

Report

ESO Performance Panel End of Year Review 2020-21

Publication date: 07 July 2021

Contact: Maryam Khan, Alice Siri

Team: ESO Regulation, Energy Systems Management & Security

Tel: 020 7901 7000

Email: ESOPerformance@ofgem.gov.uk

The Electricity System Operator (ESO) performs several important roles, from the real time operation of the electricity transmission system, through to market development and advising on network investment.

The regulatory and incentives framework encourages the ESO to maximise consumer benefits across the full range of its activities. The framework uses an evaluative approach. We set expectations, define evaluation criteria, and make a final decision on the ESO's level of performance at the end of the regulatory year. Our evaluation is based on an ongoing assessment of the ESO's performance, drawing input from stakeholders and our ESO Performance Panel.

We are publishing this report as the secretariat for the ESO Performance Panel, detailing the Panel's end of year assessment of the ESO's performance for the 2020-21 regulatory period. **This report reflects the views of the Panel, not Ofgem.**

We will use this recommendation alongside other evidence collated throughout the year to determine a financial reward / penalty for the ESO worth up to \pm £30m.

Contents

End of year review process 3

Summary of ESO Performance Panel’s assessment..... 5

 Overarching messages5

 Role 1: Control Centre operations6

 Role 2: Market development and transactions9

 Roles 3: System insight, planning and network development..... 11

Annex 1: Panel Membership for the End of Year Review 2020-21 15

End of year review process

The ESO Performance Panel (the “Panel”) plays a central role in the ESO’s regulatory and incentive framework. It challenges the ESO’s plans before the start of the year, evaluates the ESO’s performance after six months (the mid-year review) and then performs a final evaluation at the end of the year (the end of year review). Under the ESO reporting and incentives arrangements¹, the ESO published an end of year report on 7 May 2021², covering its performance from 1 April 2020 to 31 March 2021. The aim of the report is to update stakeholders on the progress the ESO has made against its deliverables, detail its outturn performance against its performance metrics; and provide evidence of the consumer benefits its actions this year have delivered or are expected to deliver in the future.

Following the publication of the end of year report, the ESO presented this evidence to stakeholders and the Panel at the virtual end of year review event that was held on 8 June 2021. During the session, stakeholders and the Panel had the opportunity to raise questions and provide direct feedback to the ESO. The Panel then held a follow up session with the ESO to seek any further clarifications on the evidence provided.

The Panel reconvened on 15 June 2021 to complete its end of year assessment of the ESO’s performance for the 2020-21 regulatory period. The Panel assessed the evidence provided by stakeholders, the ESO and collected by Ofgem throughout the year and used the evaluation criteria below to provide end of year scores for each of the ESO’s roles. These scores and this Panel report are a recommendation to the Authority on the ESO’s performance and will support the Authority, along with other evidence, to determine a financial incentive reward or penalty. The Panel’s evaluation should also inform the ESO on the areas where it is performing well and the areas where improvements could be made.

¹ The ESO Reporting and Incentives Arrangements Guidance document: https://www.ofgem.gov.uk/system/files/docs/2020/03/esori_guidance_document_2020-2021_final.pdf

² ESO End of Year report 2020-21: <https://www.nationalgrideso.com/document/191446/download>

This report summarises the Panel’s assessment of the ESO’s performance in the year. This report reflects the views of the Panel, not Ofgem.

The evaluation criteria

In determining a score for each role, the Panel used four key considerations to evaluate the ESO’s performance:

- a) Evidence of consumer benefits
- b) Stakeholder views
- c) Plan delivery
- d) Outturn performance metrics and justifications

Approach

The Panel sought to use the evaluation criteria described above and the process described in Chapter 3 of the ESORI (Electricity System Operator Reporting and Incentive Arrangements)³ guidance document to assess the ESO’s performance in relation to each role, taking into account Ofgem’s feedback in the formal opinion⁴ and stakeholder feedback collected to date.

