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## ESO Response to Governance of a Data Sharing Infrastructure Consultation

Dear Jeff

Thank you for the opportunity to respond to your consultation on governance of a Data Sharing Infrastructure.

### Who we are

As the Electricity System Operator (ESO) for Great Britain, we are at the heart of the energy system, balancing electricity supply and demand second by second.

Our mission, as the UK moves towards its 2050 net zero target, is to drive the transformation to a fully decarbonised electricity system, which is reliable, affordable, and fair for all. To do so we will consider the energy generation mix, the network infrastructure and the markets frameworks needed to deliver the ambition to achieve clean power by 2030, as well as looking further to the strategic plans leading onward to 2050. We play a central role in driving Great Britain's path to net zero and use our unique perspective and independent position to facilitate network and market-based solutions to the challenges posed by the energy trilemma.

As National Energy System Operator (NESO) we will continue to build on the ESO's position at the heart of the energy industry, acting as an enabler for greater industry collaboration and alignment. We will unlock value for current and future consumers through more effective strategic planning, management, and coordination across the whole energy system.

### Our key points

We think that secure and resilient data sharing at scale across the sector is an important enabler for the sector's digitalisation and in achieving the energy transition. Supporting this digital transformation by taking on the proposed governance role supports ESO in carrying out our function to promote our net zero objective in a coordinated and economical way. Efficient and scalable data sharing is necessary for the market, and we believe we are well placed to progress the build and governance as it scales. This governance role is vital to the coordination required to support industry wide digitalisation and we welcome the opportunity to play a key role in it.

We consider that a suitable sector digital governance model is required to enable the success of the DSI. We are supporting the development of an energy sector data sharing infrastructure through our Virtual Energy System programme and look forward to working closely with Ofgem and industry on realising the Interim DSI Coordinator role in support of this ambition.

We look forward to engaging with you further. Should you require further information on any of the points raised in our response please contact James Edwards-Tombs, Innovation Stakeholder Manager, at [James.Edwards-Tombs@nationalgrideso.com](mailto:James.Edwards-Tombs@nationalgrideso.com).

Yours sincerely

Shubhi Rajnish  
Chief Information Officer

## Section 2 Consultation Questions and ESO Responses

### A1.1 Q1. Do you see potential uses for the DSI within your day-to-day operation in the energy sector?

Answer: Yes. The Virtual Energy System programme (VirtualES) identified twenty-four use cases, as noted in the VirtualES benchmarking report<sup>1</sup> that can support the energy sector with its current, and future commitments. The VirtualES programme has also identified the need for a data sharing infrastructure to enable its objectives to be realised and is currently developing the Data Sharing Infrastructure (DSI) pilot using an outage planning use case, with strategic planning as the MVP use case that will be taken forward. Based on the expected adoption curve of the DSI, we believe it will act as an accelerant in the sector's ability to meet a Net Zero energy system by 2030. We believe the development of the DSI will also support our Digital Culture ambition noted in our Digitalisation Strategy<sup>2</sup>

### A1.2 Q2. Do you have any comments on the funding mentioned within this section?

Answer: We consider the approach Ofgem outlines to be appropriate for the development of the DSI.

### A1.3 Q3. Do you have any comments on the timeline shown?

Answer: We consider the timeline to be achievable and it fits with future NESO roles. If the need arose to bring forward timelines for delivery and operation of the DSI or wider digital infrastructure to match other ambitions, we believe this could be achievable by accelerating appointment of the long-term governance role and appropriate resources being made available to deliver.

## Section 3 Questions and ESO Responses

### A1.4 Q4. Do you agree with our short-term governance structure model where the Interim DSI Coordinator is responsible for leading the short-term governance (2024 – 2028) of the DSI?

Answer: Yes, we agree with the short-term governance structure.

### A1.5 Q5. If not, state your reasons and propose an alternative governance model or improvements to our proposed solution.

Answer: No response.

### A1.6 Q6. Are there any additional governance roles that are not covered by the proposed governance model? If so, what are these?

Answer: We believe the governance roles set out are appropriate for the development of the DSI. We will continue to observe wider digital governance activities and opportunities such as the DSIT regulatory innovation office<sup>3</sup> to ensure proportional coordination of digital governance efforts across the economy including engagement with NDTP, Ofgem, DESNZ & industry to ensure alignment.

We continue our work on a longer-term vision for digitalisation governance as described in our 'Delivering Energy Sector Digitalisation' report. This highlights our position on how the long-term governance can be realised as a future NESO responsibility. This was created openly and collaboratively with Ofgem and DESNZ and industry experts.

<sup>1</sup> <https://www.nationalgrideso.com/document/248551/download>

<sup>2</sup> <https://www.nationalgrideso.com/document/299416/download>

<sup>3</sup> <https://digitaltwinhub.co.uk/data-sharing-infrastructure/>

As noted in the digital spine feasibility study, governance needs to consider cross sector coordination. We believe the current proposals as well as the longer-term vision of the Digitalisation Orchestrator<sup>4</sup>, can align with these cross-sector initiatives as they emerge in a sustainable, secure, and effective way. An Orchestrator is proposed as an independent organisation responsible for coordinating the sector's shared digital energy system infrastructure, and to ensure that the overall design of digital infrastructure is efficient and effective for consumers today and sustainable into the future.

