National Grid Distribution System Operator

Independent Advisory Panel

First Report

January 2025

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Summary

The National Grid Distribution System Operator (NG DSO) Independent Advisory Panel was set up in April 2024 to support the DSO by providing strategic and constructive challenge to its plans and its delivery on behalf of its customers and stakeholders.

The Panel addressed a wide range of topics during its first nine months of existence and of these four key themes stood out.

First, the Panel stressed the need to understand NG DSO's stakeholders views and needs so as to properly assess whether NG DSO was effectively meeting those needs. The DSO shared their stakeholder feedback from a wide range of sources. The Panel welcomed this and noted that stakeholder engagement and feedback is unsurprisingly somewhat immature given how new the role of the DSO is. We consider that there is significantly greater potential in the use of stakeholder surveys in the future and recommend that the DSO considers designing much more extensive survey questions and reach a much larger and more diverse group of stakeholders in the future. This could provide much richer feedback and also act as a route for the DSO to communicate with and inform those stakeholders of its role and how to participate in and support the development of smart flexible networks.

Second we focussed repeatedly on the governance structures within the DSO and the Distribution Network Operator (DNO) with particular emphasis on how potential or perceived conflicts of interest between the DSO and DNO are surfaced and resolved in stakeholders and customers best interests. We appreciate that governance structures at the DSO have evolved over our first nine months' existence and we welcome steps such as the appointment of a dedicated Managing Director to the DSO and the establishment of a decision-making group to address potential conflicts of interest. We look forward to revisiting this topic when the new structures have been in place for some time and we have real examples of how it is operating.

Third we looked at the DSO's performance framework and its Key Performance Indicators (KPIs) as well as metrics for those KPIs. We sought to understand the incentive properties of the performance framework. Once again we acknowledge the early stage of the development of the DSO and in that context we understand that many KPIs are process or input based. The Panel would like to see a move to more outcome focussed KPIs over time and will revisit this topic again.

Fourth, we discussed the importance of data and technology in the delivery of the DSO function and saw considerable scope for innovation, efficiency and opportunity for the DSO. We received presentations on the relevant data workstreams which we appreciate will take time to realise full benefits.

We fully support the drive towards digitisation and transparency that is evidenced by the DSO team. We strongly support the development (or purchase) of tools to allow stakeholders to interact meaningfully with data in ways that are tailored to their needs.

We addressed a number of other very important topics and issues which are detailed in the body of this report. Along with the four key themes we will revisit these topics to assess progress during our next year's work.

Thank you

We would like to thank colleagues at the DSO (and DNO) for the assistance provided to us during our work. People were generous with their time, provided all the information we requested and answered many questions, often to tight deadlines. We are grateful for this cooperation as we carried out our work and we look forward to continuing to work with the teams in future years.

1.0 Introduction

1.1 The Context

To achieve the goal of decarbonising our economy, and specifically our electricity system, the UK's electricity networks are going through an unprecedented transformation. Networks must adapt to cope with widespread deployment of renewable generation and storage, alongside increasing use of low carbon technologies such as heat pumps and electric vehicles. These technologies are ever more likely to be connected at the distribution network level which requires distribution networks to find new and very different ways of working.

Instead of the traditional model of centrally planned 'one way' networks delivering electricity from fixed points to end consumers, distribution networks need to become smarter, more flexible and responsive. A key tool to enable this has been the creation of the DSO role. This role is described by Ofgem as 'a set of functions and services that are required to run a smarter electricity distribution network', including 'planning and network development, network operation and market development'.

1.2 NG DSO

NGED has established a functionally separate DSO function to fulfil this role. The NG DSO vision is to enable and coordinate a smart, flexible energy system that facilitates local decarbonisation for all customers and communities at the right time and the lowest cost. It sets this out in its DSO strategy and its more recently published Strategic Action Plan.

