to look like. But we had some sort of an idea of what the principles of a DSO would be like. So firstly, we were saying, 'Is it going to be a mini version of the ESO, as it was then, rather than the NESO? Is it just going to be a smaller version? Who's going to own it? What are the governance arrangements?' None of that was very clear to us, but at the same time there was a sense of 'What kind of principles would it look like?' and we came down to principles that I think govern the ESO and obviously also in some sense govern the DNOs themselves. We wanted a DSO. We knew it should be open. It was serving a huge set of stakeholders. It should be non-discriminatory; it should treat everybody equally.

It should answer all reasonable demands, not favour some entities over another. And it should be facilitative. Not only that, but it should do its best to do what its stakeholders want it to, subject to the fact that we'll often have conflicting demands. So, we have these general ideas of an organisation working in the public interest which, of course, is now the mandate of NESO itself. So, it was going to work in the public interest, it was going to be open, it was going to be transparent, it was going to facilitate every possible stakeholder. I won't disguise the fact that at the time we were a bit paranoid about the role of the DNOs. We were paranoid that the DNOs would just say 'Well actually we don't want flexibility, we just want to, to paraphrase Cathy, build, baby, build', and that was genuinely a concern in governance.

I should stress that I'm certainly not speaking for Ofgem today, but I would stress over the last 10 years I think those concerns for Ofgem have diminished. There's a sense that Ofgem has not been prescriptive about the exact governance of the DSOs because it thinks that progress has been made. We didn't expect quite this level of change. When I saw Cathy's figures earlier about the number of generators on the system, the amount of flexibility users, we didn't expect that at all. And yet it's going to get even more intense. So the question would be, has the progress been successful so far, has it worked out so far? And how do you all as users and stakeholders and people who will be interacting with the DSOs over the next 5, 10, 20 years, what do you want to see from the DSO in the future?"

Dermot Nolan,
Senior Adviser, Fingleton, and former CEO,
Ofgem

Question

"You're here from the perspective of a local authority. Looking at a whole-system point of view, you don't have formal statutory responsibilities. When you're dealing with a DSO, what are you looking for from it? And how do you think it should function in the future?"

Dermot Nolan,
Senior Adviser, Fingleton, and former CEO,
Ofgem

Answer

"We're looking for a really close working relationship with the DSO that's really collaborative, strategic and future-looking. Ultimately, we know that you're looking for the best possible data you can get from us. What does the version of the future look like for us? That's a really hard question to answer, especially when you're trying to get it from many hundreds of different actors who've all got a stake in what that vision of the future looks like. It's on us to convene and streamline those conversations. What we're looking for as a counterpart to that is a really open conversation about how we can enable that future and work with you. How can we ensure that there is thorough governance in place and the right people are around the table to be making those investment decisions, so that the underlying energy infrastructure doesn't become a blocker for growth?"

Kate Ashworth,
Energy Infrastructure Lead,
West Midlands Combined Authority

"We're the representative from industry on this panel. For us, it's straightforward, we participate in markets when there's a financial incentive for us to do so. We have had a very strong working relationship with the DSO for a long time now. We're willing to invest in that relationship and work together to ensure everything is clear and transparent when there is value for us to do so. We can say otherwise, but that's the truth. We work across the six DSOs, the focus and effort and energy put in across the board is quite different and I think that NGED has done a great job there, but I think ultimately it comes down to value. Are we able to create value for a given EV user participating in a flexibility market? If the answer is yes, then that's something we're willing to invest into on our side."

Karl Bach,
Co-Founder and CEO,
Axle Energy

Question

“What do you want to see in the future?”

Dermot Nolan,
Senior Adviser, Fingleton, and former CEO,
Ofgem

Answer

“The biggest challenge for us right now is uncertainty. Take one of the 170,000 assets connected, let’s say it’s an EV. A real example, EV drivers in NGED territory that we have paid out £1000 to over the past year from their contributions to the grid in a year. We have no idea what will happen tomorrow with them, and we’ve seen huge amounts of change. So, what’s happened the past month here vs February from a year ago is very different and so when we’re trying to set expectations across the board to our partners, to individuals etc., the more predictability and forecast ability we have, the better. And obviously we support dynamic markets, real-time markets, all the rest. And there will always be some variability there but, so far, the amount of variability makes it quite hard to predict, plan and invest when we don’t know what’s going to come.”

Karl Bach,
Co-Founder and CEO,
Axle Energy

Question

What will a RESP look like? Who will be on a RESP? What outputs will it have? When there are disagreements, who will make the final decision on a RESP? What force will a RESP have? What will happen to a RESP plan? How will it be implemented in practice?”

Dermot Nolan,
Senior Adviser, Fingleton, and former CEO,
Ofgem

Answer

“We’re still working very closely with Ofgem on the ultimate design of the roles and responsibilities, accountabilities of the RESPs and how they’ll work. We throw the acronym around — RESP’. I think of it in two ways. One, it’s a role. It’s a planning role. It’s also going to be a thing, an artefact, an output, because for each of the 11 regions, we will produce a RESP. But to me, the plan, the thing that gets produced in 2027, it will be useful at a moment in time, but the real value of RESPs is in the role, the planning role, the engagement that will happen across regional stakeholders trying to dock into a national plan to understand how we get to what ultimately needs to be a coherent energy transition strategy for GB that’s really rooted in delivering better outcomes for consumers and communities in their areas. So, it’s very much two things to me, both equally important, but it’s not a one and done once every three years we produce a plan. It is a team of people on the ground

in the region, locally recruited from the region, working with stakeholders like those in the room today to truly understand what each region needs. I would just say governance will be important. Clarity of roles and responsibilities is always important. But we will have regional boards that will be made up of a variety of stakeholders. I’m very hopeful that within those regional boards we’ll be able to solve all the difficult trade-offs, tensions, challenges within the region. To the extent that we can’t, it’s really important that we get to a set of regional plans that are really useful and that ultimately dock back to a national plan so that we do have something coherent overall. And there’ll be an important role for NESO and for Ofgem in being able to provide that support, that sort of challenge to the extent that it’s needed.”