Scoring

For each of the three roles, the Panel provided end of year scores for the ESO on a scale of 1 to 5, where:

- 1 = Weak
- 2 = Poor
- 3 = Average (‘baseline expectations’)
- 4 = Good
- 5 = Excellent

³ The ESO Reporting and Incentives Arrangements Guidance document:
https://www.ofgem.gov.uk/system/files/docs/2020/03/esori_guidance_document_2020-2021_final.pdf

⁴ Ofgem Formal Opinion 2020-21: <https://www.ofgem.gov.uk/publications-and-updates/ofgem-s-formal-opinion-electricity-system-operator-eso-forward-plan-2020-21>

Summary of ESO Performance Panel's assessment

Overarching messages

The Panel welcomed the information provided by the ESO in its end of year report and stakeholder events, including the presentation videos summarising key areas of performance over the period.

The impact from COVID-19 and the ESO's response was a key feature of the Panel's considerations. The Panel commended the ESO on its response to the pandemic and on maintaining the security of the system, despite the challenging and unprecedented system conditions created by COVID-19. Nevertheless, the Panel was concerned about the major increase in balancing costs across the year. They expected to see stronger evidence of how specific actions taken by the ESO had reduced or minimised balancing costs.

The Panel reflected that on balance the ESO's performance has improved since the mid-year stage. At the mid-year point, the Panel noted that the ESO must focus on minimising any further balancing cost increases, use a co-creation approach with industry on market reforms and 'join the dots' between various market reforms and their interaction between developments across Role 2 and Role 3. The Panel reflected that the ESO had responded to most of these challenges in the last 6 months of the year but noted continued high balancing costs during winter.

The Panel noted the positive feedback on the ESO's co-creation approach in developing and delivering new products and felt the ESO could build on this next year. The Panel welcomed the ESO's new 'join the dots' initiative and noted that it had given a better sense of the ESO's ambition about how various market reforms would interact and on when these will be delivered.

The Panel expect the ESO to build on this in the coming year and provide industry with greater certainty about market design and associated delivery plans. In particular, about how the ESO's Role 3 Pathfinder 'learning by doing' activities and non-network solutions will develop into regular market-based processes. Furthermore, the Panel would like to understand how the Role 2 and Role 3

markets form a cohesive package, along with the ESO's view of any implications for wholesale markets.

The Panel also acknowledged the positive stakeholder feedback on communication and engagement, especially around the ESO's weekly Electricity National Control Centre (ENCC) webinars and on improved code administration.

Summary of scores

We have summarised the scores agreed by the Panel, following its assessment of the ESO's performance. In some instances, the Panel wanted to reflect more detail in their scores. For example, a score of 3 denotes that the ESO is meeting baseline expectations, but the ESO's performance for a particular role may be, on the whole, just above expectations but not sufficient to be scored a 4. This is reflected throughout the report as a 'high 3'. Alternatively, a 'low 3' score signals performance that was slightly below expectations but not considered to be a 2.

In all instances, the scores should be read alongside the detailed feedback. This report captures the breadth of views that were expressed, and the reasoning provided by the panel members.

Role area	Role 1	Role 2	Role 3
Score	4 (low)	3	3 (high)

Role 1: Control Centre operations

- Principle 1.1: Support market participants to make informed decisions by providing user-friendly, comprehensive, and accurate information;
- Principle 1.2: Operate the system safely and securely, whilst driving overall efficiency and transparency in balancing strategies across time horizons;
- Principle 1.3: Coordinate effectively to ensure efficient system operation and optimal use of resources.

This role requires the ESO to support the market to balance the system as much as possible. Where the ESO does need to take actions to secure the transmission system, it should consider impacts of its actions across time horizons, to ensure the actions taken drive overall efficiency. The ESO should coordinate effectively with other parties to deliver the most efficient and economic outcomes for the whole system.

Role 1 score	4 (low)
---------------------	----------------

The Panel agreed on a score of 4 and reflected that, overall, the ESO was currently within the lower range of this score. The Panel discussed each of the criteria in turn.