**A1.7 Q7. Do you agree with the responsibilities of the interim DSI Coordinator? Are there any additional responsibilities that it should undertake?**

Answer: We agree with the responsibilities of the Interim DSI Coordinator set out in the consultation. To deliver the DSI pilot and MVP effectively, and to undertake responsibilities noted in the consultation, ESO have allocated staff and are developing capability to ensure realisation of the benefits of the DSI for wider industry. We are confident that we meet the expectations of the Interim DSI Coordinator role and will be effective in role when a decision is made. We think that the model may need to consider 1) how data quality can be improved across industry and 2) how an independent advisory group can be incorporated to support the governance.

**A1.8 Q8. Do the proposed deliverables reflect the outputs that the Interim DSI Coordinator should focus on in the initial DSI stages? Do you suggest any additional deliverables?**

Answer: We agree with the deliverables of the Interim DSI Coordinator set out in the consultation are appropriate. Were ESO to be awarded this role we believe these outputs are likely achievable in the timeframes specified. We think that the scalability of use of the DSI could be a focus, such as through enabling use cases like demand side response and others.

**Section 4 Questions and ESO Responses**

**A1.9 Q9. Do you agree with us that the System Operator is the best option as the Interim DSI Coordinator? If no, explain your reasons and justify your proposed option.**

Answer: Yes. We welcome Ofgem recommending NESO as the right organisation to be the Interim Data Sharing Infrastructure Coordinator. NESO's deep expertise and extensive industry engagement on the data sharing infrastructure and its governance make it well-equipped to deliver this interim role. We believe that the Interim Data Sharing Infrastructure Coordinator role, and the subsequent enduring governance model are both of vital importance to the sector and NESO's future roles and we are committed to ensuring they are realised.

ESO's VirtualES programme has been leading on the development of the Data Sharing Infrastructure, which included signing a memorandum of understanding with the National Digital Twin programme<sup>5</sup> to grow the capabilities of the DSI in alignment with cross sector initiatives. We have worked collaboratively with the Catapult network and others to ensure the DSI and its governance is robust, and to increase our own capability to deliver it. We have done extensive stakeholder engagement such as running advisory groups with subject matter experts from industry and academia to support our work in this space, covering technology and governance, and use cases. Separately, in preparation for NESO, we have brought in house our IT capability as recommended by Ofgem and delivered complex IT programmes such as the Open Balancing Platform (OBP). These activities are growing the internal expertise to realise a modern digital organisation and

<sup>4</sup> [Delivering Energy Sector Digitilisation](#)

<sup>5</sup> <https://www.nationalgrideso.com/news/eso-signs-memorandum-understanding-national-digital-twin-programme>

is in line with our Digitalisation Strategy. Carrying forward the learnings from the work we have already undertaken, we will be continuously improving our capabilities to ensure the role is realised as best it can be.

We recognise that NESO supporting the build, operation, and governance of the data sharing infrastructure in the first instance can lead to perceived conflicts of interest. We believe that this can be managed in collaboration with industry, Ofgem and government. As we become NESO, we'll be a new independent organisation responsible for planning Britain's entire energy system, operating the electricity network and offering expert advice to the energy sector's decision makers to ensure that we have a clean, secure, decarbonised energy system that is affordable and fit for the future. This independence removes any perceived conflict of interest. Our commitment is to ensure that the appropriate governance is in place for the DSI to ensure its benefits are realised. We believe there is a path to do so with the proposed regime. We think it is of vital importance that we continue with the plans as noted so we do not lose momentum with this crucial initiative.

NESO can ensure that the benefits of more effective digital governance are realised for consumers and industry and welcome the Royal Academy of Engineering report<sup>6</sup> and the Electricity Networks Commissioner report by Nick Winser<sup>7</sup> that recommended NESO to perform a central role in digital governance. We believe both these independent recommendations demonstrate NESO is the clear choice to perform this vital function of the energy system.

#### **A1.10 Q10. What assessment criteria do you foresee being required when transitioning from short-term governance to an enduring governance model?**

Answer: We believe that long-term governance should have different assessment criteria. Of those noted in this consultation, we think that Operational Capability, Independence, Engagement and Cyber Security are important to carry through when considering long term governance. While important, we do not believe interoperability and common standards would be the most relevant assessment criteria for the long-term governance, and this should be considered as an indicator of the DSI's success, rather than of the success of its governance.

We think that the longer-term governance will require a strong whole system thinking approach towards the energy sector (and beyond) to ensure the sector can take advantage of opportunities to heighten benefits of the DSI and other digitalisation initiatives. Secondly, a view on how the role has been performed to date should be considered in any transition between roles. Finally, assessing the impact of continuity will be important between the Interim DSI Coordinator and the longer-term governance arrangements.

#### **A1.11 Q11. What suggestions or feedback do you have for refining these governance assessment criteria to better meet the requirements and challenges of digitalisation in the energy sector?**

Answer: We believe that the assessment criteria should reflect the following categories:

- The inclusivity of the capabilities that have been developed reflect the whole energy systems needs
- The effective prioritisation of the capabilities that have been delivered aligning with wider objectives (for example Clean Power 2030).
- How fit for purpose these capabilities are for the whole energy system.

<sup>6</sup> [Royal Academy of Engineering Report.](#)

<sup>7</sup> [Electricity Networks Commissioner Report](#)