

---

## End of BP1 decision on ESO Performance

---

Publication date:	31 August 2023
-------------------	----------------

Contact:	James Hill, Matthew Fovargue, Adam Gilham
----------	---

Team:	ESO Regulation
-------	----------------

Telephone:	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 business planning and incentives scheme periods, the first of which ran from April 2021 to March 2023.

As part of the ESO's incentive framework, the ESO Performance Panel and Ofgem assess the ESO's performance at the end of each two-year cycle. This report details Ofgem's end-scheme assessment of the ESO's performance during the first Business Plan (BP1) period, 2021-2023. The decision outlined here comes with a financial reward of **£1.8m**.

© Crown copyright 2023

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.

This publication is available at [www.ofgem.gov.uk](http://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](mailto:psi@nationalarchives.gsi.gov.uk)

## Contents

<b>End of BP1 decision on ESO Performance.....</b>	<b>1</b>
<b>Executive summary.....</b>	<b>5</b>
<b>Our Decision .....</b>	<b>6</b>
<b>RIIO-2 ESO incentives framework .....</b>	<b>7</b>
Background .....	7
Approach.....	7
The evaluation criteria .....	8
Scoring .....	9
Financial outcome .....	9
<b>Role 1: Control Centre operations .....</b>	<b>10</b>
Role 1 expectations.....	10
View of Role 1 plan at BP1 Final Determinations .....	10
Our six-month and mid-scheme assessments of ESO performance under Role 1.....	11
Rationale for Role 1 evaluation score .....	11
Role 1 performance compared to expectations in the Roles Guidance ....	11
Assessment of Role 1 against Plan delivery .....	12
Assessment of Role 1 against Metric performance .....	14
Assessment of Role 1 against Stakeholder evidence .....	15
Assessment of Role 1 against Demonstration of plan benefits .....	15
Assessment of Role 1 against Value for money .....	16
BP2 Considerations .....	16
<b>Role 2: Market development and transactions .....</b>	<b>18</b>
Role 2 expectations.....	18
View of Role 2 Plan at BP1 Final Determinations .....	18
Our six-month and mid-scheme assessments of ESO performance under Role 2.....	19
Rationale For Role 2 evaluation score .....	19
Role 2 performance compared to expectations in the Roles Guidance ....	19
Assessment of Role 2 against Plan delivery .....	21
Assessment of Role 2 against Metric performance .....	23
Assessment of Role 2 against Stakeholder evidence .....	23
Assessment of Role 2 against Demonstration of plan benefits .....	24
Assessment of Role 2 against Value for money .....	25
BP2 Considerations .....	26
<b>Role 3: System insight, planning and network development .....</b>	<b>27</b>
Role 3 expectations.....	27
View of Role 3 Plan at BP1 Final Determinations .....	27

Our six-month and mid-scheme assessments of ESO performance under Role 3.....	28
Rationale For Role 3 evaluation score.....	28
Role 3 performance compared to expectations in the Roles Guidance ....	28
Assessment of Role 3 against Plan delivery .....	29
Assessment of Role 3 against Stakeholder evidence .....	30
Assessment of Role 3 against Demonstration of plan benefits .....	31
Assessment of Role 3 against Value for money .....	33
BP2 Considerations .....	34
<b>Appendices .....</b>	<b>35</b>
Appendix 1: Mid-scheme review of the ESO's EMR Delivery Body Performance in relation to the Capacity Market.....	36
Appendix 2: Proposed Direction on the ESO's financial incentive for 2021-2023 .....	40

## **Executive summary**

The BP1 period has been a challenging two years for system operation. External factors during the latter half of the BP1 period, such as the war in Ukraine and the subsequent European gas crisis, presented the ESO with new and unexpected challenges. In this context, we have recognised and appreciated the high levels of professionalism and agility shown by ESO staff to ensure high levels of system security and resilience alongside continued progress towards a net zero energy system.

Both Ofgem<sup>1</sup> and industry stakeholders have strong expectations for the performance and levels of service offered by the ESO. Within the BP1 period there have been areas of excellent performance that have clearly exceeded our expectations. Similarly, there have been areas where performance has not met the standards we expect. In our RIIO-2 Final Determinations<sup>2</sup> we assessed the ESO's 2021-23 plan as ambitious for all roles and noted that successful delivery of an ambitious plan should translate into reward for the ESO. However, several important deliverables that underpinned the ambition of the ESO's original plan<sup>3</sup> have not been delivered and these have weakened the case for reward.

At an aggregate level, across the full spectrum of the ESO's activities, the ESO has largely met our baseline performance expectations in delivering value for consumers. This level of overall performance has resulted in a **financial reward of £1.8m**.

We recognise the challenge the ESO has in deciding where and when to prioritise its resources and focus. The pass-through funding approach of the ESO's RIIO-2 price control, supported by incentives to deliver value for money, provided scope for the ESO to be agile and adapt quickly to changing circumstances and the evolving pathway to a net zero energy system. Implementation of the Demand Flexibility Service (DFS) and other winter contingency measures were a positive example of this. However, there were notable examples during the BP1 period of where the ESO had been too reactive. For

---

<sup>1</sup> The terms "we", "us", "our", "Ofgem" and "the Authority" are used interchangeably in this document and refers to the Gas and Electricity Markets Authority. Ofgem is the office of the Authority.

<sup>2</sup> RIIO-2 Final Determinations:

[https://www.ofgem.gov.uk/sites/default/files/docs/2021/02/final\\_determinations\\_-\\_eso\\_annex\\_revised.pdf](https://www.ofgem.gov.uk/sites/default/files/docs/2021/02/final_determinations_-_eso_annex_revised.pdf)

<sup>3</sup> ESO RIIO-2 Business Plan 2019:

<https://www.nationalgrideso.com/document/158051/download>

---

example, the ESO's work to ensure a fit-for-purpose connections process was developed and taken forward once the problem had magnified and only after significant industry and media attention had highlighted major concerns.

## Our Decision

We have reviewed the ESO's performance over the 2-year period of BP1 using the methodology and evaluation criteria described in this document. Overall, we consider that the ESO has on balance met our expectations of a competent and effective ESO (with some variation across and within the roles), particularly in the context of a challenging period. We propose to direct that the ESO will receive a financial incentive of £1.8 million for the period 2021-2023. Our proposed Direction can be found in Appendix 2 of this document. Representations on the proposed Direction may be made until 29 September 2023 to the email address at the top of this document.

Table 1: Breakdown of final scores for BP1

Role	Overall score	Criteria score against expectations	
1	High 3 (£1m)	Plan delivery	(low) Exceeds
		Metric performance	Below
		Stakeholder evidence	Meets
		Demonstration of plan benefits	Meets
		Value for money	Below
2	High 2 (-£1.2m)	Plan delivery	Below
		Metric performance	Below
		Stakeholder evidence	(low) Meets
		Demonstration of plan benefits	Below
		Value for money	(low) Meets
3	Low 4 (£2m)	Plan delivery	Exceeds
		Stakeholder evidence	(low) Meets
		Demonstration of plan benefits	Meets
		Value for money	(low) Exceeds

## **RIIO-2 ESO incentives framework**

### **Background**

In April 2021, we introduced the RIIO-2 price control for the ESO (covering the period 2021-26). 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<sup>4</sup> that sets out our expectations for the ESO's activities. 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.

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 end-scheme assessment covers the first two years of the RIIO-2 price control (April 2021 - April 2023), known as Business Plan 1 (BP1). We followed the process described in Chapter 3 of the Electricity System Operator Reporting and Incentive Arrangements (ESORI) guidance<sup>5</sup> to assess the ESO's performance in relation to each role, considering

---

<sup>4</sup> ESO Roles Guidance BP1: [https://www.ofgem.gov.uk/sites/default/files/docs/2021/03/eso\\_roles\\_guidance\\_2021-23\\_1.pdf](https://www.ofgem.gov.uk/sites/default/files/docs/2021/03/eso_roles_guidance_2021-23_1.pdf)

<sup>5</sup> ESORI Guidance BP1: <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>

our feedback in the RII0-2 Final Determination (delivery schedule grading) and our feedback at the six-month<sup>6</sup> and mid-scheme points<sup>7</sup>.

