

Report

Ofgem's Mid-Scheme Review of ESO Performance 2021-23

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Contact: Maryam Khan, David Beaumont

Team: ESO Regulation, Energy Systems Management & Security

Tel: 020 7901 7000

Email: ESOPerformance@ofgem.gov.uk

The RIIO-2 price control for the Electricity System Operator (ESO) covers the period 2021-26. The price control includes two-year long business planning and incentives scheme periods, the first of which runs from April 2021 to March 2023. As part of the ESO's incentive framework, the ESO Performance Panel and Ofgem periodically assess the ESO's performance.

This report details Ofgem's assessment of the ESO's performance at the mid-scheme review stage. This mid-scheme review covers the first year of the RIIO-2 Business Plan 1 (BP1) period, from April 2021 to March 2022.

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RIIO-2 ESO incentives framework

Background

In April 2021, we introduced the RIIO-2 price control for the ESO (covering the period 2021-26).¹ This consists of a pass-through funding approach, supported by performance-based financial incentives to deliver value for consumers. The incentives framework runs over a two-year period (aligning with the business plan period) and is underpinned by the ESO Roles Guidance that sets out our expectations for the ESO’s activities.² We will evaluate the ESO’s combined performance on outputs and costs, across three distinct roles, and the incentives will provide the ESO with additional returns where the ESO has delivered exceptional performance.

The ESO Performance Panel (the “Panel”) plays a central role in the ESO’s incentives framework. The Panel and Ofgem periodically assess the ESO’s performance, identifying areas where the ESO is performing in line with expectations, where it is exceeding expectations and where it is not meeting expectations. At this point in the regulatory cycle, we are providing the ESO with feedback on its performance and the opportunity to act on this and make any necessary improvements during the remaining months of the scheme.

For RIIO-2, we have decided to integrate our annual assessment of the Electricity Market Reform (EMR) Delivery Body’s (DB) performance of its functions in relation to the Capacity Market (CM) within these reports. This assessment is in Annex 1.

Approach

This mid-scheme review covers the first year of the first Business Plan period (BP1) from April 2021 to March 2022. We followed the process described in Chapter 3 of the ESORI (Electricity System Operator Reporting and Incentive Arrangements) Guidance³ to assess the ESO’s performance in relation to each role, taking into account our feedback in the RIIO-2 Final Determination (delivery schedule grading)⁴ and our feedback at the six-month

¹ RIIO-2 Final Determinations – ESO Annex:

https://www.ofgem.gov.uk/sites/default/files/docs/2021/02/final_determinations_-_eso_annex_revised.pdf

² ESO roles and principles 2021-23:

https://www.ofgem.gov.uk/sites/default/files/docs/2021/03/eso_roles_guidance_2021-23_1.pdf

³ ESORI guidance document 2021-23: <https://www.ofgem.gov.uk/sites/default/files/2021-06/Electricity%20System%20Operator%20Reporting%20and%20Incentives%20%28ESORI%29%20Guidance%202021-23%20%28REVISED%29.pdf>

⁴ Ofgem graded the delivery schedule for each role, with an explicit grading (1-5) for each role. This provides the ESO with a clear ex-ante expectation of our assessment of plan delivery if these deliverables are met. Where we considered the delivery schedule not sufficiently ambitious, we highlighted this to set a clear reference point and align expectations in the incentive process. RIIO-2 Final Determinations, Appendix 1, Ibid.

stage.⁵ We assessed the evidence provided by the Panel, stakeholders⁶, the ESO⁷ and collected by us throughout the first year and used the prescribed evaluation criteria to provide scores for each of the ESO’s three roles. We have used this score to also communicate our expectation on the ESO’s projected two-year financial incentive outcome.⁸ We followed the process described in Chapter 4 of the ESORI guidance document⁹ to translate the scores into a projected financial incentive outcome.

For the avoidance of doubt, the scores, and the projected financial outcome we describe below do not automatically equate to an incentive reward or penalty at this stage. Neither are the scores, or projected financial outcome banked for the future. These scores and the projected financial outcome are indicative and are based on the information available to us at the time. They are to inform the ESO on the areas where it is performing well and the areas where improvements need to be made over the remainder of the business plan and incentive period. This will help the ESO to forecast its financial performance and will minimise the scope for misaligned expectations. The final decision on the ESO’s scores and financial outcome will be made by Ofgem by 31 August 2023.¹⁰

The evaluation criteria

In determining a score for each role (except for Role 3 where performance metrics are not applicable), we used the evaluation criteria below to evaluate the ESO’s performance:

- a) Plan delivery
- b) Metric performance
- c) Stakeholder evidence
- d) Demonstration of plan benefits
- e) Value for money

⁵ Ofgem’s six-month review ESO Performance 2021-23: <https://www.ofgem.gov.uk/sites/default/files/2021-12/Ofgem%20Six%20Month%20Report%202021-23.pdf>

⁶ Ofgem’s call for evidence 2021-23: <https://www.ofgem.gov.uk/publications/six-month-call-evidence-2021-23>

⁷ The ESO’s six-month report 2021-23: <https://www.nationalgrideso.com/document/215871/download>

⁸ Paragraph 2.35, RII0-2 Final Determinations – ESO Annex: “we have also decided to communicate to the ESO what we expect its projected two-year financial incentive outcome will be, every six months, rather than waiting until the end of the scheme. This will help the ESO to forecast its financial performance and will minimise the scope for misaligned expectations.” Ibid.

⁹ Chapter 4, ESORI guidance document 2021-23: Ibid.