Kayte O’Neill,
Chief Operating Officer,
NESO

Question

“Marzia, any comments from you on particularly the status of the RESPs?”

Dermot Nolan,
Senior Adviser, Fingleton and former CEO,
Ofgem

Answer

“Yes, yes, definitely. I’d like to make a few comments. So, one, in the next few weeks or so, a decision will be published by Ofgem that will identify the role of the RESPs, the boundaries of the RESPs and the governance of the RESP. So all the questions that you just asked, all of them should be hopefully clearly laid out in the decision coming up. And what I would focus on is that for these plans to be successful, it cannot come from NESO. We would fail. All of us will fail in that effort, if this is a NESO report. NESO is in charge of coordinating and organising and compiling this information from the region. So, it’s a bottom-up approach. We are asking NESO to put in a number of people within each of these regions to work with local authorities, to work with businesses and get this information and have a lot of input in this. So, it’s not just a DSO inputting. It’s not just the local authorities inputting, it’s everybody within that region inputting to make sure it’s a bottom-up approach. And then that’s going to feed into the spatial planning as well. So, I would say I’m happy to talk through these things, but in a few weeks, Ofgem will officially publish this decision and hopefully it will become clear. We are focusing on democratic accountability but we need to be clear that we need to have decisions and we need to move forward. We cannot just keep going round and round and round until we get everybody’s consensus. That’s where NESO is going to come in and it’s very important for NESO to ensure that their constituents, being local authorities, those businesses, that they are listening to them because then once the

RESPs are published, then that goes straight into the price control. And that forms a system need for the various DNOs.”

Marzia Zafar,
Deputy Director of Digitalisation and Innovation,
Ofgem

Question

“After the ED3 plan came out before Christmas, there were some fairly lurid comments that this was Ofgem giving up on flexibility and from now on it was just ‘let’s build everything’. Is that a fair comment and how would you respond to it?”

Dermot Nolan,
Senior Adviser, Fingleton, and former CEO,
Ofgem

Answer

“If anybody that knows the energy system and that knows what’s coming up, the demand that’s coming up onto the system, it is unrealistic to say that all of this will be met by flexibility. It is unrealistic to say that all the demand that’s coming from transport will be met by flexibility. It’s unrealistic to say all the data centres that are coming to GB are going to be met by flexibility. It is unrealistic to say that electrifying heat, all of it is going to come from flexibility. We need to build the system. And that’s just the bottom line. We need to build the system and we need to utilise flexibility. We need to maximise flexibility. We also need to build the system so that flexibility becomes an affordability issue, deployed where we can and when we need it, so it is something that can reduce consumer bills. But at the same time, we need to build the system to meet the demand for electrifying transport. We need to build a system to meet all the added demand that I just stated. It’s somewhat interesting and surprising that people are questioning our push to say ‘You must build, but you must also maximise flexibility’. I don’t think those two are in contradiction of one another. I think that’s just being realistic.”

Marzia Zafar,
Deputy Director of Digitalisation and Innovation,
Ofgem

Question

“There’s rapid growth in electrification of road freight. Like electric HGVs, which present huge opportunities for the DSO in flexibility and other grid ancillary services. How is this being taken into account with the RESP and ED3 submissions?” **Energy consultant**

Answer

“The electrification of HGVs is something that we consider when we do our DFES. It’s a slightly different type of EV charger because it’s quite often driven by the directives on how long lorry drivers can drive — you might need to stop for 45 minutes and get a huge

amount of energy into the vehicle and that requires a certain type of charger, maybe a quite high-capacity one. We are seeing interest in them at motorway service areas and how that then translates through to building the network and investing such that those motorway service areas that are sometimes in areas of the network that are quite rural and the network itself isn’t particularly strong. That’s something that we need to consider.

But then also not every single HGV charger needs to be a kind of 1+ to 3 MW size that can charge the vehicle up in 45 minutes. The vehicle can be sat there for seven, eight hours overnight whilst the person is resting and then that can require a lower-capacity charger. So understanding the behaviour of HGVs and how we factor that into our planning is quite key because it’s not just a one-size-fits-all approach, and in the areas we expect to see them it will either be out along truck roads and areas where we have motorway service areas, but also at depots and existing customers that we do have connected that would be asking for quite a lot more capacity.”

Oli Spink,
Head of System Planning,
NG DSO

“I think it’s a really good question and a great answer, but ultimately geographically specifically where these things are is really important when it comes to network planning, and I think that’s where DFES up to this point has been really, really great in terms of planning organic growth of LCTs, which is, I think, easier to do at the domestic scale. But some of these big changes to the network, particularly around transport, it’s a great use case. Knowing in advance what those commercial ambitions are as to where those are going, how those companies are coalescing, the whole logistics and distribution piece is super important and it’s not one that you or I have had great visibility of up to this point. But those relationships are so critical, and how we gather that together.