We assessed the evidence provided by the Panel, stakeholders, the ESO<sup>8</sup> and collected by us throughout the first two years and used the prescribed evaluation criteria to provide scores for each of the ESO's three Roles. We have translated this score into a financial incentive outcome, following the process described in Chapter 4 of the ESORI guidance document.

## **The evaluation criteria**

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

- Plan delivery
- Metric performance
- Stakeholder evidence
- Demonstration of plan benefits
- Value for money

---

<sup>6</sup> ESO Six-Month Review 2021-23: <https://www.ofgem.gov.uk/publications/electricity-system-operators-six-month-review-2021-23>

<sup>7</sup> ESO Mid-Scheme Review 2021-23: <https://www.ofgem.gov.uk/publications/electricity-system-operators-mid-scheme-review-2021-23>

<sup>8</sup> ESO BP1 Evidence Chapters:  
<https://www.nationalgrideso.com/document/280071/download>

---



## 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, overall, 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.

## 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 across BP1. By default, they are split equally among each of the three Roles, with a maximum of +£10m and -£4m for each Role.

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

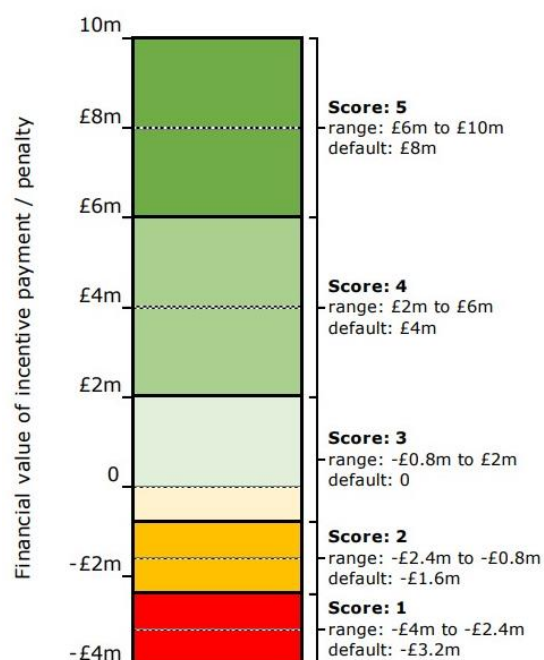


Figure 1: Financial range for Role scores

## **Role 1: Control Centre operations**

### **Section summary**

For Role 1 we considered that, on balance, the ESO performed in line with our expectations of an efficient system operator. A majority of the original plan was delivered, some areas of work exceeded our expectations, and notable steps were taken to improve transparency and stakeholder engagement. However, balancing costs were high, a number of important IT investments were delayed or under-delivered, and value for money was below expectations.

**We assessed the overall Role 1 score as a high 3 and determined a reward of £1m.** A score of 3 has an incentive range of -£0.8m to £2m and a default incentive value of £0. Overall, the ESO exceeded our expectations under Plan delivery, met our expectations for Stakeholder evidence and Demonstration of plan benefits, and did not meet expectations on Value for money and Metric performance. We believe that the ESO's delivery against an ambitious BP1 plan justifies an increase above the default incentive value.

### **Role 1 expectations**

#### **View of Role 1 plan at BP1 Final Determinations**

In our Final Determinations on the ESO's business plan for BP1, we considered that the ESO's proposed plan of activities for the 5-year period was highly ambitious, scoring it a 5. Should the ESO's proposed new processes and systems provide it with the consistent ability to efficiently operate (and restore) a carbon free system in 2025, then this would strongly exceed our expectations. Equally, we highlighted that the ESO's aims to deliver fully automated and open data through its data platform, and to ensure the seamless exchange of operational and planning information between the transmission and distribution system, were suitably ambitious.

For the two-year delivery schedule<sup>9</sup> of BP1 we graded the Role 1 plan ambition as a 5 indicating that the Delivery Schedule exceeded most of our expectations. To achieve this score, the ESO needed to make demonstrable progress against their RIIO-2 aims.

---

<sup>9</sup> ESO BP1 Delivery Schedule:

<https://www.nationalgrideso.com/document/189126/download>

Additionally, we indicated that the ESO could ensure that the data platform is designed in a way that interoperates with the energy data ecosystem and beyond and take steps to demonstrate that it is treating its data processing methods and algorithms as presumed open. Furthermore, the ESO should ensure that it delivers upon the commitments outlined in its Energy Forecasting Roadmap, in addition to the commitments outlined in its updated Delivery Schedule.

## **Our six-month and mid-scheme assessments of ESO performance under Role 1**

At both the 6-month and mid-scheme reviews of ESO performance we shared our view that the evidence suggested that the ESO was some way off track to meet the original Role 1 ambitions.

These views were informed by two main drivers. The first driver was continued delays in the delivery of important foundational deliverables, particularly on some key IT projects. The second driver was the cost increases against the Value for money cost benchmark agreed at the start of the scheme, with insufficient evidence to suggest that the additional cost was delivering additional value beyond what had been presented in the BP1 Business Plan.

Table 2: Previous Role 1 BP1 Performance Assessments

	<b>Six-month Assessment</b>	<b>Mid-scheme Assessment</b>
Indicative Score	3	Low 3
Indicative Financial Reward	£0m	-£0.8m

## **Rationale for Role 1 evaluation score**

### **Role 1 performance compared to expectations in the Roles Guidance**

In Role 1 the ESO is responsible for balancing the National Electricity Transmission System (NETS) in a safe, reliable, and efficient way. In the ESO Roles Guidance this is broken down into three activities: System Operation (activity 1a); System Restoration (activity 1b); and Transparency, Data and Forecasting (activity 1c).

#### **Activity 1a: System operation**

We consider that the ESO is on the border of meeting and exceeding expectations for this activity. Although balancing costs were above the Metric 1A benchmark, system balancing was performed in line with our meets expectations guidance. 'Maintaining

security of supply’ met some elements of exceeding expectations through the development of the Demand Flexibility Service (DFS). The proactive market surveillance and engagement with Ofgem in the second year of BP1 drove performance up for ‘Oversight of balancing services markets’. ‘Maintaining effective and reliable IT systems’ failed to meet some of the meets expectations criteria while exceeding some expectations criteria through proactive engagement with industry on the Balancing Programme. The ESO’s performance in maintaining their existing IT for continued use, did not appear to suffer the same challenges as the development of their new investment lines. The ESO met expectations ‘Making trade-offs across time horizons’, coordinating with other network operators and minimising outage changes caused by error. ‘Ensuring future operability’ exceeded our expectations.

### **Activity 1b: System restoration**

The ESO has demonstrated that it broadly met expectations with some elements of exceeds expectations for the Restoration outputs of the Roles Guidance. Both ‘Restoration plans and tools’ and ‘Restoration policy’ met expectations. The success of the Distributed Restart project and the continuing progress of the Restoration Tenders has led to ‘Restoration services procurement’ exceeding expectations.

### **Activity 1c: Transparency, data, and forecasting**

This activity met our expectations when considered holistically. Provision of market information slightly exceeded expectations. The Operational Transparency Forum was an example of proactively sharing information with market participants to support understanding of ESO decision-making, although we note stakeholder views that there is room for further improvement in this area. The ESO met expectations for ‘Driving the energy sector digitalisation’ and ‘Using and exchanging data’. The ESO failed to meet expectations in ‘Forecasting’ with demand forecasting being below expectations and wind forecasting meeting expectations but on a downward trajectory.

### **Assessment of Role 1 against Plan delivery**

The ESO’s original plan scored a 5 for ambition. Both the Panel and our own assessments measured performance against this original ambition. The Panel concluded that the ESO had failed to deliver the full ambition of their plan but had delivered what would be expected of an efficient system operator. Our own assessment of this criterion recognises the high level of ambition in the ESO’s Role 1 plan and, although this plan

was not fully delivered, we concluded that the ESO had delivered sufficiently to exceed our expectations.