1.3 NG DSO Independent Advisory Panel

When it published its Strategic Action Plan in March 2024, NG DSO also established the Independent Advisory Panel. The Panel comprises a small focussed group of experts with the skills and experience to effectively support the DSO by providing strategic and constructive challenge to its plans and its delivery.

During its first nine months of operation the Panel members have been effectively onboarded, agreed their own Terms of Reference (which are publicly available on the NG DSO website), and established initial ways of working. NG DSO has provided excellent secretariat support including access to a secure shared site where the Panel's documents have been stored. The Panel has met formally three times, benefitted from four 'deep dives' into key topics and held two site visits. Details of the Panel's activities are in Annex B.

This first report of the Panel sets out the priority areas of focus during this time, our initial views on those areas and next steps.

2.0 Key Themes

In this section we set out the Panel's work so far on some of the topics we consider to be of highest priority. We note a range of other topics where the Panel has provided input in section 2.5.

2.1 Stakeholder views

The Panel was keen to understand the views of the DSO's stakeholders so that we could constructively challenge whether these are being taken on board.

The DSO team shared stakeholder feedback from a number of sources including Flexibility Webinars, Net Zero Surgeries with Local Authorities, engagement during the development of the Distribution Future Energy Scenarios (DFES), an extensive series of engagement events (the 'Futures series') and the outcome of the DSO stakeholder satisfaction survey mandated by Ofgem as part of the DSO incentive in the energy distribution price control (ED2).

The team also responded to a request from the panel for a more in-depth discussion of the views of Local Authorities as a particularly important stakeholder group.

Futures series

Key feedback from stakeholders that was used to shape the DSO strategy and vision included:

- Demonstrate more forward-thinking to drive significant change in the industry.
- There is a greater need for standardisation across DSOs.
- More focus on whole-system coordination in respect of flexibility services.
- Move to a smart network that balances at the local level.
- Importance of transparency of decision-making.
- Clarity needed on network investment commitment.
- Focus should be on enabling decarbonisation.
- DSO deliverables should be specific and measurable.

Stakeholder Satisfaction Survey

The key themes emerging from the Stakeholder satisfaction survey included

- Requests for more transparency of data, and help in using and understanding data sets.
- Requests for more support for Local Authorities including on accessing and using data, but also in understanding key topics such as flexibility and connections.
- Frustration around connections delays and a lack of understanding about the decision making between the DNO and DSO on connections.

Our observations

The Panel appreciated the sharing of the detailed stakeholder feedback and in particular the presentation on the methodology of the Stakeholder Satisfaction survey.

We observed that the Stakeholder Satisfaction survey was somewhat narrowly focussed and the response rate and range of stakeholders who responded was limited. This was unsurprising given that it is the first such survey and that the survey was confined to those questions mandated by Ofgem which is designed to allow Ofgem to score all DSOs on a robust basis as part of the DSO incentive.

The Panel considers that there is significantly greater potential in the use of stakeholder surveys in the future. Whilst we recognise the need to continue to comply with regulatory requirements, we consider that the DSO could design much more extensive survey questions and reach a much larger and more diverse group of stakeholders. This could provide much richer feedback and also act as a route for the DSO to communicate with and inform those stakeholders of its role and how to participate in and support the development of smart flexible networks.

Next steps

The Panel asked to revisit this topic in the context of the next Stakeholder Satisfaction survey with sufficient time to input into and support the methodology and scope of the survey.

2.2. Governance and decision making

Both the DSO and its stakeholders understand that, for the DSO function to be effective, there needs to be clear, transparent governance arrangements in place that protect the independence of the DSO's decision making.

Of particular importance is the framework for exposing, discussing and resolving any decisions where there is an actual or perceived conflict of interests between the DNO and the DSO. For example, stakeholders, and the Panel, noted the possibility that in fulfilling its role of developing flexibility markets, the DSO might wish to rely on flexibility services to balance supply and demand whereas the DNO might have historically relied on capital investment. In such a situation there needs to be a mechanism to resolve any differences of opinion and reach a decision that is in the best interests of stakeholders and customers.