- The Panel recognised that the ESO performed well in maintaining the security of the system during an exceptionally challenging period. The ESO was able to adapt to unprecedented events, ensure business continuity and operate the system effectively. The ESO used a combination of existing market mechanisms and some rapidly introduced new mechanisms to maintain system security during extreme low demand periods. Overall, the ESO's pandemic response was the predominant positive driver for Role 1. However, this was counter-balanced with the significant increase in balancing costs which remained high across the entire year.
- On plan delivery, the Panel thought there was mixed progress against the ESO's original commitments in the Forward plan addendum. Overall, they recognised that the ESO had performed well in meeting its commitments and delivering new products/initiatives given the added pressure of the pandemic. The panel noted that the wider access application programming interface (API)⁵, virtual lead parties and power available signal had now been delivered. The Panel also recognised that new deliverables were brought in to deal with the effect of the pandemic,

⁵ <https://data.nationalgrideso.com/api-guidance>

including the introduction of ODFM (Optional Downward Flexibility Management)⁶, weekly transparency forums and the increased forecasting outputs on the data portal.

- The Panel noted positive stakeholder feedback with the ESO's deliverables, particularly on the ESO's weekly Operational Transparency Forum and overall quality of engagement, which has improved. There remained some feedback that the transparency of the ESO's operational decision making could improve. The Panel encouraged the ESO to test how well its new data/transparency initiatives are being used by the market and whether these are providing industry with transparency on the areas that industry prioritise most.
- On evidence of benefits, the Panel recognised that the new deliverables in response to Covid-19 (ODFM, weekly transparency forums) had delivered consumer benefit. The completion of Power Available⁷ and other control room upgrades would also deliver future benefit.
- The Panel were particularly concerned by the significant increase in balancing costs, which continued to be high during the Winter months (when the impact from Covid-19 had lessened). The Panel recognised that some of this increase was outside of the ESO's control, for example, tighter plant margins and increased wholesale market prices, as well as outage delays increasing constraint costs. Given the size and therefore importance of balancing costs, the Panel expected to see more evidence to clearly substantiate that the ESO had taken actions to bear down on these costs (as opposed to only explaining why balancing costs will increase inevitably). On the other performance metrics, the Panel was unable to confidently assess performance with wind forecasting as the ESO changed how it reported against this metric. The Panel noted that the ESO was able to keep demand forecasting in line with baseline expectations despite challenging conditions, which was positive, however

⁶ More information on ODFM: <https://www.nationalgrideso.com/news/managing-reduced-demand-electricity-what-our-new-odfm-service-and-why-do-we-need-it>

⁷ More information on Power Available: <https://www.nationalgrideso.com/news/power-available-unlocking-renewables-potential-help-balance-electricity-system>

there remains a lack of confidence more generally in the ESO's forecasting accuracy. The ESO's greater number of forecasts needs to be matched with greater accuracy of the forecasts.

- Going forward, the Panel would like to see evidence that the new initiatives (e.g. Frequency Risk and Control Report) are helping to improve transparency for stakeholders. The Panel would also like to see stronger evidence to demonstrate how ESO actions are having an effect on reducing or minimising overall balancing costs. The Panel noted previous actions that the ESO had taken and claimed to reduce balancing costs but found limited evidence of these actions having an impact on reducing costs.

Role 2: Market development and transactions

- Principle 2.1: Ensure the rules and processes for procuring balancing services maximise competition where possible and are simple, fair and transparent;
- Principle 2.2: Promote competition in wholesale and capacity markets.

This role requires the ESO to encourage and facilitate competition in all markets that it can affect. This includes the balancing and ancillary services markets where the ESO is the lead architect and principal buyer and includes the remaining markets that the ESO can affect (i.e. wholesale and capacity markets).

Role 2 score	3
---------------------	----------

The Panel agreed on a score of a 3. The Panel discussed each of the criteria in turn.

- Overall, the Panel reflected that the ESO had taken on board their mid-year feedback and had improved in the last 6 months of the year, which is reflected in the end of year score. In particular, the ESO had delivered the

Markets Roadmap to 2025⁸, adopted more of a collaborative approach with industry on market reforms and had improved stakeholder satisfaction with its code administration, all while operating under the context of a pandemic.