So, what we’re doing through Project PRIDE, for example, which I know has come up previously before, but it’s essentially our way of kind of trying to gather as much of this kind of local and regional data as possible, is also about those relationships and it’s also about working with industry bodies and it’s also about working with known clusters to make sure that we’re grabbing that information. It’s a very shifting sand. It’s a very live space. But the more that we collectively know about it, the better you can plan your network.”

Kate Ashworth,
Energy Infrastructure Lead,
West Midlands Combined Authority

“And there’s a role also there for NESO because we have, for example, engaged with Transport for Wales on this sort of topic, and there’s a role, I think, in NESO and in particular RESPs for convening and sharing best practice of those things. We, in our strategic engagement team, tried to share best practice from local authorities where we have 120, so we know where things work well and we can share that with others, but it’d be really useful to do that with other industries and across the whole of GB. So that’s a role that I think NESO can do.”

Oli Spink,
Head of System Planning,
NG DSO

Question

“I was curious just to zoom out a little bit and hear your thoughts on trends for open data at the moment, and how should we approach the trend for transparency, open data, data availability and cybersecurity?” **Developer**

Answer

“One of the ideas, again, behind the DSOs was that there would be data freely accessible to all, everybody with free access. That was at least the principle. With that in mind, who’d like to have a go at answering that?”

Dermot Nolan,
Senior Adviser, Fingleton, and former CEO,
Ofgem

“From a NESO perspective, we really, really enjoyed the work that came out that was led by Laura Sands a while ago on energy data and data and digitalisation, and that sort of set us on a path very much towards presumed open, standardising data portals. We’ve got new roles, maybe this is what Marzia will touch on in terms of creating the environments for sharing of data and all the infrastructure to allow that to happen. The only thing I just wanted to inject was actually to pick up on your final comment or final words there around the security implications of that.”

I think we can’t lose sight of the need to move to a much more open and transparent approach to our data. But the security and resilience of our systems is critically important, never been more important. And we do have to find a way to make the appropriate trade-offs between putting everything out there and putting enough out there to unlock consumer value, but without putting ourselves at risk.”

Kayte O’Neill,
Chief Operating Officer,
NESO

“I would say I’m pretty excited about this and I would say Ofgem is probably the best of the best globally when it comes to trying to digitise the energy system.

So, a few things that we’re doing, and we’re doing this alongside NESO. First, in 2023, we issued our data best practices where we said ‘Here are the types of data that are presumed open and this is how it should be shared and it should be accessed’.

So, then we’ve asked our network companies to not just share PDFs, but to make this logical and make this standardised. That’s for data that’s presumed open. For data that needs to be secure, that needs to be only shared with certain stakeholders. We are working with NESO and others to create a data-sharing infrastructure, essentially an intranet for stakeholders and energy stakeholders in the GB system. NESO has already developed the pilot. We are next going to do an MVP with them, and that MVP is going to be strategic planning.

So everybody’s going to want to be part of that intranet. And that decision for the data-sharing infrastructure also will be issued April 8th or in the next couple of weeks. So that’s the second way that we’re digitising the system and making sure that people utilise the data. Additionally, as smart meter data is out there, we do have the GDPR restrictions around it. So we are creating a consumer consent framework, where the customer can see who they’ve consented, and also third parties like Axle Energy who are wanting to go to the customer, they can have this part of their app or part of their website to then allow the customer to easily be able to give consent to their data so that it could be utilised and there could be tailored propositions for them.

So I think what we’re doing in terms of data best practices, in terms of the data-sharing infrastructure and consumer consent is probably regulatory leading when you look around the world on this. We’d like to thank definitely NESO for helping us and especially in developing this intranet. I think the only other country that has something similar is Australia, but I think our system is far more complicated. So, once we get to this in the next couple of years, all we’re trying to do and we’re working at pace to make sure that in the next couple of years, all of this becomes business as usual rather than something brand new.”

Marzia Zafar,
Deputy Director of Digitalisation and Innovation,
Ofgem

Question

“We’re building an electric vehicle charging hub network for heavy goods vehicles right now. There’ll be 35 locations across the UK this year and we’re working across industry to do this. We’ve got a lot of data and we’re going to be building up a huge amount of data across the industry of what the diesel trucks are doing today. Then, what the electrification looks like over that long 15-20 year period. We would love to get that information out into NESO and into

Ofgem and into NG DSO. The problem is that it's actually really quite difficult to engage. Even today, I've been talking to people, 'Oh yeah, you need to go and see so-and-so, you're going to speak to them or go and speak to somebody else'. We want to be able to share that data so we can give you the information that you need to build up your network and understand what's going to be required in the future and also to help us as we roll out electric vehicles across the heavy goods vehicle industry. So really knowing how companies and organisations and consortiums like us can actually engage with you in a much more productive way." **Developer**

Answer

"So brilliant to hear what you're doing and would be really keen to engage and learn more about that. I think we do have, across NG DSO's surgeries, which from a DSO perspective, we run Net Zero surgeries, which are very much looking at the future, that's kind of key for a lot of our local authority stakeholders that we engage with, but it's not just exclusively local authorities. That sort of avenue would be a brilliant way of starting that discussion. But yeah, we'll be really keen to learn more about that."

Oli Spink,
Head of System Planning,
NG DSO

"Very happy to build it into PRIDE as well, which is another great way of connecting directly and having that data overlaid with all the other things that are happening. So it's another really good way of having that data accounted for in terms of DFES, and ultimately in terms of business planning process."