¹⁰ Paragraph 2.31, ESORI guidance document 2021-23: “The Authority will produce its final decision on the incentive reward or penalty by 31 August in the year after the business plan cycle, or such later date that it considers appropriate.” Ibid.

Scoring

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

1	Overall performance clearly does not meet performance expectations, for example the ESO has strongly underperformed most criteria
2	Mixed overall performance and on balance the ESO mostly did not meet expectations, for example the ESO has net underperformance across the criteria
3	Mixed overall performance and on balance the ESO mostly met expectations, for example underperformance and outperformance across the criteria balance each other out
4	Mixed overall performance and on balance the ESO mostly exceeded expectations, for example the ESO has net outperformance across the criteria
5	Overall performance clearly exceeds performance expectations, for example the ESO has strongly outperformed most criteria

In some instances, we wanted to reflect more detail in the scores. For example, a score of 3 denotes that the ESO is meeting 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.

Projected financial outcome

The maximum reward the ESO can achieve for BP1 is £30m and the maximum penalty is -£12m over two years. These figures are the total incentives value across BP1. As a default, this will be split equally among each of the three roles (+£10m upside and -£4m downside per role).

Each score corresponds to a pre-defined financial default amount and range, as shown in Figure 1.

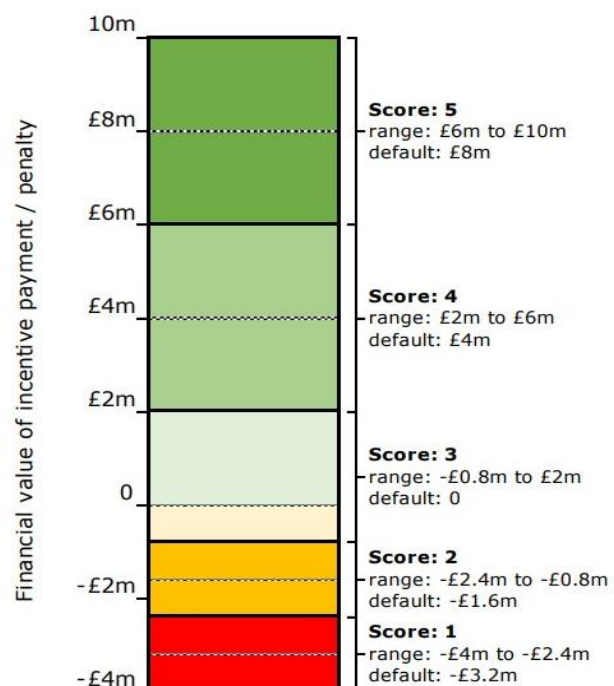


Figure 1: Financial value of incentive payment / penalty

Ofgem’s Mid-Scheme Assessment of ESO performance

Summary

In our RIIO-2 Final Determinations,¹¹ we said the ESO’s 2021-23 business plan (BP1) was broadly ambitious and challenging, and that full and good quality delivery would exceed our expectations. At this twelve-month review point, the ESO has marginally fallen below our expectations on Role 1, marginally exceeded our expectations on Role 2 and has exceeded our expectations on Role 3. Whilst the ESO is working toward an ambitious plan, performance on Role 1 over the first year has not given us the confidence that it is on track to meet this ambition in practice. This is due to notable delays and issues with milestones associated with major IT projects. Alongside this, forecast internal costs are significantly above the previously agreed cost benchmark for Role 1 with limited robust justification that this will lead to additional benefit and therefore deliver value for money. The ESO is marginally exceeding expectations on Role 2, with the potential to exceed further if it can improve the quality of its market reform products to ensure it is maximising consumer benefits (particularly through its product design). For Role 3, we consider the ESO is broadly on track to deliver the ambition in its plan, but it could still further exceed our expectations in the ways we have set out.

We have summarised our scores in Table 1, following our assessment of the ESO’s performance and our consideration of the Panel’s recommendations. In all instances, the scores should be read alongside the detailed feedback. The ESO is midway into delivering a two-year plan and it still has the potential to strongly exceed expectations in all roles if it can respond to our feedback in this report.

Table 1: Summary of ESO’s mid-scheme review 2021-23

	Role 1	Role 2	Role 3
Ofgem delivery schedule grading (Final Determinations)	5	4	[low] 4
Panel recommended score	[low] 3	[low] 4	3
Ofgem score	[low] 3	[high] 3	[low] 4
Ofgem’s projected financial outcome	-£0.8m	+£1m	+£3m

¹¹ Annex 1 (Grading of ESO’s Delivery Schedule), RIIO-2 Final Determinations – ESO Annex:
https://www.ofgem.gov.uk/sites/default/files/docs/2021/02/final_determinations_-_eso_annex_revised.pdf

On Role 1, we believe the ESO is on course for a score of a low 3. Our delivery schedule grading scored the Role 1 plan as strongly exceeding expectations (score of 5). Whilst the ESO’s RIIO-2 plan for this role is very ambitious, the ESO has failed to meet a number of the planned deliverables, particularly some key IT projects that are fundamental to delivering significant consumer benefit. Given the current level of progress, we have slightly less confidence (compared to the six-month review) that the ESO can deliver its full plan in the time remaining. At the same time, costs are projected to be ~18% above the cost benchmark for this role, mainly in relation to these IT projects. This is marginally better than the six-month review, but we have seen limited justification for the increases or explanation for how the additional costs will deliver additional benefit and still deliver the value for money set out in the RIIO-2 business plan. The combination of delay on critical milestones and cost increase were the two main areas of underperformance that lowered the ESO’s score. The ESO’s balancing costs were also high over this period, but we recognise that several external factors beyond the ESO’s direct control contribute to these high costs. Stakeholder feedback indicated that the ESO continued to meet expectations. The ESO could expect a £0.8m penalty based on its current projected performance.