- On plan delivery, the Panel reflected that the ESO had largely met baseline expectations. The ESO delivered most deliverables committed to in its Forward plan addendum. However, the Panel reflected at the start of the year, that most Role 2 activities were publication/strategy-based, and there was limited commitment to significant on-the-ground implementation. The Panel welcomed the Markets Roadmap to 2025 and the associated stakeholder engagement sessions and thought that they were helpful and could give greater confidence in the ESO's overall strategic direction, but that greater clarity about delivery outcomes would be needed to give confidence that benefits would be realised. In terms of delivering market reform this year, there were some aspects that were positive, but there were also some inconsistencies and aspects which could be improved. For example, the ESO implemented dynamic containment and ODFM at pace, but the Panel noted stakeholder feedback that implementation had been rushed and this had led to flaws and market distortions. The Panel noted that the ESO had acted to remedy some of these concerns.
- On stakeholder feedback, the Panel noted the positive views on the ESO's adoption of a 'co-creation' approach with industry, particularly on market reforms. The Panel also welcomed this culture change within the ESO and saw this as an improvement from the mid-year point. The feedback on Open Networks was also positive. The Panel noted some mixed feedback where ESO engagement had been weaker in specific areas, such as ODFM implementation.
- The Panel also considered the BSUoS billing error which had significant negative impacts on market participants. The Panel noted that the time taken to identify the issue and remedy the issue was poor and the Panel was not sufficiently reassured that the error was a one-off and not a result of more systemic failures within charging systems and processes.

⁸ This roadmap sets out the ESO's ambitions, principles and process to transform the markets: <https://www.nationalgrideso.com/research-publications/markets-roadmap-2025>

- On the performance metrics, the ESO had a notable improvement in its code admin stakeholder satisfaction score. This was supported by stakeholder feedback and the Panel considered this positively. There were some concerns over Reserve, Black Start and Reactive Power reforms leading to limited progress on the competitive procurement metric; however, the Panel recognised that some of this was due to impacts from Covid-19. The Panel also noted the ESO's performance in the accuracy of BSUoS forecasts, and the lack of stakeholder confidence in these, which did not meet expectations.
- On evidence of benefits the Panel recognised that the ESO did well by responding proactively and quickly to equip the control room with new tools during the pandemic (for example through the urgent code modifications). The reserve from storage trial was also considered to be a good initiative that showed positive intent and the Panel expect to see the learning from this being applied to better deliver the ESO's planned reserve reforms.
- The energy transition is driving fundamental change in balancing market volume, scope, participants and the ESO has a critical leadership role. Going forward, to improve stakeholder confidence, the Panel would like to see strong prioritisation of on-the-ground implementation of clearly defined, integrated market reforms, more consistent outcomes from the ESO's co-creation activities and improved accuracy of BSUoS forecasts. The Panel would also like to see greater focus on fast-tracking the initiatives that are expected to have the greatest impact on reducing the high level of balancing costs, as well as the improvements in code administration maintained in the future.

Role 3: System insight, planning and network development

- Principle 3.1: Coordinate across system boundaries to deliver efficient network planning and development;
- Principle 3.2: Facilitate timely, efficient, and competitive network investments.

Under this role, the ESO is expected to coordinate effectively with other parties to deliver the most efficient and economic outcomes for the whole system. This

includes coordinating with other parties across network boundaries when undertaking network planning and development. The ESO should also facilitate competition to ensure value for consumers and to drive innovation.

Role 3 score	3 (high)
---------------------	-----------------

The Panel agreed on a score of a 3 and reflected that overall, the ESO was currently within the higher range of this score. The Panel focussed on plan delivery, stakeholder views and evidence of benefits.