Kate Ashworth,
Energy Infrastructure Lead,
West Midlands Combined Authority

Question

"One was also around improving supporting skills within the sector. Obviously, a huge amount is changing in terms of infrastructure, but we need to do a lot of work to be able to get enough of the workforce behind it to deliver. We are also very much aware in terms of community engagement. Smart meters are going to be really important to make sure that they're working, but most importantly that householders want to take up and be involved in this. There's a lot of disinformation still being shared. How do we see, maybe through these networks, who's doing what? We've had lots of great examples today and I'd like to be able to tap into some of those other organisations supporting this, but how do we work more succinctly and coherently together to deliver this on all levels, from training to community engagement, to ensure that we've got everything in place as quickly as possible to deliver Net Zero by 2030?" **Developer**

Answer

"So it's a really good question. I think we are learning as well as NG in the last six or seven years since we've been engaging with customers. I think we've slowly worked out the right sorts of questions to ask, asking questions in the past of 'Does this graph look right to you?' is never going to get a really a particularly useful answer."

So through some of the work that we've done we're improving how we engage with our stakeholders. But it's a fair question around how we make sure that we're educating people and what role do DSOs have in particular of making sure that we're getting the right information out there and speaking to our stakeholders in such a way that isn't just jargon, it simplifies things in a way that people can understand. So, what I'm trying to say is I think we've done quite well over the last seven years. We've come a long way in terms of how we speak to people and how we engage with people, but there is more to do to take that next step."

Oli Spink,
Head of System Planning,
NG DSO

"I guess I'd add to that and say that I think there is a wider conversation to be had around skills. Obviously, there's a huge amount of investment that needs to go into networks. We've heard that from all the speakers, and also a huge amount of investment and potential scaling up opportunities around the flexibility opportunities. And in both of those, there are opportunities for local jobs, for skills, for development. What we've seen previously in terms of Net Zero industry is the confidence you alluded to earlier, confidence is hampering people's ability to kind of fully invest feet first in that space because we've seen previously boom-bust incentives."

We need to be really clear about direction of travel. I think many people in this room are absolutely convinced that this is happening and that there will be huge opportunities at scale. It's making sure we meet that demand with supply and we're talking with stakeholders and building that confidence about what those opportunities are going to look like. What courses can be run? How do we engage? How do we bring people on the journey? Genuinely, there is a wider societal benefit that needs to be incorporated into this, as much as we're trying to do a very mission driven thing at the same time. We need to kind of be really clear what those local benefits are."

Kate Ashworth,
Energy Infrastructure Lead,
West Midlands Combined Authority

Question

“Any final thoughts on the DSO? And maybe a particular focus on the users of the DSO services. What do you want to see from the DSO? What’s the most important thing over the next five years?”

Dermot Nolan,
Senior Adviser, Fingleton, and former CEO,
Ofgem

Answer

“The thing that’s come out most for me today, I think, is the need to make the conversation really real and really tangible. There are a huge amount of voices that need to be heard, but we get can get too caught up in talking about the theory and actually, it’s the reality of what’s happening on the ground for industry, for customers, for consumers, and we need to bring those voices properly into the conversation.”

Kayte O’Neill,
Chief Operating Officer,
NESO

“Building on that, making sure that we’re progressing the discussion to delivery and what we are delivering and making sure that there are tangible outputs to what we are doing and how it’s impacting on our customers. So, I think that’s key for us to focus on.”

Oli Spink,
Head of System Planning,
NG DSO

“So essentially what I’m really keen for is to increase the visibility of the opportunity and then understand how to have informed conversations so that when you are building data, everything that we’re doing is all in the same direction. And then when we are having those informed conversations, you can see the impact of that coming back around again through the connections; we can be really confident in terms of the direction that we’re going in.”

Kate Ashworth,
Energy Infrastructure Lead,
West Midlands Combined Authority

“From a high level, the grid needs more flexibility, and you can see that in the Clean Power 2030 Action Plan and across the board, and what I keep on coming back to is broadly: markets work. If there’s a clear price signal, if there’s clear predictability, then us on the industry side will do our job. We’ll make sure that that flexibility is there. I think we’ve taken great strides with DSO markets here and across the country. There are still a ways to go there, but I think we’re trending in the right direction.”

Karl Bach,
Co-Founder and CEO,
Axle Energy

“I think we’re looking for DSOs to focus on system planning, on maximising flexibility procurement, on voltage management, and we want the DNOs to focus on maintaining the system and developing the system.”

Marzia Zafar,
Deputy Director of Digitalisation and Innovation,
Ofgem

“My final comment is that, frankly, the job of a DSO is bloody difficult. Just no two ways about it. You’ve got this huge number of different voices. You’ve got to assess them all, listen to them all fairly, openly, transparently, and then try to make decisions that satisfy those when you can’t do what everyone wants. It’s a very difficult job, has to be done. Cathy strikes me as a good person to do it. But it’s a hugely difficult job. And I would ask you to remember that in your dealings with the DSO over the next two, three years. It is inherently difficult. And the same very much applies to NESO as well. But it has to be done. It has to be done really well if we’re ever going to get towards Net Zero. So, I will leave you with that thought.”

Dermot Nolan,
Senior Adviser, Fingleton, and former CEO,
Ofgem

1. What do you think are the most important benefits for consumers and the energy system that DSOs should focus on delivering in the future?