On Role 2, we believe the ESO is on course for a score of a high 3. This is an improvement from the six-month stage, although still below our delivery schedule grading (score of 4). There have been some notable areas of good performance, including the ESO’s work on Net Zero Market reform and enduring markets for stability and voltage. We have also taken account of the Panel’s feedback that the ESO has improved its delivery of balancing products. However, there are also some areas where we have increased concerns, and the ESO’s demonstration of plan benefits has fallen short of meeting our expectations. We consider that the quality of some of the ESO’s delivered balancing products could have been better and we would like the ESO to provide us with more confidence that it will resolve these issues and realise the business plan’s full expected benefits. Performance over the year indicates that the ESO is close to being on track with its milestones (with some valid reasons for delays in some areas) and whilst stakeholder feedback has been mixed, it is meeting stakeholder expectations overall. Overall, we consider the ESO to be marginally exceeding expectations and we have outlined several areas where the ESO could increase its score further. The ESO could expect to receive a £1m incentive reward based on its current projected performance.

On Role 3, we believe the ESO is on course for a score of a low 4, in line with our delivery schedule grading (which was towards the lower end of a 4). The ESO’s deliverables and costs are broadly on track, and we recognise that the ESO is now working on several additional projects with Ofgem and BEIS beyond its original business plan. As the ESO is on track with most of its deliverables and also delivering additional outputs, we expect it to

achieve a substantial portion of its expected benefits. However, there have been some areas over the first year where the ESO could have shown greater initiative and acted quicker to avoid future costs (such as on connections), and further steps are needed for the ESO to exceed stakeholder expectations. Overall, the ESO has started to respond to areas of past feedback, but we believe it still has progress to make to strongly exceed our expectations. The ESO could expect to receive a £3m incentive reward based on its current projected performance. This is an improvement from the six-month review due to positive progress in some areas, such as improved pathfinder delivery and the ESO’s increased contribution to developing more strategic network planning arrangements.

Detailed feedback

Role 1: Control Centre operations

Our expectations

This role requires the ESO to balance the National Electricity Transmission System in a safe, reliable, and efficient way. This includes contracting and trading with energy market participants as well as working with network owners to optimise short term physical network configurations. Other key functions under this role include short term energy forecasting, system restoration and emergency response, as well as managing and sharing system data and information. Please see the ESO Roles Guidance for our expectations for how the ESO should deliver these activities.

Our mid-scheme assessment

Table 2: Role 1 assessment

Ofgem assessment	Six-month review	Mid-scheme review
Role 1 score	3	[Low] 3
Projected financial outcome	£0m	-£0.8m

We agree with the Panel and consider the ESO’s performance over the first year of BP1 is reflective of a projected score of a low 3. Our score recognises the original high level of ambition of the Delivery Schedule but reflects our view that the evidence against the criteria suggests the ESO is currently some way off being positioned to meet this ambition. There are two main drivers of the score falling to marginally below expectations, compared to the six-month stage. There remain important foundational deliverables that are delayed and there is now less time for the ESO to get back on track. Whilst the cost increases are marginally less than predicted at the six-month stage, the 18% increase in projected costs

remains substantial and still has not been sufficiently justified. It is not clear to us that the additional costs will lead to additional benefit and therefore represent a similar level of value for money as set out in the ESO’s RIIO-2 business plan. Overall, The ESO could expect a £0.8m penalty based on its current projected performance, which is the low end of the financial amount for a score of 3.

Plan delivery

Our delivery schedule grading scored the Role 1 plan as exceeding expectations (score of 5). We recognise that the ESO stated that it is on track to meet many of its deliverables, but we note that some important milestones were delayed, which has shifted our assessment of plan delivery down to meeting expectations. It is the importance of some of the delayed milestones – foundational IT reforms needed to deliver zero carbon operation by 2025 – which underpin our assessment. If the ESO can address these delays and give us confidence that the IT related deliverables can be set back on track, they could exceed expectations by the end of the scheme.

The ESO has avoided any major incidents that risked system security and progressed the majority of its other deliverables on time, with some elements even being slightly ahead of the ESO’s ambitious plan. However key IT delivery that is critical to the realisation of the plan benefits has been delayed (e.g., State of Energy signal, the implementation of forecasting products, creation of a data analytics platform and Development of inertia monitoring capabilities). Noting the continued delays and increased costs, we would like stronger reassurance that overall delivery of key IT reforms would still be met by the end of the BP1 period. There are also delays to the ESO’s Control Centre Training deliverables. Whilst we understand COVID-19 has impacted opportunities for in-person training, we believe the ESO could have sought ways to adapt to these circumstances and progressed these deliverables more than it has over the last six months. We note a few delays to the Restoration Delivery Plan (mainly outside of the ESO’s control) but the ESO is currently on track to deliver all key documentation within the set timeframes following the decisions from Ofgem and BEIS. The ESO is also on track to successfully deliver the key components for Transparency and Data showing strong performance on this activity so far.

Demonstration of plan benefits

For the first half of this two-year scheme, our assessment has mainly focussed on whether the ESO is on track to meet interim milestones for projects that will eventually deliver future benefits. There are significant benefits associated with the ESO’s IT reforms to deliver its control centre architecture and systems. Given that there are delays in some of these areas (noted above), we have concerns that the benefits will also be delayed. We

have similar concerns with the ESO’s control centre training and simulation deliverables. As the ESO is on track with most of its Restoration activities, Data and Transparency activities and Transform Network Control deliverables, we also expect it to achieve a substantial portion of these expected benefits. We would like further information on the changes made to the Balancing Programme and how this will lead to additional consumer benefit.