Incentives

The Panel sought to understand the incentives on the DSO and the DNO and how these might influence decision making. Because the Panel considered this to be one of the most important topics it was touched on at all meetings. The DSO team accepted this and provided a detailed briefing on governance and incentives at the Panel's October meeting.

The team noted the importance of the ED2 DSO incentive to the entire NGED Group and the fact that the DSO controls financial approvals, giving it significant influence over what outcomes are chosen and delivered.

DNO/DSO conflicts and decision making

The DSO team took on board the Panel's strong interest in governance and in particular the mechanisms used to surface any real or perceived conflicts between the DNO and DSO, as well as the mechanisms in place to resolve such conflicts. A detailed briefing was provided at our October meeting, setting out the steps the DSO and the DNO are taking to address this issue.

These include:

- Establishing a new decision-making group comprising the MD of the DSO and the key directors of the relevant DNO directorates such as Connections, Asset Management, Field Operations and Transformation. The group is designed to take key decisions where a conflict is identified and those decisions are based on equal weighting of the DNO and DSO views, not on the number of individuals attending.
- Developing a robust conflict register to help expose where there are genuine intractable conflicts rather than just robust debates between individuals about how best to implement decisions.
- Clear process maps for resolving those issues that are not true conflicts, to ensure that only truly intractable conflicts need to be escalated to the new governance group.

The DSO team presented the existing process used to make decisions on what solutions should be implemented which included the following steps:

- Why take action? The DSO identifies the customer need.
- What action to take and how? Following appropriate modelling the DSO makes a strong recommendation followed by detailed iteration with the network planners in the DNO.
- When? The DNO has flexibility as to when the agreed solution is implemented, subject to a 'long stop' date.

Our observations

The Panel recognises that the development and implementation of governance structures is a work in progress. We have made a number of suggestions on how further mechanisms to expose and resolve conflicts might be developed, for example the potential use of a pseudo internal profit and loss account to expose the incentives on both the DSO and DNO. We also stressed the need for decision making to be robust and transparent so all stakeholders can see how their views have been taken into account.

We are grateful to the DSO team for taking our feedback on board as it develops its governance structures and we welcome the establishment of the new governance group. We will revisit how this group works when it has been operational and taken some decisions.

We expect governance structures to develop further as lessons are learned from real world decisions. As that happens we would like to see how those structures take into account the impact on all stakeholders including end customers through their energy bills.

We have also asked the DSO team to consider whether governance, and transparency, would be aided if there were a separate set of licence conditions applying specifically to the DSO.

Next steps

We acknowledge the considerable amount of work that has already been done on this topic; and there is more to be done. We have asked to revisit this topic in detail in a future meeting, preferably when the new governance structures have bedded in and the Panel could see some real-world examples of decision making. At that time we would also like to consider the potential benefits (or not) of separate licence conditions.

2.3 Performance framework and KPIs

The Panel received a presentation from the DSO team on the DSO's performance KPIs. These had been developed following stakeholder feedback and are published on the DSO website.

Incentives

The Panel sought to understand how the KPI's relate to the incentives on the DSO, including the DSO incentive included in ED2.

We also wanted to understand any incentives driven by the DSO/DNO governance and decision-making frameworks and how these linked to the performance related incentive scheme operated for colleagues with the DSO and the wider NGED group.

Our observations

The Panel was very supportive of the work by the DSO to develop performance metrics. We suggested that future iterations of KPI's look at the following key issues:

- Can the KPI's be based on consumer outcomes rather than inputs (if not now then in the future as the system becomes more mature).
- Is it possible to gather information that allows the NG DSO to understand how well it is performing compared to its peers.
- How is NG DSO performance reported to the wider Group and how does this affect incentives on the DSO.

Next steps

The Panel supported the ongoing publication of performance metrics and asked to revisit this topic with reference to the above observations at an appropriate time.

2.4 Data

The role of data in delivering the DSO function and realising its vision of truly smart flexible networks supporting decarbonisation is critical. This was one of the first priority areas identified by the panel and we note how it repeatedly surfaces in stakeholder feedback.