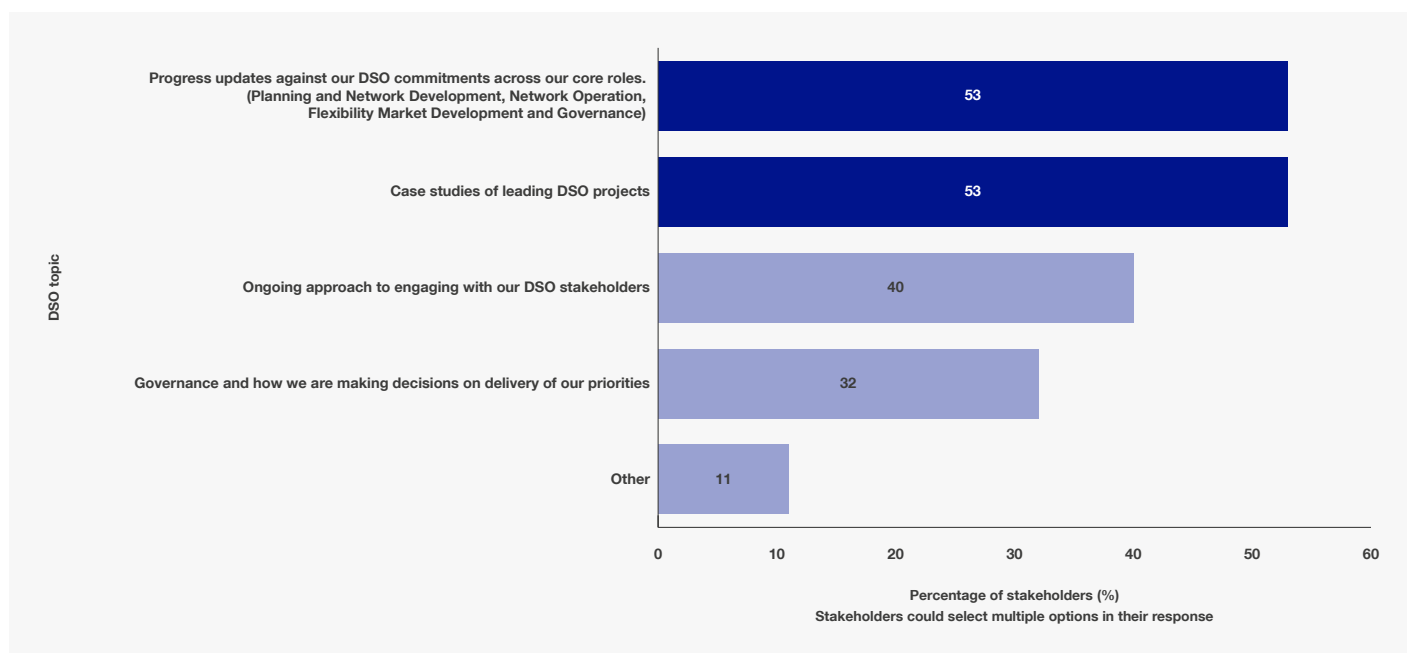
2. Which factors will have the most significant impact in shaping the future role of PSOs?



3. What do you think are the biggest challenges that we could face in delivering these future benefits?



4. What DSO topics are you keen to continue to be informed about in future?



5.If you answered 'E. Other' to the last question, which topics would you like to cover:



Interactive stands



Interactive stands

Alongside the formalised engagement sessions, NG DSO ran three interactive stands focused on DSO Data and Digital; A Day in the Life of a Network Planner; and Flexibility Market Development. Stakeholders were invited to visit these on a drop-in basis.

Comments and questions from each stand have been detailed below.

Data and Digital

- “I want to see what you’re doing with data and digital, particularly what areas you’ll apply it to on your roadmap. Where will you bring in partner companies? Are you using AI for processes and planning?”
- “You’ll be the first DNO to roll out Active Network Management (ANM) everywhere.”
- “Availability of flexibility is key.”
- “Nobody has addressed the decision to do something short term versus having a strategic plan. Where do you decide to swap?”
- “It’s difficult to buy services, especially on the demand side.”
- “Get a statistical handle on things.”
- “I’m interested in distribution network optimisation. Get more technology knowledge and information from stakeholders. Optimisation must focus on stakeholders.”
- “I’m searching for data such as load and generation.”
- “Smart meter data is needed.”
- “Could the highly restrained areas be a focus for flexibility?”
- “Is this to encourage people to connect where it’s needed? Where does the data come from?”
- “Some DNOs have a map where you can enter your postcode and search for your area. UKPN has a way you can search for this.”
- “Dispatch data and weekly trade result data lacks clarity. Sometimes the data doesn’t make sense. There is a ceiling price, but sometimes the acceptance price is above it. Sometimes you have an EV charger of 7 kW accepted for 16 kW, which is double. Commercially, it does make some sense that prices are higher than advertised.”
- “Is there a separate platform for smart meter data?”
- “This map shows some improvements, such as headroom data. Previously, it only showed red, amber or green. Is NG DSO working on it on a regular basis?”
- “We applied for a connection via this platform, but we were told it was not up to date. Is this map updated regularly?”
- “Is there a way to find postcodes for substations? For GSPs, it’s easy.”
- “What is the grid landscape in urban areas?”
- “There could be potential for multi-megawatt and sub-megawatt EV charging at motorway services and in supermarket car parks.”
- “I’ve got a start-up developing heat pumps and heat batteries. We could potentially offer flexibility.”
- “The map is not as useful for a flexibility service provider.”
- “There could be an option to enter what you are connecting and how much you want to connect.”
- “A red light for one company could be seen as an opportunity by another. The colours mean different things for different companies. It can indicate the health of the network.”