Overall, the ESO is broadly meeting our expectations on the demonstration of plan benefits. If the ESO can address key delays and give us confidence that the IT and training deliverables can be set back on track and deliver the benefits in the original timescales, it could exceed expectations by the end of the BP1 period.

Stakeholder feedback

We agree with the Panel’s conclusions on stakeholder feedback for Role 1 and consider that the ESO has met expectations on this criterion. The ESO had some positive and some negative feedback but the feedback from the ESO’s stakeholder survey was predominantly “meeting expectations” (84% of respondents selected this category). Compared to the six-month stage, fewer stakeholders considered the ESO to be exceeding expectations (at the mid-scheme stage 9% of stakeholders said the ESO was exceeding expectations compared to 19% at the six-month stage). On the positive side, fewer stakeholders thought the ESO was below expectations at the mid-scheme stage.

Performance metrics

The ESO’s performance on the Role 1 metrics was mixed. Wind forecasting performance exceeded expectations with continued good performance throughout the year (Metric 1C). Short notice changes to planned outages continued to meet expectations with fluctuating performance across the months (Metric 1D). Demand forecasting performance has improved and while there is still some monthly variance, it is now meeting expectations over the first 12 months (Metric 1B). Balancing costs (Metric 1A) were significantly higher than the benchmark for all months, however we note that wholesale costs and offer prices in the Balancing Mechanism (BM) are markedly higher this year when compared to the years that set the benchmark. We share the concern of the Panel that there is limited evidence to suggest the ESO has taken sufficient proactive actions to manage balancing costs. We are also concerned that inefficiencies in balancing products introduced so far during BP1 have caused costs to be higher in some balancing cost categories than they could otherwise have been. Overall, we consider the ESO’s performance against the metrics to be meeting expectations.

Value for money

We agree with the Panel that the ESO is below expectations on value for money. The ESO’s Role 1 costs are forecast to be 18% above the Role 1 benchmark. The ESO’s original forecast costs for four IT projects that constitute the Balancing Programme of £28.1m are now estimated to be £70.3m. Whilst the cost increases are marginally less than predicted at the six-month stage, the 18% increase in projected costs remains substantial. The ESO has not presented sufficient detail or evidence to convince us that the additional costs represent the same level of value for money set out in the Business Plan (i.e., through the higher costs delivering additional consumer benefit).

Going forward

Overall, we recognise the ESO’s ambitious plan for Role 1. The ESO should address the delays in priority IT delivery to ensure that it can deliver the benefits set out in its plan and show how it is exploring all available options to address increased balancing costs. We also expect to see significantly stronger evidence to demonstrate that the ESO is still delivering value for money in light of the projected overspend against the Role 1 cost benchmark.

Role 2: Market development and transactions*Our expectations*

This role requires the ESO to develop and procure balancing and ancillary system services in a way that promotes competition and drives efficiency in its operational activities. The ESO administers and is party to various codes, and it is able to propose changes to these codes, provide its expertise and analysis to aid industry discussions, and influence the final recommendations that go to the Authority. It also administers the charging arrangements on behalf of industry, it is the Electricity Market Reform (EMR) delivery body, and it has responsibilities related to implementing network codes and regulations. Please see the ESO Roles Guidance for our expectations for how the ESO should deliver these activities.

*Our mid-scheme assessment**Table 3: Role 2 assessment*

Ofgem assessment	Six-month review	Mid-scheme review
Role 2 score	3	[High] 3
Projected financial outcome	£0m	£1m

We consider that the ESO’s performance over the first year of BP1 is reflective of a score of high 3. The ESO could expect to receive a £1m incentive reward based on its current projected performance. This is a marginal improvement from the six-month review, although marginally lower than the Panel’s recommendation of a low 4. We have recognised the improved Panel assessment in our projected score and this is one of the reasons for an improved outlook compared to the six-month review. We have also marked the ESO up for its good progress in response to some past areas of feedback, including on the ESO’s Net Zero Market Reform programme and its work to consider future markets for stability and voltage. However, we are slightly less confident than the Panel around the ESO’s delivery of benefits. At the six-month stage, we saw a few early indications of delays and some issues with balancing product design. We still hold concerns on the quality of the ESO’s delivery of its suite of new products and, with less time left in the scheme, we now need greater reassurance that the ESO can realise the full benefits from its balancing market reforms.

Plan delivery, stakeholder feedback and demonstration of benefits

The ESO is close to being on track with plan delivery in Role 2, though with some delayed activities.¹² Stakeholder feedback was mixed but meeting expectations overall. The ESO’s demonstration of plan benefits has also been mixed, and has driven down the score from the Delivery Schedule grading. We have commented on each criterion in relation to the Role 2 activities below.

- *Reform of balancing and ancillary services (A4)*

In previous incentive years, the Panel, stakeholders and Ofgem have highlighted the importance of delivering tangible new markets and product developments. While the ESO has continued to progress against its ambitious delivery plan, including delivery of Dynamic Moderation and Dynamic Regulation, we consider there have been issues with the delivery of these reforms. We still have concerns around auction design for these products, which appears to be leading to less efficient procurement costs. We also note some concerns around stakeholder engagement, including issues over communication around grid supply point (GSP) / GSP group aggregation and with providers reporting that they did not have sufficient information or on-boarding time. Moreover, as a result of delays and uncertainty in the development of new balancing services, the ESO looks likely to extend the life of

¹² We note that the ESO had previously planned milestones relating to project TERRE and MARI and we acknowledge that these will no longer be possible due to the trading arrangements in place between the UK and EU. As a result, we will not be assessing the ESO’s progress against these deliverables. However, the ESO does have new obligations that stem from the requirements in the UK/EU Trade and Cooperation Agreement (“TCA”). We understand that it is making steady progress against these new requirements.

legacy products which could further delay the delivery of benefits. Generally, we consider we have had to provide more regulatory input than necessary to ensure that the ESO’s product design is compliant with legislation and in line with the ESO’s own broader ambitions (such as net zero system operation).