We recognised that the ESO successfully operated the system, avoiding any major incidents that risked system security during a period of historically high prices, and prepared for a winter with unprecedented risks. However, within the period we shared concerns with the ESO regarding the operational efficiency of its use of a fixed value Net Transfer Capacity restriction being placed on the North-Sea Link (NSL) interconnector for such a prolonged period. The subsequent reduction in the capacity of NSL reduced the benefits it could bring during a winter of tight system margins.

The development of both the winter contingency contracts and DFS are considered under Role 2, but the use of these services is considered under Role 1. Whilst the ESO avoided any major security of supply issues we note that on all occasions when the winter contingency contracted plant was warmed or utilised, there was alternative headroom available by the time it was needed. This, along with the below expectations performance of the forecasting metrics in 2022-2023, highlight a need for improvement in forecasting to ensure more efficient system operation.

The ESO delivered 90% of the milestones in its delivery schedule, however we recognise the Panel had issues rationalising the ESO's delivery of open-ended milestones marked as complete and that a notable proportion of these deliverables were delivered later than originally planned. The ESO also undertook a new Market Monitoring role that was not part of its original plan.

The ESO's delivery of its restoration activities has largely exceeded expectations with the consistent work to deliver the Electricity Restoration Standard, the successful launch of the Restoration Tenders, the successful testing synchronisation of two power islands and the success of the initial deliverables of the Distributed Restart project with an additional trial successfully delivered in BP2.

The domestic flexibility trials paved the way for DFS and the continued delivery of the Frequency Risk and Control Policy (FRCR), facilitated by the Accelerated Loss of Mains Change Programme (ALoMCP) and the delivery of Dynamic Containment and Stability Pathfinder (which are considered under Roles 2 and 3 respectively), produced significant savings for consumers.

The successes noted above are balanced against the failure of the ESO to meet its original plans to deliver a number of key IT investments required to deliver zero carbon operability by 2025. This failure to deliver against the original business plan is

exemplified by the delays to the completion of the following deliverables: upgrades to the legacy balancing and situational awareness tools, detailed forecasts and analysis, inertia monitoring capabilities, enhanced balancing tool, real-time situational awareness tool and the Restoration decision making support tool. While we recognise the rationale for these delays given the development challenges, this represents a significant step-down in overall plan ambition.

### **Assessment of Role 1 against Metric performance**

We agree with the Panel that the ESO's performance against the Role 1 metrics was below expectations.

Metric 1A Balancing costs performance was significantly worse than the benchmark with total spend being £6,966m over the 2 years of BP1 against a cost benchmark of £3,020m. We recognise that since the benchmark was set, there has been a significant shift in the wholesale electricity markets, which in turn impacted the prices in the Balancing Mechanism (BM). This change in prices was not captured by the metric and we therefore recognise that a straight comparison between cost and benchmark is not appropriate. However, we share the view of the Panel that balancing costs were still higher than would reasonably be expected. Furthermore, we consider that the ESO began taking strategic steps to address the growing balancing costs too late. We do however note that the ESO has, since the mid-scheme stage, begun to develop a strategic plan to address growing balancing costs and we are encouraged that this should lead to reduced costs in the BP2 period.

Metric 1B, Demand forecasting, ended up below expectations overall. The ESO performance in 2021-2022 met expectations whilst the performance in 2022-2023 fell notably below expectations. The Panel noted that poor demand forecasting was a factor in the growth in balancing costs. The same trend can be seen with metric 1C, wind forecasting. During 2021-2022, wind forecasting accuracy exceeded expectations, but performance fell markedly during 2022-2023 to below expectations. Overall, the ESO met expectations for metric 1C, but we are concerned with the downward trajectory.

Metric 1D, short notice changes to planned outages, had mixed performance month to month but in both years the ESO met expectations. However, again we notice the fall in performance year on year from 2021-2022 to 2022-2023.

### **Assessment of Role 1 against Stakeholder evidence**

We agreed with the Panel that the ESO met expectations over the two-year period and note that the final 6-month survey showed a marked improvement in performance, which we expect to continue in BP2.

The feedback we received highlighted that stakeholders were supportive of the OTF and believed the forum added significant value. We do however note that the most recent feedback showed signs that stakeholders felt the OTF could deliver greater value and the ESO should use this feedback as an opportunity to continue to improve the OTF as a tool to provide operational transparency. Stakeholders noted concerns with skip-rates, transparency of dispatch and the ESO's operational decision making. The concerns highlighted that market participants expect the ESO to take further steps to address the causes of actions being taken out of merit order. This was believed to be impacting overall balancing costs as well as harming industry investment signals that could lead to a faster net zero energy system transition.

### **Assessment of Role 1 against Demonstration of plan benefits**

The Panel assessed the ESO's performance against this criterion as mixed, putting it on the border of below and meets expectations. We largely agreed with the views of the Panel but assess this criterion as meeting expectations overall.

The industry wide benefits delivered by the OTF were recognised by both the Panel and stakeholder feedback as being significant. However, it was noted that there are further improvements that could be made to maximise the benefit of this forum. Similarly, we agreed with the Panel that the ESO's market monitoring function had delivered clear benefit for consumers. The progress made in the implementation of the Restoration Standard, Restoration tests and the successful delivery of the original deliverables of the ESO's Distributed Restart Project, which is in the process of delivering additional benefits beyond those originally scoped within the same budget, indicate significant value. FRCR and the associated changes made to the operation of the system in line with that report has also demonstrated significant value to consumers.

However, realisation of benefits has been restrained by delays and under-delivery of planned IT deliverables, in particular the IT investments that make up the Open Balancing Platform, and the late delivery of benefits associated with control centre training and simulation. Furthermore, stakeholder feedback indicated that significant benefits of additional transparency have been missed due to the ESO's processes related

to transparency of operational decision making (which is related to one of the pieces of Regularly Reported Evidence for Role 1). We expect the ESO to provide greater clarity on the causes of ESO actions that are taken out of merit order and the ESO's plans to reduce these.

### **Assessment of Role 1 against Value for money**

We do not consider that the ESO has met expectations against this criterion. The ESO overspent by £18m (an increase of 8.6% against the benchmark) and under-delivered on Role 1 activities. Subsequently, the ESO requested additional funding in BP2 to deliver projects that were originally planned to be delivered in BP1.

The Balancing Programme was the largest driver of the Role 1 overspend, owing to the ESO underestimating the scale and complexity of the requirements. The £33m of overspend on the Balancing Programme was partially offset by savings elsewhere, most notably a £9.9m underspend of National Grid group shared services costs.

We note that the ESO spent money on additional deliverables that were not included in the plan, such as funding of external costs following the UK's withdrawal from the EU (this includes a shift in funds that were originally captured in Role 2's BP1 benchmark) totalling £1.7m, the market monitoring function totalling £0.7m and the additional winter preparedness which came from team budgets. However, this £2.4m spend on additional activities does not deliver sufficient value to offset the overspend in Role 1 IT or account for some of the IT spend that shifted from BP1 into BP2.

The panel stated that the key factor that moved their score from 'below expectations' to 'meets expectations' for Value for money was that the ESO recognised the need to delay and overspend on the Balancing Programme early and the level of transparency provided in relation to this. The Panel commented that the industry appreciated the engagement and were brought along in the process. Whilst we agree that the early recognition, transparency, and industry engagement were positive, we do not consider that it is enough to bring performance up to meets expectations.

### **BP2 Considerations**

We expect the ESO to continue to deliver where it has demonstrated high performance against Plan delivery and address the concerns where it has not by meeting the full set of deliverables that it has set for BP2, including those reliant on IT investments. The ESO should ensure that its strategic plan to address the rise in balancing costs is delivered and that the delivery of the plan shows a measurable reduction against what costs would



have been without the plan. The ESO should also seek to improve its performance against all Role 1 metrics and reverse the downward trajectories seen between the first two years of BP1. We expect the ESO to improve its forecasting for both demand and wind by fully utilising its investments in this space.