A Day in the Life of a Network Planner

- “It is so important to always have innovation ongoing and at the forefront of what you are doing.”
- “You say that these are all of your chief reinforcement scenarios, but you could also get a load management contract for a year or two, so does your investment plan reflect the optionality of flexibility and cheap reinforcements?”
- “I do not think anyone yet has taken the benefits of flexibility in the short term, whilst also having a well put-together strategy to deviate and be flexible from, how do you marry those two things up?”
- “I would suggest a GPT system, so you can combine innovation projects into one system so that users can quickly navigate all the different innovation ideas. The current website where they are all listed is not user-friendly.”
- “I think that probabilistic fault predictions need to happen, it’s about going that one step further to add a risk overlay to the work that you do.”
- “I know someone who has two back-up power supplies, but no one will give him an indication of failure. You need the ability to give an aggregated probability of failure to your customers.”
- “You need the ability to have a risk overlay, showing not only how likely the risk is, but the consequences for the customer. This needs to happen.”
- “The danger of using a graph to represent numbers is it is not always clear what you are trying to show.”
- “Would Solution B (build a new primary substation with added flexibility) work better than just Solution C (building a bigger primary substation).”
- “Are these all traditional models?”
- “Are you using AI to do this modelling?”
- “I am interested in virtual macro-grids as a paradigm; if I want to integrate the output from a town into a community, using a battery system, is it technically feasible, and if so, is it already being done?”
- “How would you identify a network which is serving a community that is also capable of taking an additional few megawatts of photovoltaics with the potential of adding a five-to-ten-megawatt battery into the system?”
- “In terms of network reliability, how do you monitor and manage that, do you wait for it to break and then look at statistics?”
- “Do you do probabilistic fault predictions?”
- “Do you have to ensure that the network can cope with all of these scenarios when you are planning?”
- “How much reliance is there on the generation you model in this way?”
- “Do you, at the same time, look at what the cost of this modelling would be?”
- “I am not a big believer in a full hydrogen network, but I am curious to see where it will go.”
- “Do you have any idea of how realistic your solutions are, and how do you measure that?”
- “Are these in-house tools that you’ve developed?”
- “How do you feed our data into the work that you do; for instance, planning for a new electrified freight depot?”
- “Are heat networks factored into these models?”
- “How do you decide where to add reinforcements, is it just based on these models?”
- “How does your model represent the different forms of generation, for instance, solar and wind, are they combined?”
- “How can I identify your long-term plans and the constraints that might be in place?”
- “Are these models released to your customers?”
- “What assumptions do you make with your data, and what are those assumptions based on?”
- “How much do you take into account flexibility when you’re running these models?”
- “How do you select the solutions, and how would probabilistic modelling impact those choices?”
- “Do you run a cost-benefit analysis for every scenario, or only those you put forward as the best option?”
- “Do you have faith in the DFES? They are very optimistic.”
- “Are your previous evaluations of historical DFES published?”

Flexibility Market Development

- “Is there a running total of demand for flexibility?”
- “Are you doing a full-time series or just gathering the data to see what you could do with it?”
- “Are you discussing different methods of operating the network and some of the trade-offs?”
- “You need to make sure that one transformer on its own can handle the demand as well as the flexibility redundancy.”
- “The trade opportunities section of the website is user-friendly.”
- “There are two issues, cost of flexibility and successful management implementation of the same.”
- “You should be willing to spend more than the annual cost of reinforcement on flexibility.”
- “I’m particularly interested in well-established re-evaluation options.”
- “There is not much about the balance between reallocation, reinforcement, and a strategic plan.”
- “Is there a well-costed analysis of flexibility implementation?”
- “I don’t think they are going to innovate a cheap way of doing this.”
- “Behaviour is very important when you have a single buyer.”
- “The chances are there is lots of flexibility at a good price if it can be organised properly.”
- “Will the demand management be there and will it remain in the future?”
- “The trick is getting the price in line with the consumer with noodle pricing or GSP pricing to start with.”
- “We have lots of sites waiting for a flexible connection.”
- “Do you have any HGV chargers on your database yet?”
- “How do the spatial planning team interlink with your department?”
- “At the moment, there is still a safety risk with batteries, especially at motorway charging stands, which has held us back for years.”
- “Without data on batteries and the various constraints, we find it hard to plan what the exact demand of motorway chargers will be for HGVs, which is why flexibility is so important.”
- “Do you know where you are on your price control solution?”
- “Do your databases reflect well where the demand for flexibility will be needed most?”
- “How closely do you work with planning to forecast demand and implementation of where flex will be needed most?”
- “Feedback for flexibility must be very useful for you guys as we rebuild the network and explore flexibility options.”
- “Does this platform help you with data collation?”
- “We are looking at large rooftop solar on our commuter buildings, it will be good to know as part of our business model where the revenue will be by looking at the map with forecasted flexibility.”
- “How does the queue work in the flexibility space?”
- “Is it cued on expected revenue?”
- “How is flexibility prioritised to clients?”
- “I guess you’re not presenting this by local authority area. It’s just by geographical area?”
- “Are the bigger areas lower risk of someone else getting further ahead of the game, with regards to flexibility implementation?”
- “What additional constraints might you see with implementing flexibility?”
- “We are thinking about bringing forward funding with the local power plant project, so this table to date is very useful to see.”
- “Do you always have a long-term dataset published for flexibility implementation, cost, status, and expected delivery date?”
- “How often is this data table updated or published?”
- “Do you take all assets, or do you have criteria for what you will and will not accept?”
- “What is the process of uploading asset information?”
- “Where can I find the tutorial for uploading and how to upload assets to register for distribution?”
- “How much is flexibility worth?”
- “Are you offering any secondary training within your upcoming innovation projects?”
- “Is there a use case for secondary training going forward?”