Some strong positive aspects have included the first launch of the Single Markets Platform, and a strong start toward providing enduring markets for ancillary services such as reactive power and stability. Outputs from two NIA projects^{13,14} indicate that the ESO is planning for these markets well, and we would encourage the ESO to continue with performance in this area as they move toward early delivery of these markets.

There have been some delayed activities in this area, notably on reserve reform. We recognise that in some cases (including reserve reform) this has been due to prioritisation assessments undertaken by the ESO. We are pleased to see the ESO trying to maximise the benefits realisable from the activities it delivers and encourage it to take a forward-thinking approach to this, while ensuring any delays do not prevent the overall Role 2 outcomes for BP1 from being achieved. We encourage the ESO to also continue to keep the wider industry up-to-date where there are delays, especially if specific dates for delivery have been publicly communicated. We further encourage the ESO to undertake prioritisation activity at early stages whenever possible, to assist wider industry to maximise their efficiency (eg by appropriately resourcing preparations against planned product roll-outs).

Overall, we currently consider that the ESO’s plan delivery for this activity is in line with our grading, but that the ESO is falling short of our expectations on the demonstration of benefits. Improvements in stakeholder satisfaction (particularly around quality and clarity of information provided) and demonstration of benefits (focus on the design and potential value added of new products), would enable the ESO to increase its score in this role.

- *EMR (A5)*¹⁵

The ESO has been regularly engaging with stakeholders on its new EMR portal and its engagement has been praised. However, the legacy EMR portal continues to fall short of

¹³ Further details on the ESO’s Stability Market Design are available here: <https://www.nationalgrideso.com/balancing-services/reactive-power-services/reactive-reform-market-design>.

¹⁴ Further details on the ESO’s Stability Market Design are available here: <https://www.nationalgrideso.com/electricity-transmission/future-energy/projects/stability-market-design>.

¹⁵ For a more detailed look into the ESO’s EMR Performance please see Annex 1. This Annex meets the requirements set out in Regulation 83(a)(ii) and (b) of the [Electricity Capacity Regulations 2014](#).

expectations of participants, with stakeholders expressing concerns about the portal being cumbersome and sometimes unusable. We consider EMR performance to be meeting expectations. This is based largely on the ESO being on track to deliver improved services to customers and implementing the new EMR Portal by April 2023. The ESO can move to exceeding expectations if the new Portal is delivered with strongly evidenced value for money, and if the ESO can provide a step change improvement in user experience and query management.

- *Industry codes and charging (A6)*

The deliverables associated with industry codes have mostly been completed in line with the ESO’s delivery schedule. It is also positive that stakeholder satisfaction for the ESO’s code work has seen a large improvement compared to previous years. The ESO’s charging deliverables are also on track with the ESO indicating improvements to the current charging and billing system completed, ensuring its reliability until the new system is in place.

One area of notable strong performance is the ESO’s Net Zero Market Reform programme. We believe this is a positive example of the ESO stepping out of its past comfort zone and using its unique expertise to influence the wider wholesale market arrangements in order to promote consumers’ interests. If the ESO can further progress this work, continuing its current trajectory, then this is an area that would exceed our expectations. In addition to shaping the long-term direction for energy markets, we also encourage the ESO to consider shorter to medium-term changes to existing codes that can promote better market outcomes and help deliver an efficient transition to Net Zero.

On balance we consider that the ESO is broadly on track with its delivery schedule aims and benefits for this activity. It is additionally starting to go beyond its original plan and exceed our expectations through its contribution to future wholesale market design.

Performance metrics

There is one metric for Role 2 (Metric 2A: Competitive Procurement). The ESO is meeting expectations with 51% of its services being procured through competitive means (calculated by expenditure). Despite dropping slightly from the six-month assessment, performance remains within ‘meeting expectations’ range, and we are not concerned about performance against this metric.

Value for money

The ESO reported an overspend of £1m for Role 2. We note that the ESO has ceased work (and expenditure) in relation to EU regulatory changes and some overspend has been

offset by these reduced costs, rather than the ESO necessarily delivering additional value for money for its activities. When accounting for this, overspend is approximately £7.4m. While this is not a large percentage deviation (~5%) from the benchmark costs, we expect ESO to keep an eye on costs here. In particular, spend on the EMR platform appears very high (>200% over-benchmark) – this is clearly a high impact deliverable for the ESO, but costs also need to be kept in check, with any increases well justified.

Overall, we consider that the ESO is meeting expectations for this criterion. If the ESO can improve the quality of balancing reform outputs and demonstrate the delivery of additional beneficial outputs from areas of increased expenditure, it could outperform this criterion.