We expect the ESO to act on the concerns raised by industry on skip-rates and the transparency of operational decision making. We also expect the ESO to address the causes of skip-rates where possible, which should result in an overall reduction in the percentage of actions taken out of merit order, thereby reducing overall balancing costs. Furthermore, the ESO should seek to address the concerns with transparency in general, improving the quality of the information and providing the appropriate educational materials to industry to allow them to fully understand the information provided.

The ESO should continue to deliver transparency to the industry through forums such as the Operational Transparency Forum and Balancing Programme updates and webinars. However, we expect the ESO to improve these where possible, taking on feedback from industry and acting on it where appropriate. The ESO should continue to listen to and address stakeholder feedback more broadly as well, maintaining the high stakeholder survey score reported in the final six-month report in BP1.

## **Role 2: Market development and transactions**

### **Section summary**

The ESO did not meet our expectations across Role 2. We found that the ESO under-delivered and failed to match its original plan ambition, despite delivering some additional items which were rightly prioritised in preparation for winter 2022-2023 (eg, DFS and Winter Contingency Service contracts). We also considered that the ESO was unable to consistently deliver benefits to the consumer across this role. Unclear communication, delays, and issues in design in some areas meant that the progress that was made in this role was not as strong as it should have been.

**We assessed the overall Role 2 score as a high 2 and determined a penalty for the ESO of -£1.2m.** A score of 2 has an incentive range of -£0.8m to -£2.4m and a default incentive value of -£1.6m. Overall, we assessed the ESO's plan delivery, delivery of benefits and metric performance as below our expectations. The ESO met expectations in stakeholder evidence and value for money, though both were at the lower end of that scale. We have adjusted the financial value above the default incentive values because of the ESO addressing some of the key concerns raised in our six-month and mid-scheme reviews and the delivery of services for winter 2022-2023 in short timeframes.

We note that our score for Role 2 differs from the view of the Panel (who scored Role 2 as a 3). This is due mainly to a difference in our assessment of the plan delivery criterion.

### **Role 2 expectations**

#### **View of Role 2 Plan at BP1 Final Determinations**

In our Final Determinations on the ESO's business plan for BP1, we considered that the ESO's proposed plan of activities was ambitious. We provided an *ex-ante* grading of the plan ambition as a 4, indicating that the Delivery Schedule met our expectations in most areas and exceeded expectations in others.

To improve this score, we indicated that the ESO should ensure lessons learned from pathfinder projects are used to demonstrate clear progress in implementing enduring markets for solutions to stability, voltage, and thermal constraints. Additionally, we suggested that the ESO could develop plans for coordinated, competitive markets that

cover all system services and align with distribution-level flexibility markets and demonstrate how it is proactively shaping wider market arrangements (such as balancing, wholesale and capacity markets) and industry frameworks.

## **Our six-month and mid-scheme assessments of ESO performance under Role 2**

In our earlier BP1 assessments, we noted that the ESO had broadly met our expectations for Role 2, with performance being mixed across the different activities.

At the mid-scheme point, we noted strong performance on industry codes and charging as elements of this activity were starting to exceed our expectations. Under activity 2a, the ESO was on track with plan delivery, though we expected to see improvements in the other evaluation criteria going forwards.

EMR performance was a concern at the mid-scheme point. While stakeholder feedback noted discontent with the EMR portal, we indicated that this activity was meeting our expectations on the basis that the ESO reported the new EMR portal as on track for full delivery by April 2023.

For the second half of the BP1 period, we suggested that the ESO should focus on ensuring that delivery of new balancing products maximised near and long-term benefits whilst creating certainty for market participants. We also indicated that the ESO could demonstrate further progress in implementing enduring markets for stability, voltage, and thermal constraints solutions.

Table 32: Previous Role 2 BP1 Performance Assessments

	<b>Six-month Assessment</b>	<b>Mid-scheme Assessment</b>
Indicative Score	3	High 3
Indicative Financial Reward	£0m	£1m

## **Rationale For Role 2 evaluation score**

### **Role 2 performance compared to expectations in the Roles Guidance**

In Role 2, the ESO is expected to design and deliver competitive markets to procure system services, execute the EMR delivery body role, undertake code administration functions, and manage system charging processes.

### **Activity 2a: Market design**

The ESO is slightly below meeting our expectations for 'Competitive market-based procurement', supported by our assessment of their performance in Metric 2A. 'Close to real-time procurement' has not been achieved for all services, and so is not fully aligned with meeting our expectations. However, the ESO does have clear plans that would exceed our expectations, and to have achieved this, we would have liked to see more progress across the suite of balancing and ancillary services. Under 'Delivering accessible markets', the ESO exceeded our expectations for some aspects, clearly having learned lessons from pathfinders and demonstrating progress toward enduring markets for these ancillary services. We note that there are still barriers to entry in place for many market parties (issues such as revenue stacking, level playing field, provider size, and type still pertain). While progress has been made in some areas, we believe too many remain over BP1 to fully meet our expectation here.

The ESO has reasonable performance against 'Signalling procurement needs' under activity 2a. Whilst we think the ESO could be more front-footed and clear, there has been communication with market parties about the types of services the ESO wants to procure. Equally, due to limited proactivity and clarity of engagement, we find that ESO performance against 'Coordinated procurement across the whole system' is meeting our expectations.

### **Activity 2b: Electricity market reform**

Despite the ESO making some improvements to user experience, it did not deliver the new EMR portal and, therefore, fell well short of our expectations under 'User experience with the EMR portal'. The ESO largely met our expectations with respect to 'Implementation of policy and rule changes', 'Improving EMR processes', 'Making accurate prequalification decisions', 'Monitoring compliance with rules', 'Security of supply modelling' and 'Providing support to EMR parties'.

### **Activity 2c: Industry codes and charging**

The ESO did not meet our expectations for 'Improving rules and standards' in all cases, with a lack of proactivity, thoroughness of alternative proposals and robustness of analysis. We acknowledge that some of the expectations under 'Influencing, implementing, and administering European rules' became obsolete over the scheme. The ESO did not fully meet our expectations for 'Managing code changes', where the ESO could improve its performance as a code administrator, reflecting some concerns over the quality of information and analysis included in final code modification reports. Under

‘Promoting efficient charging and access arrangements’, the ESO generally met our expectations, though we suggest additional attention is paid to the assessment of any new modifications to charging codes.

### **Assessment of Role 2 against Plan delivery**

Overall, the ESO’s BP1 plan delivery did not meet our expectations. Having originally graded the ESO’s plan ambition at a 4 for Role 2, we note that over a third of the planned milestones for BP1 were not delivered (39/108 milestones), and fourteen of those incomplete milestones were reported as delayed for ESO internal reasons.

Important deliverables that were fundamental to the original ambition of the plan were not delivered. The outturn ambition of the plan, therefore, is reduced compared to the *ex-ante* view presented in our Final Determinations. For example, given the history of delays, full delivery of a new EMR portal was crucial to meeting our performance expectations. Likewise, the Enduring Auction Capability (EAC) was expected to deliver benefits through reforming and improving how the ESO procures balancing services. Delays to phasing out of the dynamic aspect of the Firm Frequency Response (FFR) service, and the lack of new reserve services call into question whether the ESO is on track to meet wider RIIIO-2 aims such as competitive procurement in all balancing services and operation of a net zero system by 2025.

In addition, we found that the ESO continued to show a lack of understanding of the legal framework that they operate under – a sentiment echoed by the Panel. This led to delays and sub-optimal design choices with a number of the ESO’s 2a and 2c activities.

We acknowledged that some activity additional to the original plan, such as delivery of the Demand Flexibility Service (DFS), the Winter Contingency Service (WCS) contracts, and studies and engagement around net zero market reform, was delivered by the ESO under Role 2. In delivering these activities the ESO showed its ability to act at pace and responsively to emerging system issues. We also recognised that preparation work in the build-up to winter 2022-2023 meant that some work in Role 2 was reprioritised. We generally feel the ESO responded well to this, and we understand the decision to deprioritise Reserve Reform. However, IT dependencies were problematic to Role 2 delivery ambition throughout BP1. Therefore, we find it unlikely that the ESO would have met their original planned time scales for these particular services in any case.