- “What do you do in the short term for training?”
- “Do you look after any commercial dispatch?”
- “How do you filter by highest value?”
- “What complications do you find you come across most with engaging with stakeholders regarding flexibility?”
- “When it comes to settlement for utilisation revenue, would you take the accepted capacity as a way of offering a price estimate or is it off of a set baseline value?”
- “We are evaluating the peak load for just about everything.”
- “It would be interesting to see the chances of an asset failure within the postcode checker.”
- “In terms of the high-voltage systems, what are the plans for growth and how are they developing?”
- “Would you ever redesign your new map in a way it shows different LV and HV zones within regional and geographical area?”
- “Can you assign your assets to a measurable unit?”
- “Do you want your assets to be stackable?”
- “How do you determine which regions and areas need the most flexibility, is it by requirement?”
- “How do you calculate risk when deciding which actions to deliver on?”
- “Who pays who for the flexibility implementation?”
- “Can you guarantee utilisation centres?”
- “As stakeholders, where would we be best placed to help you with utilisation?”
- “How well do you manage getting everyone on board with open networks?”
- “It is somewhat annoying for flexibility providers to know which part of the country to focus on.”
- “Do you have any good guide for all the new tools that you are bringing in?”
- “How much is operational mitigation a factor regarding availability of flexible utilisation?”
- “Do you have API documentation that explains how it all works and the consideration of dispatch flexibility?”
- “I was keen to understand, how do you actually dispatch all the network providers, how does the mechanism work?”
- “How do you get a rooftop solar, for example, registered? Where do I get this information from as a domestic consumer?”
- “How do you forecast your plan when new assets sign up?”
- “Do you monitor on a short- or long-term basis?”
- “Is it real-time monitoring or post-processing with the data?”
- “How do you minimise the risk of an overload happening?”
- “If there is an outage, who do you prioritise and who do you curtail?”
- “How much flexible capacity do you have from heat pumps?”
- “What are the next steps for you and how will you use today to help implement your plan?”

Appendix 1

Attendees

A total of 187 stakeholders participated in the workshop, online and in person, representing 131 organisations. The organisations represented are shown below:

Accenture	EDF Energy
Adler and Allan	Eelpower
Aker Systems	Eight Eights
AMPYR Solar Europe	ElectraLink
Axle Energy	Electric Miles
Birmingham City Council	Electron
Birmingham University	Emeren Group
Bristol City Council	Energy Networks Association
British Ports Association	Energy Systems Catapult
Buckinghamshire Council	Entropica
BUUK/GTC	Enzen Global Ltd
Cadent	EPEX SPOT
Capco	EY
Cardiff Capital Region	Flexitricity
Cardiff City Council	GE Vernova
Carmarthenshire County Council	Gemserv/Talan UK
CCRI	GHD
Central Bedfordshire Council	Great British Energy
Centre for Sustainable Energy	Growing Mid Wales
Centrica	GTC Infrastructure
Ceredigion County Council	Habitat Energy
CGI	Harborough District Council
Chesterfield Borough Council	Harpo Consultancy
Conrad Energy	Herefordshire Council
Cornwall Council	Hitachi
Coventry City Council	Hydrock
CUB (UK)	Keele University
Denville Energy Consulting Ltd	Kronos Solar
Department for Energy Security and Net Zero (DESNZ)	Last Energy
Derby City Council	LCP Delta
DHL	Leicester City Council
Drax	Leicestershire County Council
Dudley Metropolitan Council	Levelise
E.ON UK	Low Carbon
EA Technology Ltd	Lucy Electric
Ecotricity Smart Grids	MASDAR
	Megger Ltd

Midlands Aerospace Alliance
Midlands Connect
Milton Keynes City Council
National Energy System Operator
National Grid
National Grid Electricity Distribution
National Grid Electricity Transmission
Neath Port Talbot County Borough Council
New Flexibility Technologies
NextEnergy Capital
NG DSO Panel
North Kesteven District Council
OakTree Power
Octopus Energy
Ofgem
Opencast
Oracle UK
OVO Energy
PA Consulting
Piclo
Plymouth City Council
Pod Point
Red Hat
Regen
Rhondda Cynon Taf County Borough Council
Roadnight Taylor
Schneider Electric
Siemens
Siemens Advanta

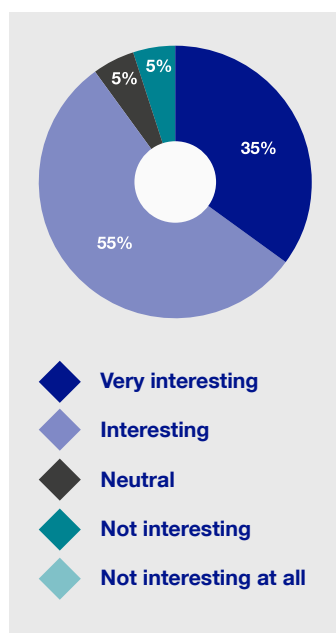
Smart Grid Consultancy
Somerset Council
Sonnedix
South West Net Zero Hub
Staffordshire County Council
Stantec
Stealth Energy
Sustainable Investing Solutions Limited
Teignbridge District Council
The Natural Power Consultants Ltd
The Schumacher Institute
Torfaen County Borough Council
TRC
UDC Services
UK Power Networks
UKRI
University of Bath
University of Birmingham
University of Edinburgh
Voltaria
Voltempo Group Limited
Wales and West Utilities
Warwickshire County Council
West of England Mayoral Combined Authority
Wood
Worcestershire County Council
Worcestershire LEP
ZIV Automation