Going forward

In addition to addressing the points raised in our assessment above, we re-encourage the ESO to take on board the feedback we provided in our Delivery Schedule grading for Role 2. To ensure that it exceeds our expectations, the ESO could:

- Focus on ensuring that product delivery will maximise benefits in the near and long-term, including by reassessing work and timelines if necessary to deliver best quality whilst also creating certainty for market participants.
- Build on initial good work and demonstrate further progress in implementing enduring markets for solutions to stability, voltage and thermal constraints.
- Develop plans for coordinated, competitive markets that cover all system services and align with distribution-level flexibility markets. It could also work with DNOs to ensure that service providers have a single, consistent set of procurement requirements when looking to provide services to the ESO or DNOs.
- Continue positive work on the Net Zero Market Reform programme to influence wider market arrangements in consumers’ interests. Consider and show progress in other areas where the ESO can proactively shape wider market arrangements and industry frameworks, particularly when it comes to the development of distribution-level operational frameworks.
- The ESO could also go further than just ensuring compliance with regulations and obligations under frameworks such as the Trade and Cooperation Agreement. It could bring together GB stakeholders to develop and implement strategic plans for ensuring efficient trading relationships with connected TSOs, including maintaining a focus on communication to interested parties.

Role 3: System insight, planning and network development

Our expectations

The ESO is responsible for publishing key insight documents on credible long-term pathways for the energy sector and on long-term electricity system needs. The ESO is also responsible for the managing the process to connect to the electricity transmission system and for managing impacts on the transmission system from connections of new generation offshore and at distribution level. It also currently produces the annual Network Options Assessment (NOA), wider NOA methodologies and looks into long-term operability solutions via its Pathfinder projects. The ESO coordinates offshore network development and works with DNOs to ensure that its network development activities maximise whole system benefits across network boundaries. Please see the ESO Roles Guidance for our expectations on how the ESO should deliver these activities.

The scope and scale of activities related to system planning and coordination have grown over the BP1 period, and the ESO is working with Ofgem and BEIS to introduce more strategic network planning processes. This includes the ESO making further progress introducing competition in networks, supporting the Offshore Transmission Network Review (OTNR) (including taking on responsibility for a Holistic Network Design), as well working with Ofgem to introduce a future centralised strategic network plan (CSNP) under the Electricity Transmission Network Planning Review (ETNPR).

Our mid-scheme assessment

Table 4: Role 3 assessment

Ofgem assessment	Six-month review	Mid-scheme review
Role 3 score	[low] 4	[low] 4
Projected financial outcome	£2m	£3m

Overall, we consider the ESO to be on track for a low 4, showing a slight improvement since our six-month assessment. We consider there have been improvements in performance in some key areas, such as on Pathfinder delivery, and the ESO also increased its contribution to projects which are shaping the future network planning process. However, there have also been several issues, including those raised by the Panel and stakeholders, which mean our projected score is not as high as it could be. We believe the ESO could still do more to fully exceed our expectations, including by using its unique position in the sector to set out a vision for a coordinated set of future network planning processes that deliver the optimal overall solutions to network needs.

We consider the ESO is on track for a higher score than the Panel’s recommendation of a mid-3. We agree with many of the key messages from the Panel, including the request for the ESO to show more industry leadership and stronger coordination on whole system network development. However, we have also recognised the complex policy environment the ESO is operating in and its shared responsibility with Ofgem, BEIS and other stakeholders (such as network operators) to drive forward the necessary changes.

We have reflected on the Panel and stakeholder’s concerns around the process to develop a Holistic Network Design. While we were mindful of the issues experienced, and we encourage the ESO to continue to learn lessons from this feedback, we have also accounted for the tight timelines given to the ESO and the fact this was a novel and challenging piece of work. We note that stakeholder feedback on the ESO’s OTNR has already improved and there have since been some major notable successful milestones; however, these latest developments occurred outside of the 12-month assessment period so will be considered in a future assessment.

We agree with Panel’s concerns around the connections process and we feel this is an area where the ESO could improve by the end of BP1. We consider the ESO could have been more proactive at thinking about necessary changes before the issues started to materialise. However, on balance, we feel these issues are offset by improvements elsewhere in response to our six-month feedback, such as the ESO learning lessons from pathfinders to develop enduring arrangements, and the ESO’s greater contribution to strategic network planning projects.

The ESO could expect to receive a £3m incentive reward based on its current projected performance.

Plan delivery

The ESO appears broadly on track to deliver the key components of its business plan. The ESO has therefore exceeded our expectations on plan delivery considering the original ambition of the plan. However, there are some delays to planned improvements to network assessment tools and processes. Some of these delays are due to the re-evaluation of how the ESO can generate best value for consumers, and while this is laudable, we also want the ESO to be mindful of significant delays which could mean plan benefits are not delivered. As noted at the six-month stage, we are monitoring this area. We also reiterate our comments that the ESO must ensure it is suitably resourced to deliver additional work under the OTNR and ETNPR without knock-on impact on other key areas covered under Role 3.

Demonstration of plan benefits

As the ESO is on track with most of its deliverables, we also expect it to achieve a substantial portion of its expected benefits. The pathfinders are an area where we expect the ESO to deliver significant additional value for consumers, therefore delivering those benefits on time and in full will be key. We have seen the ESO improve coordination and processes across the range of pathfinder activities and we hope this continues, allowing increased competition and innovation to deliver continued benefits in terms of carbon reduction and cost savings. The ESO has also increased its contribution to wider network planning projects such as the OTNR and ETNPR, which should help support the delivery of additional benefits on top of the original RIIO-2 business plan.

We noted at the six-month stage that we would like to see more tangible examples of specific actions on Regional Development Plans (RDPs). We feel the ESO needs to do a greater job of explaining the benefits of this work along with other areas of their 5 Point Plan for Constraints, especially in the context of increasing balancing costs. This is an area where there is clear consumer benefit available, and we would like to see the ESO really pushing forward to deliver on these items. We also share the Panel’s view that the ESO could show more leadership and coordination on the connections process, as failure to do this could lead to developer uncertainty and increased costs for achieving Net Zero. Whilst we recognise the challenges associated with increasing volumes of connections, the ESO needs to ensure it is set up internally to manage this increase. This includes making sure its processes can support the delivery of connection offers on time and to a good standard. Whilst we also recognise the ESO is reliant on other network operators to meet stakeholder needs, we believe the ESO could have demonstrated more strategic leadership and worked with the network owners to address existing issues before serious issues materialised. This includes suggesting and progressing necessary changes in the industry code arrangements and thinking more proactively about the interactions with other network planning deliverables (such the OTNR).