The DSO team shared a number of data workstreams that were ongoing to improve the availability and use of data, including

- DFES data; replacing unhelpful .pdf files with open-source data.
- Monitoring; working towards an optimal use of smart metering data and substation monitoring.
- Work to improve IDNO data sharing.

Our observations

It is clear to us that the DSO (like its peers) is at the start of a journey to optimise the use of data and that data (and technology) has huge potential in the future. However we also recognise that this is a vast subject and the DSO must prioritise and work in a methodical way to maximise the benefits of data and make the best use of its resources. Key themes we noted were;

- The need to improve transparency of data, which includes allowing open access to raw data but which may also include making the data more accessible by presenting it in formats that particular stakeholders can use more easily. This could be a function of the DSO or could be performed by third parties in the future.
- Opportunities to triangulate data with third party sources to improve accuracy.
- There will be a need to develop a deeper and more granular understanding of consumer data and behavior over time, so identifying sources of this is important.

Next steps

Recognising the critical importance of data and the fact that all DSOs are on the early stages of this journey, the Panel asked to revisit this topic regularly in the future.

2.5 Other topics

The Panel addressed a number of other important topics during its first three meetings including

- **Strategic work force planning**, and the importance of scaling up the DSO function in a sustainable way; the Panel is pleased that the DSO took and acted on this feedback, considerably increasing its headcount and strengthening its senior team over the past nine months.
- How (and whether) to measure the **carbon impact of flexibility services**; the Panel noted that Ofgem had previously taken the position that carbon intensity should not be calculated and asked the DSO team to revisit this topic at a future meeting.
- The importance of managing **boundary issues** between different DSO areas and the potential for collaboration to improve customer and stakeholder experience, for example by standardising some key interfaces such as flexibility market portals.
- Development, ownership and operation of **market gateways** and how the DSO might make decisions on whether to build or buy such services (linked to workforce planning and the digital capabilities within the DSO).
- The outcome of the first Ofgem EDII incentive report and NG DSO's ranking compared to other DSOs.
- The development of the RESPs and the role these will play in the future.

Annex A Links to reference materials

NGED DSO Strategic Action Plan https://www.nationalgrid.co.uk/dso

Independent Advisory Panel members https://www.nationalgrid.co.uk/nged-dso-panel

Independent Advisory Panel Terms of Reference https://www.nationalgrid.co.uk/downloads-view-reciteme/665513

Minutes of Panel meetings https://www.nationalgrid.co.uk/downloads-view-reciteme/662821

NGED DSO Performance Metrics https://www.nationalgrid.co.uk/dso/dso-performance-metrics

Annex B Panel Activities

Onboarding

3 April 2024: Onboarding day

- Introduction to NGED and the DSO team
- DSO Panel role and purpose
- DSO roles and responsibilities
- Regulatory requirements and NGED's commitments
- Panel ways of working

Formal meetings

23 April 2024: First Panel meeting

- DSO stakeholder needs and reflections
- Governance and compliance landscape
- Performance Framework
- Agree Panel Terms of Reference

22 July 2024: Second Panel meeting

- Detailed look at Local Authority stakeholders
- Carbon impact of flexibility
- NGED data workstreams
- Stakeholder survey
- Stakeholder engagement strategy
- Strategic workforce plan

14 October 2024: Third Panel meeting

- NGED DSO operating model and change in executive structure
- Governance of DSO
- Conflict of interest deep dive
- Policy and processes workstream
- Regional Energy System Plan (RESP)
- Incentive report
- Advisory Panel annual report

Site Visits

23 April 2024: Visit to SeaBank power station

3 April 2024: Visit to DNO Control room and contact centre

Deep Dives

- 11 May 2024: DSO performance framework including KPIs
- 28 June 2024: The operation of the Market Gateway
- 4 September 2024: How Flexibility markets work
- 13 December 2024: Total system planning