The ESO did show good progress toward the implementation of markets for system services. Despite the reprioritisation of some of the work on stability and voltage

services, the ESO appears to be on track for delivery of these markets, which could add substantial consumer value and market confidence.

We also noted that some aspects of the plan, such as delivery of the TERRE<sup>10</sup> and MARI<sup>11</sup> were not delivered due to changes in the legislative landscape. We understand that the ESO did not deliver these markets but did begin work on similar cross-border market activity under the new frameworks set out in the EU-UK Trade and Cooperation Agreement (TCA).<sup>12</sup> While this work was of lesser ambition than originally planned, the ESO was a ready party under this framework and generally worked well to progress under the TCA where possible, showing good leadership at times. Work to combine the Transmission and Distribution Codes was descoped during BP1 following industry feedback and lack of realisable benefit. We do not dispute this stance, but we stated that clear steps toward achieving this could exceed our expectations, and as not delivered, our view is less positive.

As noted, our view of ESO Plan delivery under Role 2 was lower compared to that of the Panel and this primarily led to the different overall scores that we and the Panel assessed for Role 2. This is mainly due to our assessment that too much of the original plan ambition was not achieved during BP1 and there was significant room for improvement in some of the activities that were delivered. Additionally, both Ofgem and the Panel viewed performance of the ESO in preparing for winter 2022-2023 as a positive and accepted that this impacted on some of the ESO's plans. However, in our view these were not sufficient to offset the underperformance in general across the BP1 period. We considered that ESO delivery of some good outputs additional to their plan as positive, and these were the main reason for the incentive value to be higher than the default value for a score of 2.

---

<sup>10</sup> TERRE is the Trans European Replacement Reserve Exchange. Details of the TERRE platform can be found at: [https://www.entsoe.eu/network\\_codes/eb/terre/](https://www.entsoe.eu/network_codes/eb/terre/)

<sup>11</sup> MARI is the Manually Activated Reserves Initiative. Details of the MARI platform can be found at: [https://www.entsoe.eu/network\\_codes/eb/mari/](https://www.entsoe.eu/network_codes/eb/mari/)

<sup>12</sup> The EU-UK Trade and Cooperation Agreement came into force following the UK's exit from the EU. The TCA can be accessed at: [https://commission.europa.eu/strategy-and-policy/relations-non-eu-countries/relations-united-kingdom/eu-uk-trade-and-cooperation-agreement\\_en](https://commission.europa.eu/strategy-and-policy/relations-non-eu-countries/relations-united-kingdom/eu-uk-trade-and-cooperation-agreement_en)

---

## **Assessment of Role 2 against Metric performance**

Overall, both Ofgem and the Panel agreed that performance in this criterion was below expectations.

The single metric for Role 2 assessed the number of services that the ESO procured competitively, based on the percentage spent on services procured competitively out of the total spend on balancing services.

The ESO reported that in the first year of BP2, performance against this metric was in the banding of meeting expectations, matching the benchmark. The ESO noted that performance in this year was aided by negative spending on Constraints and SO-SO trades, particularly Q2, which was recorded as 451% competitive. This oddity is a metric feature and does not shift our view significantly. However, if the negative values were excluded or taken as absolute values, then this would have reduced performance to below the mid-point of the meeting expectations performance band.

We expected an improvement in performance in this metric from the first to the second year of BP1 as the ESO introduced more competitively procured services and retired legacy non-competitive services. This was implied through an increase of the meeting expectations benchmark central value from 55% to 70% competitively procured. However, ESO performance reduced from 55% to 48%. Whilst not reaching our expectations, we recognise that one of the drivers of this was positive in nature, with strong growth in the Dynamic Containment market leading to a reduction in price (£/MWh) of this competitively procured service.

## **Assessment of Role 2 against Stakeholder evidence**

In alignment with the Panel, we consider that overall, the ESO's Role 2 performance against the Stakeholder evidence criterion met expectations. The ESO consistently met the stakeholder's expectations in Role 2, with an average of 69% over BP1. There was a roughly even split between respondents who scored the ESO as below expectations (average 17%) and exceeding expectations (average 14%).

The EMR portal was a notable area of strong stakeholder discontent. This attracted feedback highlighting poor communication, such as conflicting messaging and insufficient notice, and was capped by strong negative feelings about the non-delivery of the portal. However, there was some more positively framed feedback around the ESO's general performance as the EMR delivery body, with stakeholders noting improvements in the ESO's query management and processes.

During the period we identified some regular discontent with the ESO's communications around balancing services development, particularly a lack of clarity around reasons for change and delays. There were also some points of dissatisfaction with the ESO's proposed design for Balancing Reserve (BR) and certain aspects of the Dynamic Containment (DC) service (particularly relating to aggregation at Grid Supply Point (GSP) versus GSP group).

### **Assessment of Role 2 against Demonstration of plan benefits**

We considered that the ESO was below our expectations for evidence of plan benefits in Role 2, a view shared by the Panel. There were several notable examples of the ESO delivering activities but in a way that limited the quality of the output and / or the realisation of benefits. Implementation delays to some services also led to delayed realisation of benefits.

We found that the ESO did not always find the right balance between implementing minimum viable products and perfect products, on occasion taking too long to deliver services, and on others, bringing forward services that needed significant subsequent amendment. This view was backed up by stakeholder feedback. One instance of this was the ESO's proposed new balancing service, BR. BR was identified as a potential solution to reduce high balancing costs. The ESO's development of BR showed leadership and proactivity to support a core ESO function and deliver benefits for consumers. However, the ESO attempted to introduce the service at pace, deprioritising other workstreams. The ESO made design decisions that were not supported by industry parties and were non-compliant with relevant legislation, resulting in the rejection of the proposed service. It was possible for the ESO to take a more thought-through approach and considered design that could have avoided our rejection, given that the ESO's assessment of expected balancing cost savings for the BR service showed these to be mainly realised in the latter part of the year.

Similarly, the ESO delivered new procurement approaches for DC and Short-Term Operating Reserve (STOR). However, inefficiencies in the auction design added extra spending to the procurement of STOR and DC, reducing balancing cost savings in the short term. The ESO should have noticed these issues and responded sooner to our concerns with the design. Further, the ESO proceeded with the same design for subsequent services, Dynamic Moderation (DM) and Dynamic Regulation (DR).

Stakeholders also flagged the timeliness of the ESO's communication of updates to the market as too often untimely and contributing to reduced investment certainty. For



example, Dynamic FFR and Static FFR were originally intended to be phased out during BP1. However, the ESO belatedly identified a continuing need for the static service and the redesigned service was approved for use only shortly before the previous regulatory derogations were due to expire.

For the majority of the BP1 period, the ESO used a non-market-based tool, NTC, to manage system frequency over the North Sea Link (NSL) interconnector. There was limited information provided to the market regarding its use and the ESO's NTC actions led to strained relations with Norwegian counterparts. The ESO could have acted sooner to use market-based alternatives to managing system security.

We recognised that the ESO delivered some benefits from the activities completed during BP1. Examples of this include the delivery of a new suite of dynamic frequency services and shifting Static FFR and STOR to day-ahead procurement. In the second year of BP1, performance measured through RREs generally exceeded expectations. However, we note the decrease in accuracy of the Balancing Services Use of System (BSUoS) charge setting compared to the first year, despite the introduction of a new methodology and data set. EMR Decision quality saw improvement year-on-year across the scheme, and EMR demand forecasting accuracy moved from below expectations to exceeding expectations from the first year to the second year of BP1.

### **Assessment of Role 2 against Value for money**

We considered that the ESO performed in line with our expectations against the value for money criterion but toward the lower end of the scale. We noted that the Panel's view was that the ESO met expectations for Role 2 value for money.