On balance the ESO is currently slightly exceeding our expectations on demonstration of plan benefits. To exceed our expectations more strongly, we would like to see improvements on the connections process and the ESO more actively setting out its view on how the future end-to-end network planning arrangements can deliver the best overall solutions to the energy system’s needs.

Stakeholder feedback

The majority of stakeholders view the ESO as ‘meeting expectations’ for Role 3. We note that Role 3 continues to have the greatest number of stakeholders deeming that the ESO is

below expectations (20%), though this number has decreased from the six-month stage (24%). However, this is offset by a reduction in stakeholders assessing the ESO as ‘exceeding expectations’, which dropped from 18% at the six-month stage to 8%. A positive point is that feedback on pathfinders appears to have improved since the mid-scheme point. The main negative feedback focussed on the ESO being inefficient and not providing visibility of issues with regards to the connections offer process, and a lack of leadership in some areas of system planning. We feel that some of this feedback is delivered to the ESO as the ‘face’ of certain activities, where not all fault lies at its door. However, we agree with the Panel and stakeholder feedback that ESO should show greater leadership in some areas, including ensuring that it communicates issues earlier and that it has sufficient resource and internal skills to conduct these activities.

The ESO is generally meeting our expectations for stakeholder feedback but needs to work hard if it is to improve this to an exceeding score. The ESO made good ground in addressing some areas of stakeholder concern, for example on pathfinder activities, with better engagement and processes, and a better picture of the future plans for procurement of these ancillary services. ESO will need to continue to do this in other areas over the remainder of the scheme to avoid slipping below expectations.

Value for money

The ESO is currently exceeding our expectations on value for money. This is because its spending is broadly in line with the Role 3 cost benchmark, it is on track for most of its deliverables and it is also delivering additional outputs on strategic network planning and Early Competition.¹⁶

Going forward

We recognise that network planning is a fast-evolving area and there have been several developments since the RIIO-2 Final Determinations. This includes an Ofgem decision on early competition in networks ¹⁷, the ESO developing key outputs for the OTNR (including a Holistic Network Design), as well as Ofgem publishing a minded-to decision on the ETNPR (which includes the ESO working on a transitional CSNP).¹⁸ The ESO has a key role in these

¹⁶ We note that the ESO reported some overspend in this role, but offset that with ‘savings’ on expenditure which is pushed into the BP2 period. We do not agree with this accounting method, but nonetheless have no real concerns with expenditure trajectory in Role 3 at this point.

¹⁷ [Decision on the development of early competition in onshore electricity transmission networks \(ofgem.gov.uk\)](https://www.ofgem.gov.uk/publications/consultation-initial-findings-our-electricity-transmission-network-planning-review)

¹⁸ Electricity Transmission Network Planning Review: <https://www.ofgem.gov.uk/publications/consultation-initial-findings-our-electricity-transmission-network-planning-review>

projects and is already making strong contributions. We believe these projects present a good opportunity for the ESO to further demonstrate the expectations we have set in our ESO Roles Guidance. To strongly exceed expectations, we would like to see the ESO thinking more holistically, proactively drawing links between the different workstreams and presenting a consolidated view on the best overall future arrangements for network planning. The ESO should set out a clear future vision and strategy for an optimal network assessment process (or suite of integrated and harmonised processes) capable of addressing zero-carbon system operability challenges. This would include the ESO more clearly explaining how emerging strategic network assessment processes (such as the CSNP), network competition, and future enduring markets, fit together and will facilitate a level playing field for all types of solutions to compete to solve all types of network needs.

In addition, we encourage the ESO to respond to the other areas of feedback we provided in our Delivery Schedule grading for Role 3 and to address the issues raised by the Panel and stakeholders. For the ESO to score more highly by the end of the scheme, we would expect to see:

- More information on how the ESO will deliver step change improvement to the existing connections process. This includes getting on top of current issues to improve the timeliness and accuracy of connection offers and making strong progress with a substantial review of the connection arrangements, so these arrangements can deliver an efficient transition to a zero-carbon network.
- Demonstrable outputs under the ESO’s Constraints 5 Point Plan with a clearer identification of the benefits delivered from this work.
- The ESO building on the initial steps it has taken over the last six months, to learn from the Pathfinders and implement a detailed plan for regular, dependable markets for solutions to all system issues (fully considering the interactions with early network competition).
- More evidence of the ESO driving changes as a result of its deeper whole system insights, including more specific recommendations on how existing frameworks need to be changed and aligned to deliver whole system outcomes.

Annex 1: Mid-scheme review of the ESO’s EMR Delivery Body Performance in relation to the Capacity Market

Regulation 83(a)(ii) of The Electricity Capacity Regulations 2014 requires Ofgem to provide the Secretary of State with an annual report on the Electricity Market Reform (EMR) Delivery Body’s (DB) (National Grid Electricity System Operator Limited, NGESO) performance of its functions in relation to the Capacity Market (CM). During the RIIO-1 period we published dedicated annual reports covering the DB’s performance against the EMR incentives. However, in RIIO-2, EMR DB performance is now included in the ESO’s wider incentive scheme within Role 2. Therefore this section of the report covers the DB’s performance during the period from 1 April 2021 to 31 March 2022, which includes the Capacity Auctions held in February 2022. We have used the guidance set out in the ESORI Guidance Document to assess the performance of the EMR DB.