- The Panel reflected that there has been an improvement from the mid-year point, and this is reflected in the end of year score. On plan delivery, the Panel recognised that the ESO had undertaken significant work to deliver its Early Competition Plan, showed positive leadership on the Loss of Mains Programme⁹, opened the NOA process to third party solutions and made progress through the Pathfinders. These positive elements of delivery were counter-balanced with a view that there appeared to be limited evidence of the RDPs (Regional Development Programme)¹⁰ and NOA third-party solutions making progress during 2020-21 and, overall, there had been insufficient focus on how the discreet Role 3 activities come together as a coherent whole.
- The Panel noted that the ESO had claimed that it had learnt valuable lessons from the first two phases of the Stability Pathfinder and appeared to be applying these to discussions on the development of phase 3, which is positive. The ESO's engagement in the Scotland and North of England work was also recognised as an area of strong performance. However, the Panel noted that the ESO had attracted some 1500 options for one of its Pathfinder tenders, adding potential unnecessary cost and complexity to the process.

⁹ More information on the Loss of Mains Programme: <https://www.nationalgrideso.com/industry-information/accelerated-loss-mains-change-programme-alomcp>

¹⁰ More information on the ESO's Regional Development Programmes: <https://www.nationalgrideso.com/research-publications/regional-development-programmes>

The Panel urge the ESO to learn the lessons from these Pathfinders to ensure their future competitive processes can deliver their potential benefits.

- The Panel noted the ESO's 5-point plan¹¹ to manage constraints but felt it didn't provide significant new insight or commitments and so it was unclear how or when this plan will deliver any additional benefit. The Panel noted that the Constraint Management Pathfinder appeared to be a continuation of traditional approaches, given its focus on inter-trip solutions. As constraint costs are expected to increase significantly in the future, the 5-point plan could be strengthened by defining some clear outcomes/targets and expanding the scope of the ESO's activities, notably the Constraint Management Pathfinder.
- The Panel recognised that stakeholder feedback was, overall, in line with baseline expectations. Stakeholders were particularly positive on Open Networks and whole system engagement (particularly with TOs). There was mixed feedback on Pathfinders engagement, particularly in terms of key stakeholders lacking certainty on important aspects, such as scope, roles, and timings. The industry representatives welcomed the latest Future Energy Scenarios¹² and the Bridging the Gap deliverables¹³, which had positive feedback from their members.
- On evidence of consumer benefits, the Panel reflected on the lack of tangible outcomes from new initiatives but noted that a number of Role 3 deliverables should deliver consumer benefit in the future. The Panel noted that the ESO had prioritised delivery of the Loss of Mains Programme and agreed that these activities are expected to deliver significant benefits in future years.
- Going forward, the Panel expects to see the ESO make a step-change in providing leadership and signposting to industry what needs to happen to optimise future system development. This also includes providing greater

¹² More information on the ESO's FES: <https://www.nationalgrideso.com/future-energy/future-energy-scenarios>

¹³ More information on the ESO's Bridging the gap deliverables: <https://www.nationalgrideso.com/future-energy/future-energy-scenarios/bridging-the-gap-to-net-zero>

clarity on how the ESO's Role 3 activities form a coherent package, and that alternative non-network solutions are fully considered. The Panel expect the ESO to develop links between Role 3 activities and Role 2, in order to progress from provisional learning-by-doing activities into established market processes.

Annex: Panel Membership for the End of Year Review 2020-21

The members of the Panel include:

- Ian Tait (independent Panel member)
- Jo Butlin (independent Panel member)
- John Carnwath (independent Panel member)
- Robert Hull (independent Panel member)
- Energy UK (represented by Jack Presley Abbott)
- Association of Decentralised Energy (represented by Chris Kimmet)
- Energy Networks (represented by Lynne Bryceland)
- Citizens Advice (represented by Richard Hall)
- Ofgem Chair/facilitator (represented by Cathryn Scott)

© Crown copyright 2021

The text of this document may be reproduced (excluding logos) under and in accordance with the terms of the [Open Government Licence](#).

Without prejudice to the generality of the terms of the Open Government Licence the material that is reproduced must be acknowledged as Crown copyright and the document title of this document must be specified in that acknowledgement.

Any enquiries related to the text of this publication should be sent to Ofgem at:
10 South Colonnade, Canary Wharf, London, E14 4PU. Alternatively, please call Ofgem on 0207 901 7000.

This publication is available at www.ofgem.gov.uk. Any enquiries regarding the use and re-use of this information resource should be sent to: psi@nationalarchives.gsi.gov.uk