The ESO spent £15.1m below the Role 2 benchmark for the BP1 period. This underspend resulted mainly from work not completed, with the largest reduction in expected spend due to legislative changes (following Brexit). While we agreed that the ESO should not have undertaken this activity and therefore not spent this money, we have not considered it an underspend against the original benchmark.

Likewise, while the ESO reported underspend against the EAC project of £3.7m, we noted that this reflects £5m of delayed spending into BP2, with no efficiencies reported. We accepted this delay of spend as being outside of ESO control, but we did not view it as a value for money underspend. Further, we noted that this value was associated with more than £1m of additional spend in the project due to the rescoping of the initial activity, although the additional costs reflected additional activity and added value.

Our major point of concern under value for money in Role 2 was related to the EMR portal. The ESO overspent on the project by 237% (£8.3m) and didn't deliver the portal.

We recognised that the ESO delivered additional activity, principally the net zero market reform work, without spending beyond the initial benchmark. Some underspend against the benchmark was realised through savings on shared services.

### **BP2 Considerations**

The feedback from stakeholders and the insights from the Panel showed that the ESO needs to improve communication, transparency and leadership under Role 2 going forward. Removing the uncertainty among stakeholders caused by a lack of clear communication will address some of the key concerns raised throughout BP1.

Furthermore, the ESO needs to learn the lessons around service delivery in BP1 (e.g., BR), to deliver a set of services compliant with relevant legislation, offer low barriers to entry and allow for low-cost operation of a zero-carbon system. BP2 should see the ESO provide high quality, compliant and timely submissions for any products, allowing sufficient time for readiness for all parties. Industry and Ofgem should be brought along through the design process where appropriate, including the development of new markets and products.

The EMR portal must be delivered to a high quality, ensuring an improved user experience. A key reason that the ESO needed to meet expectations in Role 2 was the under-delivery of planned deliverables. A focus on ensuring that planned delivery is caught up on and planned activities can start to add value for the consumer is crucial for improving and gaining an improved assessment of BP2.

## Role 3: System insight, planning and network development

### Section summary

Overall, the ESO slightly exceeded our expectations for Role 3. There was good performance in many of its Role 3 activities and additional deliverables were also achieved that provided benefits to consumers. However, performance on connections fell below our expectations, affecting the end-scheme score.

**We assessed the overall Role 3 score as a low 4 and determined a reward of £2m.** A score of 4 has an incentive range of £2m to £6m and a default incentive value of £4m. Overall, the ESO exceeded our expectations under Plan delivery and Value for money and met our expectations in the other evaluation criteria. However, we believe that the ESO's performance on connections justifies a decrease to the lower end of the incentive range.

### Role 3 expectations

#### View of Role 3 Plan at BP1 Final Determinations

In our Final Determinations on the ESO's business plan for BP1, we considered that the ESO's proposed plan of activities was somewhat ambitious. We provided an *ex-ante* view of the plan ambition as a low 4 indicating that the Delivery Schedule met our expectations in most areas and exceeded expectations in others.

We suggested that to improve this score, the ESO could use the learning from its pathfinder projects to develop and begin to implement a detailed plan for regular, dependable markets for solutions to stability, voltage and thermal constraints needs. We also said that where outputs from Regional Development Programmes (RDPs) provide tangible developments that are applicable more widely (i.e., not just in specific regions or with individual DNOs), it should be shown how they contribute to the ESO's overall vision. We noted that the ESO's plan to work with other network organisations to develop consistent and coordinated connections processes for customers appeared to exceed our expectations during BP1.

## **Our six-month and mid-scheme assessments of ESO performance under Role 3**

Throughout the scheme, we generally found that Role 3 performance slightly exceeded our expectations, with indicative scores of a Low 4 at both the six-month and mid-scheme assessments.

At the mid-scheme assessment, we noted that the ESO had made improvements in areas such as Pathfinder delivery, and that the ESO had increased its contribution to projects that were shaping future network planning processes. However, we reiterated feedback from the Panel that the ESO could show more leadership in this role, particularly around whole system network development activity.

We set out that we were concerned by a lack of proactivity by the ESO in Role 3. We noted concerns around the connections process as an example of where the ESO should have started to adapt and introduce necessary changes before issues grew. We noted that the ESO could score more highly by the end of scheme if it could tackle existing issues to improve the timeliness and accuracy of connection offers, make strong progress with a substantial review of the connection arrangements, and identify benefits from outputs under the ESO's 5 Point Plan for Constraints.

Table 4: Previous Role 3 BP1 Performance Assessments

	<b>Six-month Assessment</b>	<b>Mid-scheme Assessment</b>
Indicative Score	Low 4	Low 4
Indicative Financial Reward	£2m	£3m

## **Rationale For Role 3 evaluation score**

### **Role 3 performance compared to expectations in the Roles Guidance**

Under Role 3, the ESO is responsible for a variety of insight, planning and network development activities. In the Roles Guidance this is broken down into three activities: Connections and network access (activity 3a); Operational strategy and insights (activity 3b); and Optimal network investment (activity 3c).

#### **Activity 3a: Connections and network access**

The ESO mainly failed to meet our expectations in 'Managing connections': during BP1 the ESO has not responsively managed and maintained the network connections process, processed connections requests in a sufficiently timely manner, or sufficiently

planned ahead to consider how the future pipeline of connections should inform actions in the present. The ESO met our expectations in 'Outage and medium-term access planning', showing some hints of exceeding behaviour through Joint Works projects, but we still retain concerns over openness of data and coordination with DNOs.

### **Activity 3b: Operational strategy and insights**

The ESO generally showed performance in line with our exceeding expectations criterion for 'Providing energy insights'. Performance against 'Producing analytically robust scenarios and long-term forecasts' met our expectations, but the ESO needs to do more here with respect to stress-testing its scenarios, and we did not see evidence from the ESO on how it was working to expand, improve and collaborate to a degree consistent with exceeding our expectations. We assessed that the ESO met our expectations for 'Ensuring coordinated scenario development' but consider that it has some way to go in achieving our exceeding expectations criteria.

### **Activity 3c: Optimal network investment**

Performance here was mixed. The ESO hit several of our exceeds criteria and generally performed well against the meeting expectations criteria for 'Identifying network needs and solutions'. There were some areas where performance needs improvement, for example, in regards to the robustness, thoroughness, and timeliness of their assessments of network solutions presented to them by other parties. We expect the ESO to advocate on the consumers behalf and where required, hold the Transmission Operators to account in the provision of information for their analysis. On 'Coordination between network assessments', the ESO doesn't always appear to have coherence between similar activities, and its identification of technical and regulatory barriers was ad-hoc and reactive in nature. It is clear though, that the ESO performed strongly against our expectations for 'Procurement of network solutions', including exceeding expectations criteria.

### **Assessment of Role 3 against Plan delivery**

The ESO delivered a majority of the plan that they set out for BP1. This plan was graded *ex-ante* as a Low 4, indicating that full and timely delivery of the plan would result in an evaluation under the Plan delivery criterion of a Low 4. However, the activity delivered under Role 3 expanded beyond that original plan, particularly under 3b (Strategy and Insights) and 3c (Long term network planning) activities to include new roles such as development of Early Competition.

Despite delays to some deliverables, we consider that during BP1 the ESO delivered a plan of greater ambition than originally set out, through delivering work on Early Competition, a Holistic Network Design (HND) and the HND Follow-up Exercise. While the ESO were obliged by regulatory or legislative change to deliver some of this activity rather than through their own ambition, we consider that Plan delivery under Role 3 was representative of a 4. The Panel also felt that ESO performance against Plan delivery in BP1 should be scored 4.

The main milestones not delivered were under the RDPs and Enhanced Frequency Control Capability (EFCC). We agreed with the ESO's assessment that as the major benefits from the EFCC work were already being realised under Dynamic Containment in Role 2, there was a suitable reason to cease work on this. We noted the lack of delivery of RDPs. While the ESO stated that connections issues and coordination issues with other parties have been problematic, we noted there have also been delays to these projects due to issues with IT systems and through late ESO-led changes to align the RDPs.