Overview

Considering all criteria we feel that EMR performance is meeting expectations. This is based largely on the ESO being on track to deliver improved services to customers and implementing the new EMR Portal by April 2023. The ESO can exceed expectations if the new Portal is delivered with strongly evidenced value for money, and if the ESO can provide a step change improvement in user experience and query management. However, if the new EMR portal is delayed beyond April 2023, the ESO is likely to be below expectations due to this being a key deliverable for the ESO and stakeholders.

Plan Delivery

The ESO is on track with plan delivery for all EMR related deliverables. It has responded to previous stakeholder feedback and has published a simplified prequalification guidance document, podcasts and YouTube videos to support applicants through prequalification. The ESO has also improved its score in the annual Customer Satisfaction Survey for resolving queries and engagement with customers. Both the T-1 and T-4 auctions ran smoothly with over 1,200 applicants.

In the six-month review we stated that the ESO needed to address issues with the existing EMR portal and deliver the new EMR portal by the end of BP1. It is positive to see that the ESO has taken this on board with the first release of the new EMR portal going live in March 2022. We understand that further rollout of the new EMR portal was being planned on a ‘just in time’ methodology for the remaining releases. However, it has recently been brought to our attention that the ESO will no longer be delivering this ‘just in time’ methodology and will instead use the existing EMR portal for the 2022/23 Auctions. This is disappointing as stakeholders have consistently expressed their frustrations with the

existing portal labelling it “cumbersome and unusable”. The ESO have stated that it is still aiming for the new EMR portal to go-live by April 2023, and it is important the ESO achieves this to meet our expectations.

Stakeholder Evidence

The ESO received positive feedback on EMR, highlighting that it has continued efforts to improve user experience of the EMR Portal and that it has engaged well with market participants with queries and rule interpretations. The ESO has also improved its customer satisfaction score from 6.35 in 2020/21 to 6.83 in 2021/22. This included increases around resolving queries and engagement. Stakeholders were also pleased that elements of the new EMR portal had been launched due to the many issues that were recognised in the existing EMR portal.

Stakeholders reiterated that the existing EMR portal still places a significant burden on industry during prequalification. One stakeholder stated that the new EMR portal has similar issues that were raised with the existing portal.

Overall, the ESO is meeting expectations for stakeholder feedback. The ESO must deliver a new EMR portal in conjunction with stakeholder’s views to improve the user experience and remove the burden stakeholders face when applying for prequalification.

Demonstration of Plan Benefits

The ESO stated in its report that it will not see any benefits relating to any of the deliverables in BP1 for the 2021/22 financial year. The ESO highlighted that it has met or is on track to meet all its deliverables in BP1. Whilst stating that the delivery of the new EMR portal and the publication of the Electricity Capacity Report will start to show benefits in the 2022/23 financial year.

It is promising that the ESO is on track to meet these deliverables. However, we are also aware that the CM and Contracts for Difference will no longer be integrated into the ESO’s Single Market Platform (D4.4). Therefore, we are concerned that the benefits related to reducing barriers and cost of participation may not be fully realised. The ESO needs to fully explain how integrating EMR with the Digital Engagement Platform (DEP) will provide benefits to consumers for us to score the ESO as exceeding expectations in this area.

RRE 2C EMR Decision Quality

This is to be confirmed later in the BP1 period as Ofgem has not yet provided the data for this RRE. However, qualitatively, the ESO met our expectations for the quality of its recent CM prequalification decisions.

RRE 2D EMR Demand Forecasting

The ESO did not meet expectations for the T-1 forecast for the 2020/21 delivery year and met expectations for the T-4 forecast for the 2020/21 delivery year. The ESO highlighted that COVID-19 demand patterns and the interaction between ‘demand turn down and DSR’ as a few of the reasons for the difficulty in forecasting. It is essential that the ESO improve their peak demand forecasting as this is important when determining the parameters of auctions and therefore the ESO is below expectations in this area.

Value for Money

The cost benchmark for spend on EMR Portal improvements for BP1 (2021/22 and 2022/23) was £3.5m. The ESO is now forecasting this at £11.0m which is a 214% increase.

The ESO’s reasoning for this variance is that the development of the new EMR portal was moved from RIIO-1 into the RIIO-2 period. Therefore, the development and investment were allowed in RIIO-1 and not included in the RIIO-2 benchmark.

The ESO highlighted that this was not delivered in RIIO-1 because in 2019/20 and 2020/21 there were a large volume of mandatory changes that had to be made to the existing EMR portal to facilitate the CM restart following renewed state aid approval. Whilst it also highlights that it had to support customers through COVID-19 and implement other regulatory changes from BEIS and Ofgem.

In 2019 the ESO received an initial additional allowance of £2m to develop a new EMR Portal by April 2021. At the time, the ESO estimated that the new EMR Portal would cost between £2m and £5m. The ESO highlighted in its RIIO-1 Close Out Submission that it did not incur any CAPEX spend on the new EMR Portal during RIIO-1 due to the reasons set out in the above paragraph. The ESO has now stated that it expects to spend £7.1m on the new EMR portal (and £3.9m on the existing EMR portal) during BP1. This is a considerable increase from the £2m-£5m it estimated in 2019.

For us to be confident that this increase in spend provides value for money, the ESO must give more information and justification. We are also aware that industry is keen to have a new EMR Portal that will greatly improve user experience. Therefore, the ESO must keep Ofgem and Stakeholders up to date on their progress with the new EMR Portal and explain fully the variance in cost from the 2019 Reopener and BP1 forecast.

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