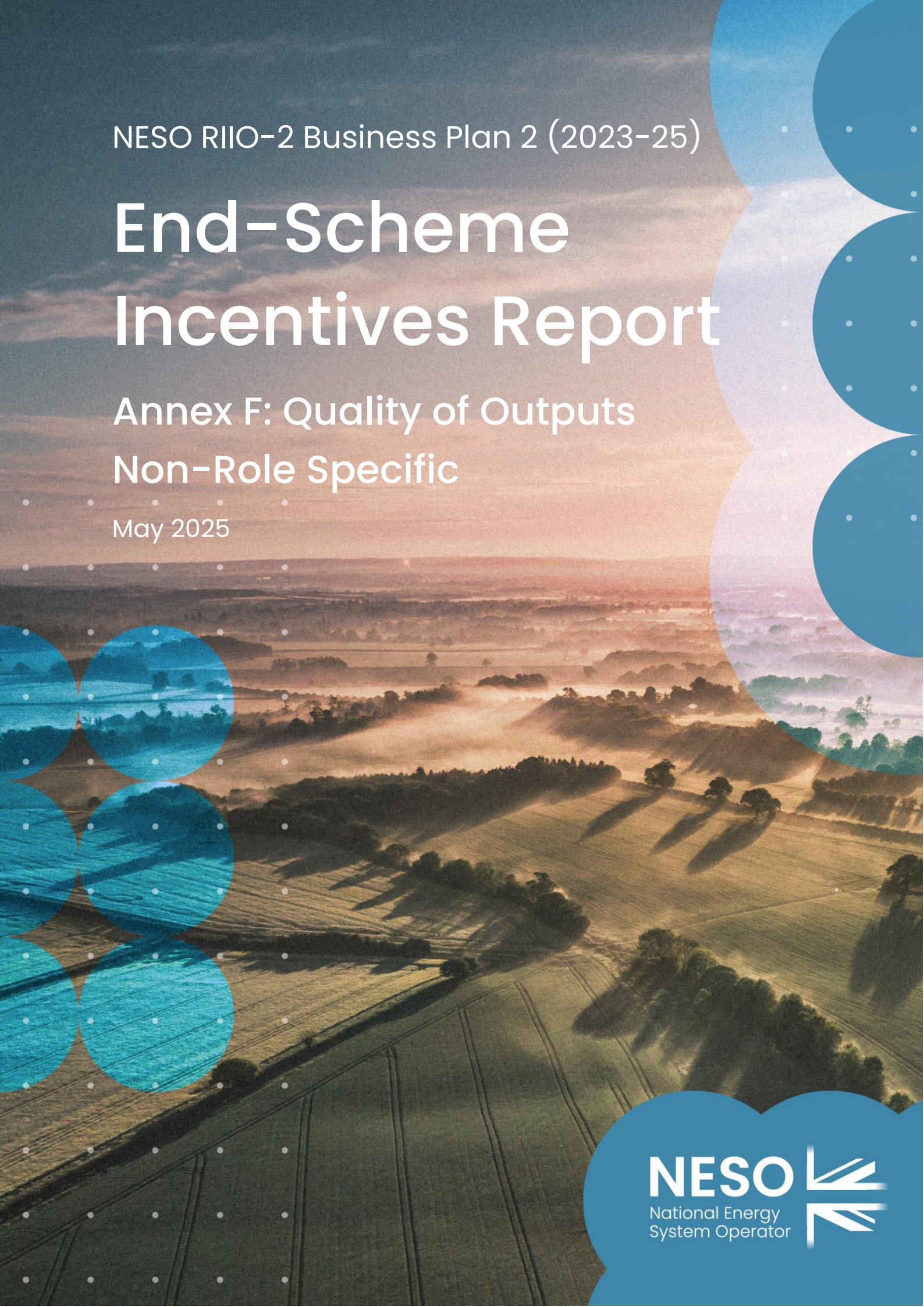
NESO RIIO-2 Business Plan 2 (2023-25)

End-Scheme Incentives Report

Annex F: Quality of Outputs Non-Role Specific

May 2025



NESO
National Energy System Operator

Contents

Quality of Outputs

Roles Guidance Criteria (non-role specific)

In this section, we provide evidence against the Quality of Outputs criteria which have been integrated into the Ofgem Roles Guidance document for BP2. These criteria are not role-specific and include:

- Publications
- Stakeholder Engagement
- Submissions to the Authority
- Proactivity
- Data and Information
- NESO Policy

These criteria cover a wide range of NESO activities, and to ensure reporting is proportionate, we have provided targeted evidence below across a selection of the above criteria. There is also further evidence across other areas of this report. Alongside our reporting we regularly engage with Ofgem to discuss performance in these areas.