While delivered within BP1, we also note that connections portal milestones were delivered significantly late in several cases. For example, the Connections Portal (Phase 1), which digitalised the connections process, was released after an 11-month delay and only in a minimum viable product state. This platform was designed to allow quick and easy submission and management of new connection applications, pre-applications and queries, and to provide customers with access to information on their projects. If this had been delivered on time, the connection queue could have been shorter, due to better pre-application information available to customers and automation of some processes.

We recognised that the ESO brought forward some of its plans for connections reform and established a Connections 5 Point Plan, but the efficacy of this will not be evident until BP2. We expected earlier and more impactful actions during the BP1 period, considering the concerns raised at the mid-scheme point.

### **Assessment of Role 3 against Stakeholder evidence**

We assessed Role 3 stakeholder evidence as meeting expectations overall, although at the low end of this. There was less satisfaction across stakeholders than in other roles, however we do not believe this is sufficient to score below our expectations, particularly given the propensity of the ESO to resolve issues throughout the scheme in some Role 3 areas. The Panel also determined that ESO performance was meeting expectations here.

Through the ESO's six monthly stakeholder surveys, most stakeholders felt the ESO met expectations over the course of BP1. However, across all three roles, Role 3 scored lowest amongst stakeholders with 25% of respondents (averaged across the four surveys) noting that the ESO performed below expectations.

Several issues garnered most of the negative stakeholder feedback. Early in the scheme, there was criticism of the way the ESO's pathfinder projects<sup>13</sup> were being run. By the mid-scheme evaluation, we considered that this had been resolved, and indeed we are of the opinion that the pathfinder projects now represent one of the more positive outputs in BP1. This is also reflected in some of the stakeholder evidence that we received. Since then, the connections process has driven most negative feedback. The Panel noted stakeholder concerns regarding the connections process and agreed that the ESO must improve management of the connections process and the queue.

There were several aspects of Role 3 which received positive feedback, such as the Future Energy Scenarios outputs and the ESO's engagement in this area (including webinars and the 'FES in 5' document).

### **Assessment of Role 3 against Demonstration of plan benefits**

On balance, the ESO's performance for this criterion met our expectations. We viewed ESO performance as a mixture of exceeding expectations in some activities (pathfinder projects, Constraint Management Intertrip Service (CMIS)) and below our expectations in others (connections). The view of both the Panel and Ofgem is largely aligned.

Many Role 3 activities undertaken by the ESO bring with them large potential benefits which are often realised only years into the future. We gave the ESO credit at this stage for the work done and the expected benefits to be gained. However, we found it unclear with several of these activities to determine where the ESO has added *additional* value, compared to where the activity simply provides value by being completed. An example is the Network Options Assessment (NOA) which the ESO is required to deliver under its licence, but we have not seen evidence to show that the ESO is exceeding our expectations in this area – the strong future benefits available are an intrinsic feature of

---

<sup>13</sup> In BP1, the ESO ran several pathfinder projects to procure network services to provide solutions to system issues such as stability, voltage, and constraint management. For BP2, the ESO has updated the name of pathfinder projects to network services procurement, to better reflect the status of this procurement activity given the maturity gained through pathfinder learnings.

this type of activity. Reporting under RRE 3B does not show clearly the additional ESO benefit delivered here. RRE 3C appears to show a slight reduction in benefit, with less variation in options being brought forward, which might indicate that potentially beneficial options are being missed.

However, some activities in Role 3 brought significant consumer value in large part driven by the ESO. The pathfinder projects (two stability and two voltage pathfinder tenders were run during BP1) delivered benefits against a clear counterfactual, and the constraint management pathfinder developed into the CMIS which also delivered benefits. The fact that the ESO also managed to make some early balancing costs savings from the CMIS is a positive sign. The ESO learnt from the lessons of previous pathfinders and made the procurement process more efficient throughout, adding significant consumer benefit. However, inherent issues in the learn-by-doing approach for pathfinder projects did contribute to problems (for example, connections issues were exacerbated during the stability phase 2 pathfinder). Performance here is supported by reporting under RRE 3A.

We found that some ESO actions led to disbenefits, particularly around planning for future connections and proactivity resolving issues, leading to delays in connection offers being made. Based on the ESO's forecast at the start of BP1, the ESO expected only minor growth in connection applications (8% average per annum), a reduction from the preceding period (~20% average per annum). The outturn growth, however, ended up being significantly higher (~72% average per annum). Of the transmission connection offers sent to applicants in 2022 and 2023, only 21% were offered the same date as the one requested, down from 52% in 2020/2021. Furthermore, the gap between offered and requested dates, where offered dates do not meet the requested dates, increased significantly, with an average difference of 43 months in 2022-2023 compared to 19 months in 2020-2021. This led to significant issues and the ESO requested a significant number of derogations from their licence requirement to provide connection offers within 90 days over the BP1 period.

The number of offers which were not issued right first time and the number of occasions that offers were made late requiring derogation led to specific monitoring of these



aspects of connections in the BP2 programme. The late delivery of the connection's portal was also seen as a cause of lost benefits.<sup>14</sup>

The slow connections process, large scale of the queue and long delays in dates being offered to customers gave rise to significant concerns across the industry. While the ESO launched initiatives to speed up connections under its 5 Point Plan and a review of broader connections arrangements under its Connections Reform programme, these are yet to deliver improvements, as highlighted in our Open Letter<sup>15</sup> earlier this year.

### **Assessment of Role 3 against Value for money**

We consider that the ESO slightly outperformed this criterion, although we note that a proportion of cost savings identified by the ESO were not achieved through ESO-led proactive efficiencies.

The ESO reported underspend against the benchmark of £18.2m across Role 3 activities. A large amount of this underspend came from stopping work on the EFCC project, as the ESO identified that the same benefits were already being realised through introduction of the Dynamic Containment frequency response service (in Role 2). Savings were also found in the NOA enhancements, while some of this is discountable due to work being moved into BP2, this is one area where the ESO found efficiencies which drove down costs. As in all roles, the ESO also noted underspend against shared services costs. There was also some underspend reported which occurred due to work being delayed, such as on the RDP projects.

The ESO had additional spend in Role 3 due to additional activities that were not costed in the original BP1 plan. Overall, in Role 3, we recognise that the ESO delivered new activities (such as Early Competition and the HND) and remained below the cost benchmark.

---

<sup>14</sup> The portal may have improved pre-application information which could have avoided some issues. For example, a total of 1,663 transmission connection applications were received by ESO in 2022-2023, approximately three times the 554 applications received in 2020-2021. Over the same period the size of the total contracted connections (not yet connected) reported in the TEC register more than doubled from circa 128GW at the end of 2020-2021 to 280GW by at the end of 2022-2023.

<sup>15</sup> Open letter on future reform to electricity connections process:

<https://www.ofgem.gov.uk/sites/default/files/2023-05/Open%20Letter%20Connections%20%28Final%2016.5.23%29.pdf>

---

## **BP2 Considerations**

The ESO produced some strong work, which we hope continues throughout BP2.

Documents such as FES have been well received, and additional insight that shapes and aids policy and industry planning demonstrates strong leadership in this space.

Additionally, the drive towards whole-system network development is crucial in reaching net-zero targets, and we trust that the ESO continues its work on this. We would like to see the ESO develop a more cohesive and consistent set of outputs which could deliver an improved experience for those using and relying on these for long term planning and investment.

It is vital that the ESO delivers connections reform and the tactical 5 Point Plan for connections to address performance issues. Had the ESO been more proactive in identifying and tackling issues in this space, the financial reward under Role 3 would have been greater. We expect that the ESO will focus on improving the timeliness and accuracy of its connection offers during BP2.

We expect to see the ESO learn from feedback and tackle issues proactively rather than reactively. Improvements in this area should result in stronger performance against stakeholder feedback, as this was a common issue.