Appendix 2

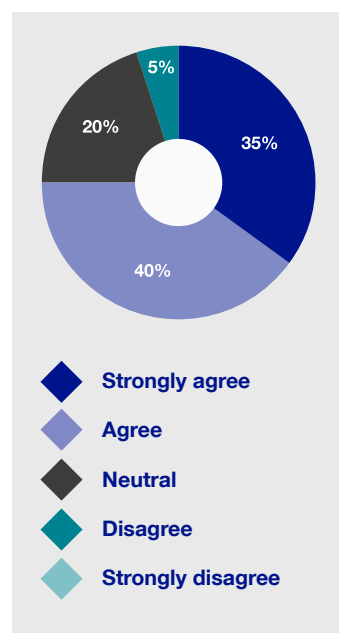
Workshop feedback

After the workshop, stakeholders were asked to complete a short feedback form. Some of the key findings are shown below.

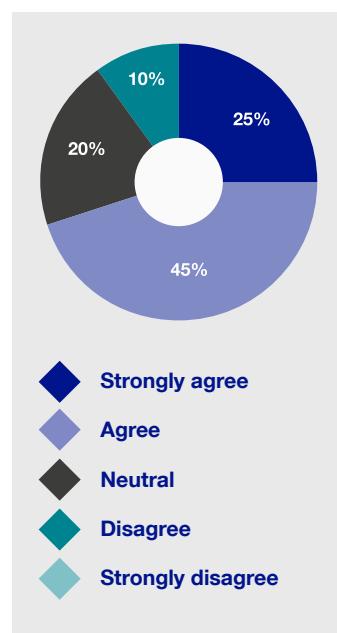
1. Overall, did you find this workshop to be:



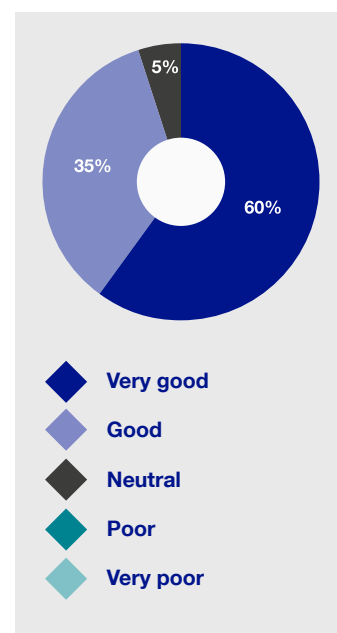
2. Do you feel you had sufficient opportunity to contribute to the discussion and ask questions?



3. Did the range of topics discussed meet your expectations?



4. What's your assessment of how the workshop was chaired and facilitated?



Question 1 comments

- "Good range of speakers and the right sort of length."
- "Was great to hear the speakers, and the range of DSO topics covered was great."
- "I would have liked to have seen more mention and discussion around just transition."
- "I had not realised how far the NG DSO had come and so quickly."
- "Good effort, but there are a lot of conversations where we violently agree that we need more certainty and information without detail. Maybe that comes in RESP events."

Question 2 comments

- "The roundtables were a great arrangement."
- "Could always do with more time!"

Question 3 comments

- "Range was expected, would have liked to see more on impact of grid reform. But overall, really good."
- "Mostly still need more clarity on CP2030 and how community energy will be able to be involved to deliver if the queue contains the required decarbonisation energy connections."

Question 4 comments

- “All went smoothly.”
- “Excellent job.”
- “Very good focus on moving through the presentations and questions on time and at pace to maximise use of time.”

5. What was most useful to you today?

- “Networking opportunities with colleagues and the discussion at the roundtables.”
- “A mix of all of it — speaking to people from different organisations, hearing from the speakers, discussing at the roundtable and the stalls.”
- “Networking and knowing the DSO strategy, actual and future activities.”
- “Speaking to those from the DSO and understanding the scale of the task at hand. Good to see many local authorities present too.”
- “Plenty of networking opportunity.”
- “Opportunity for feedback on some of the tools — Network Opportunities Map and the update from Ofgem (roundtable) and NESO.”
- “Catching up with changes to the flexibility bidding.”
- “The general update on the good progress and where things are moving, allowing me to think what opportunities there may be for me as a developer.”
- “Being able to talk to the individual teams at NGED and get my questions answered.”
- “The roundtable session.”
- “Listening to the NG DSO team, NESO and Ofgem. Meeting people from NGED.”
- “Hearing how things are progressing, who’s come to the stakeholder engagement.”
- “Learning about flexibility services.”
- “Engagement and DSO understanding.”

6. Finally, what could we do to improve future events like the one you have attended today?

- “More discussion opportunities.”
- “I would just like to say, adding a prayer room was a really thoughtful thing to do. One of the better events I have been to and was pleased with how it was all arranged and structured. Well done.”
- “Carry on including all relevant stakeholders, to include those from other vectors as we work towards the whole-systems energy transition.”
- “More detail on the DSO ancillary service markets that will be developed and what price discovery and predictability will be available/possible.”
- “Make them more specific for each area relevant to stakeholders, e.g., flex breakout session, network planning breakout session etc.”
- “Discuss more competing futures. While I understand that NGED needs firm plans, the nature of the energy market is that there are competing futures and we should explore them.”
- “It might be tricky but cater a bit more for those less fluent in terminology.”
- “More roundtable discussion sessions.”

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