Publications

Each year, we publish a wide range of reports that provide energy insight and analysis, as well as information about how we're shaping the future of energy in GB. All our reports are found on their respective pages on the NESO website, and can also all be easily searched and accessed in the Publications Library on our website.

Our publications vary in content and level of detail dependent on the target audience, however, they are consistent in approach such that stakeholders can easily navigate through them.

See below some examples of NESO publications over the second year of BP2:

Publication (with link)	Summary	Date of latest publication
Operability Strategy Report	The report outlines our strategy for ensuring an operable electricity system in Great Britain (GB) as we transition to clean power by 2030 and net zero beyond.	March 2025
Business Plan (BP) 3	Our draft RIIO-2 Business Plan 3 for the period April 2025 to March 2026 (BP3) marks a significant milestone, as it is our first business plan as NESO and the final plan for the RIIO-2 period.	January 2025

Electricity Ten Year Statement (ETYS)	The ETYS outlines our view on the future transmission requirements and the capabilities of the National Electricity Transmission System to meet forecasted growth in demand.	January 2025
Clean Power 2030	In August 2024, the Department for Energy Security & Net Zero (DESNZ) and Mission Control commissioned us to provide advice and expertise for the first time on how to reach its clean power by 2030 (CP30) target. As part of our advisory role, we shared our comprehensive and independent analysis of how GB can achieve this and become a clean energy superpower.	November 2024
FES	Future Energy Scenarios (FES) 2024: NESO Pathways to Net Zero represent different, credible ways to decarbonise our energy system as we strive towards the 2050 target.	July 2024
Markets Roadmap	The roadmap details our forward-looking view of our markets, our market design principles and plans to reform and evolve our markets.	March 2025

Publications Case Study

Demand Side Flexibility documents

In December 2024, we published our Enabling Demand side Flexibility in NESO Markets report. This is our first flexibility market strategy, designed to establish a clear vision and objectives for unlocking distributed flexibilities and enabling their seamless operation across markets. To support one of the strategic priorities identified in this work - identifying and removing barriers - we also conducted a Route to Market Review for Demand side Flexibility. This review aims to identify and prioritise barriers in our services and set out our approach and timelines for removing them.

We took a collaborative, partnership-driven approach to the development and delivery of these two publications.

- Following the completion of the first draft, we conducted intensive industry engagement activities in early 2024, which included 121s and workshops. These sessions involved a broad range of stakeholders such as flexibility service providers, regulators and industry associations. We also leveraged the Market Advisory Council and NESO Market Forum to seek expert advice from industry.
- To ensure we're heading in the right strategic direction and to foster collaboration with industry, we issued a Call for Input (CFI) in May 2024, inviting industry colleagues to provide insights to help shape this strategy. Over a four-week period, we received 44 responses from a wide range of stakeholders. Most respondents welcomed our examination of this topic and appreciated the opportunity to provide feedback ahead of the strategy's release. They agreed

that the strategy outlines a comprehensive plan to address the key challenges that industry is facing to optimise flexibility services in GB. The average rating for the approach and roadmap clarity was 7 out of 10.

- To further engage stakeholders, we held two webinars - one to promote the Call for Input and another to deep dive the final report. These sessions provided stakeholders with an opportunity to seek clarifications and ask questions. More than 300 participants attended across the two events.

We made refinements based on industry feedback. For example, we clarified how this work aligns with other NESO strategies and broader industry initiatives; clearly defined our priorities to match industry needs and the rationale behind them; and provided greater specificity on dependencies and enablers to ensure the success of this strategy.

These two initiatives establish a clear strategic direction for enhancing demand side flexibility participation in NESO markets, developing fit for future market arrangements and better coordinating with other system operators.