## Appendices

Index

<b>Appendix</b>	<b>Name of appendix</b>	<b>Page no.</b>
1	End-scheme review of the ESO's EMR Delivery Body Performance in relation to the Capacity Market	36
2	Proposed Direction on the ESO's financial incentive for 2021-2023	40

## **Appendix 1: End-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. This section of the report covers the DB's performance during the period from 1 April 2022 to 31 March 2023, which includes the Capacity Auctions held in February 2023. 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 was slightly below expectations. This is based largely on the ESO not delivering the EMR Portal by April 2023. The ESO did make some improvements to user experience, with stakeholders highlighting the improvement of query management. The ESO also met our expectations with respect to the implementation of policy and rule changes, improving EMR processes, making accurate prequalification decisions, monitoring and compliance with rules and security of supply modelling.

### **Plan Delivery**

We note that 33% of planned milestones for BP1 were not delivered (6/18 milestones). Three of those incomplete milestones were reported as delayed for ESO internal reasons, whilst the other 3 were determined no longer valid due to the industry developments (ie, the Capacity Market Advisory Group (CMAG)).

In the 6-month review of the ESO's performance, we highlighted that the ESO needed to address the issues with the existing EMR Portal and deliver the new EMR portal by the end of BP1. The ESO seemed to take this on board as in March 2022 they went live with the first release of the new EMR portal. At that time, the ESO were planning to have all aspects of the portal ready for the auctions in February 2023. However, after the first release, we were made aware that this would not be possible. This was disappointing, as stakeholders have continuously expressed their frustrations with the existing portal.

The ESO at that point stated that the new EMR portal would be ready by the end of BP1 and could be used for prequalification in 2023. However, in January 2023, the ESO made us aware that the new EMR portal would not be ready for the start of the prequalification process. This was due to a number of internal reasons such as the DB needing to understand of the complex nature of the relevant specific regulations and rules; the challenges with size and complexity of EMR processes; and the limited window to launch the new EMR Portal. The ESO also noted a few external reasons for the delay which included needing enhanced customer engagement; dealing with regulatory uncertainty; and optimising processes with other relevant delivery partners such as the settlement body. The ESO engaged with industry in February 2023, setting out the different options available, and have now committed to delivering the new portal by Q1 2024/25.

This has been disappointing, as the ESO and Ofgem have been discussing a new IT portal for EMR as far back as 2019 and this key deliverable remains undelivered. We are also aware of stakeholder feedback highlighting the need for a new portal and requesting that this portal be able to support CM Regulatory changes. As a result, we fully expect the new IT portal to be delivered to a high quality and cost-efficient standard by Prequalification in 2024. If this does not get delivered by then, we will continue to see this as being below expectations with regards to the ESO's Incentives Scheme for Role 2.

The ESO delivered all other milestones that did not require the new EMR portal to be delivered. It was positive to see that the guidance for the CM auctions included specifically tailored guidance for situations that had been the cause of previous appeals. As a result, the ESO ran a smooth CM auction process last year. They processed 1,281 applications, which ultimately resulted in Ofgem only receiving two tier 2 disputes (the lowest since the Capacity Market began in 2014). For these two disputes, Ofgem upheld the ESO's original decision, showing the improvement in assessing prequalification information.

We also would like to acknowledge that the ESO have played a proactive and valuable part in the Capacity Market Advisory Group (CMAG) since its implementation in October 2022. This will provide an alternate route for the prioritisation of Rule Changes and as a result the ESO are no longer required to take part in a separate prioritisation exercise that was outlined in BP1. We note that the ESO plans to be more proactive in setting out rule improvements to CMAG in BP2, which we see as a positive intent.

## **Stakeholder Evidence**

The ESO received positive feedback on EMR, highlighting that they have improved query management. Stakeholders also believed that they made continuous efforts to improve

user experience of the EMR portal. However, many stakeholders raised serious concerns on the continued delay to the new EMR Portal. They believe that the ESO had not been transparent enough in its development of the new EMR portal in BP1 and that the ESO did not provide sufficient justifications for delays, whilst also highlighting concerns that non-delivery of the new EMR Portal resulted in an inefficient process where CM Rules changes were required to be implemented in both the legacy and new portals.

## **Demonstration of Plan Benefits**

We were disappointed with the demonstration of plan benefits with regards to EMR. We recognised that the ESO believed that the expected benefits of EMR activities over RIIO-2 increased to £134m, however this has been driven by external reasons such as notable increases in the clearing price of the CM auctions. The ESO highlighted that the main way to achieve benefits in this area was to develop the new EMR portal. This has not been implemented, therefore the benefits (£2.2m/year) have not been realised.

## **RRE 2C EMR Decision Quality**

The ESO met expectations for this RRE. In 2021/22 the ESO received 1,234 applications and we only overturned two themes from the Tier 2 disputes we received. In 2022/23 the ESO received 1,281 applications and we overturned zero themes from the Tier 2 disputes received.

It should be noted that CfD Allocation Round 4 disputes occurred in May 2022. Ofgem received two Tier 2 CfD disputes and overturned the ESO decisions in both. This was not acknowledged in the ESO's end of scheme report and is not part of this RRE. However this performance has been accounted for in our assessment of the ESO's performance with relation to its duties as the Delivery Body of EMR activities.

## **RRE 2D EMR Demand Forecasting**

The ESO highlighted improved performance accuracy that was dependent on increased diligence on input data for peak demand and better understanding of peak demand. They stated that core modelling has improved but has had a lesser impact and that a large part of the improvement was due to a good set of predictions about how the economy would develop post COVID-19, despite a very wide margin of uncertainty.

It is clear that the ESO improved forecasting when compared to the results from 2021/22.

## **Value for Money**

The cost benchmark for spend on EMR Portal improvements for BP1 (2021/22 and 2022/23) was £3.5m. The ESO spent £11.8m which is a 237% increase.

The ESO highlighted that this increase was due to the original BP1 forecast assuming that the EMR improvements would largely be delivered in RIIO-1 and thus only a moderate change would occur in BP2. They highlighted that a substantial number of regulatory changes occurred since October 2019 and that this led to rescoping and reprofiling the delivery plan. They also noted that the key drivers to increased costs were a better understanding of business requirements, the evolving complexity of the regulatory environment and the higher anticipated costs of the IT solution.

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 spent £8.3m more than the BP1 benchmark on the new EMR portal. This is a considerable increase from the £2m-£5m it estimated in 2019. We do not believe this increase in spend provides value for money, based on the information and justification provided by the ESO. We are also aware that industry is keen to have a new EMR Portal that will greatly improve user experience.

This decrease in value for money is disappointing. As mentioned above, we now expect the new IT portal to be fully delivered to a high quality and cost-efficient standard by CM prequalification in 2024. If this is not delivered by then, we will continue to see this as below expectations with regards to the ESO's Incentives Scheme for Role 2.

## **Appendix 2: Proposed Direction on the ESO's financial incentive for 2021-2023**

**For and on behalf of the Gas and Electricity Markets Authority**

### **DIRECTION PURSUANT TO PARAGRAPH 4.4.4 OF SPECIAL CONDITION 4.4 OF NATIONAL GRID ELECTRICITY SYSTEM OPERATOR LIMITED'S ELECTRICITY TRANSMISSION LICENCE IN RELATION TO THE ELECTRICITY SYSTEM OPERATOR INCENTIVE ARRANGEMENTS**

Whereas:

1. National Grid Electricity System Operator Limited ("NGESO") is the holder of an electricity transmission licence (the "Licence") granted or treated as granted under section 6(b) of the Electricity Act 1989 (the "Act").
2. Special condition 4.4 (Electricity System Operator Reporting and Incentive Arrangements), Part A (The Electricity System Operator Reporting and Incentive term) of the Licence, that was in effect on 31 March 2023, allows the Authority to direct the value of ESORIt, in respect of NGESO's incentive performance, as determined under this condition and the ESORI Arrangements Guidance Document.

#### **Therefore:**

In accordance with Special Condition 4.4.4, the Authority hereby directs the incentive value of ESORIt in respect to the Business Plan Cycle 2021-2023, to be £1.8m. This Direction and the document to which this proposed Direction is attached constitutes notice of the reasons for the decision pursuant to section 49A of the Act.

**To be signed and dated upon direction.**