Stakeholder Engagement

Stakeholder engagement is critical across all our activities. Engaging with and having representation from the full range of stakeholders across the energy landscape, ensures we maximise the level of insight, collaboration and debate and drives the best possible outcome for all involved.

Below we demonstrate how we engage with our stakeholders using two specific case studies. However, there are many examples of engagement in other sections of this report, particularly in the Activity Updates section under each role.

Stakeholder Engagement Case Study
Operational Transparency Forum (OTF)

We remain focused on understanding the needs of our customers in order to ensure the OTF meets their expectations by providing updated information and insight on operational challenges.

In December 2023, we conducted a comprehensive survey of the OTF. Using the feedback gathered, we identified and implemented changes to enhance the value provided to participants. Following some delays due to preparations for NESO Day One, we integrated these improvements into the OTF in the third quarter of 2024/25. We then published a final update on our response to the survey on the OTF webpage in January 2025.

In January 2025, we conducted an additional survey of participants. We received 91 responses, which is more than double the 40 we received for our last survey. This feedback also represented a more diverse group of energy industry participants. We discovered that forum participants perform a variety of roles within their organisations, which helps us to better understand our audience.

Regular content and the focus topics/deep dives continue to score positively, and most comments were positive, showing that the industry highly values the forum.

Summary of comments from 2025 OTF survey

We also asked participants what additional forms of engagement they would like to see from us to enhance their understanding and experience of NESO operations. Respondents expressed interest in learning more about our activities through various channels, including LinkedIn and podcasts. We will be exploring these suggestions with the industry over the next year.

We plan to provide a summary of the survey responses and our initial responses in Q1 of 2025/26.

Stakeholder Engagement Case Study

Strategic Spatial Energy Plan (SSEP)

The Strategic Spatial Energy Plan (SSEP) is one of the largest strategic energy planning projects ever undertaken in GB, so it is important to listen to the views of the public and interested parties as the plan is developed. Our engagement is designed for us to hear and respond to the views of a wide range of stakeholders, a number of whom we have not historically engaged.

In November 2024 we established an energy Industry Working Group to test our understanding and gather data, insights and feedback to ensure that the outputs of the SSEP are deliverable. Membership includes the electricity and gas network operators, developer representatives, trade associations, supply chain and academics with spatial planning and energy expertise. More information about the group can be found on our website here.

Societal groups bring diverse and unique perspectives on the energy transition and considering their views is key to seeking societal acceptability for the SSEP and GB's transition to clean, secure and affordable energy. We will ensure our engagement with societal groups represents a broad spectrum of economic, demographic and environmental interests across GB. These groups include those interested in the cost of living, business, visual impact and for those living with disabilities.

In late 2024, we started to contact a wide range of community and societal groups, and in January 2025 started the process to set up 14 NESO Societal Forums. The purpose of the forums is initially to provide insight on the development of the SSEP and listen and act upon feedback to influence and to contribute to the evolution of the SSEP. In the longer term, we anticipate that the Forums may be invited to input to other NESO projects and programmes, ensuring the voice of society and of local communities is heard in all our strategic energy planning work and beyond.

We began engagement with the societal forums in March 2025 with two key purposes:

1. Input

- Stakeholder groups will be involved in and aware of the development of strategic energy plans much earlier in their lifecycle.
- We will share, where appropriate, the information, data and feedback we are using to develop our plans.
- This will enable stakeholders to come to a considered and informed view on strategic energy planning, and what it means for them and those they represent.

2. Inform

- Stakeholders will provide feedback on the data sources and research outcomes (inc. our Societal Research) that we are using to inform the SSEP and help us make sure it is considered appropriately.
- Stakeholders will input into the modelling process – reviewing our outcomes, and, where appropriate, contribute to modelling activity.

In November 2024, we conducted a societal opinion survey to understand the views of different segments of society in different locations. The poll, which had a representative sample of over 9,000 people from across Britain, asked high level questions on the right balance for developing energy infrastructure based on topics such as financial cost, negative environmental impact, positive economic opportunities and local social value.

The analysis of this data will shape our decision-making process and create a context for all other engagement. It will also inform a societal assessment process which will provide an assessment of societal views on potential pathways, to support and inform pathway decision making.

Proactivity

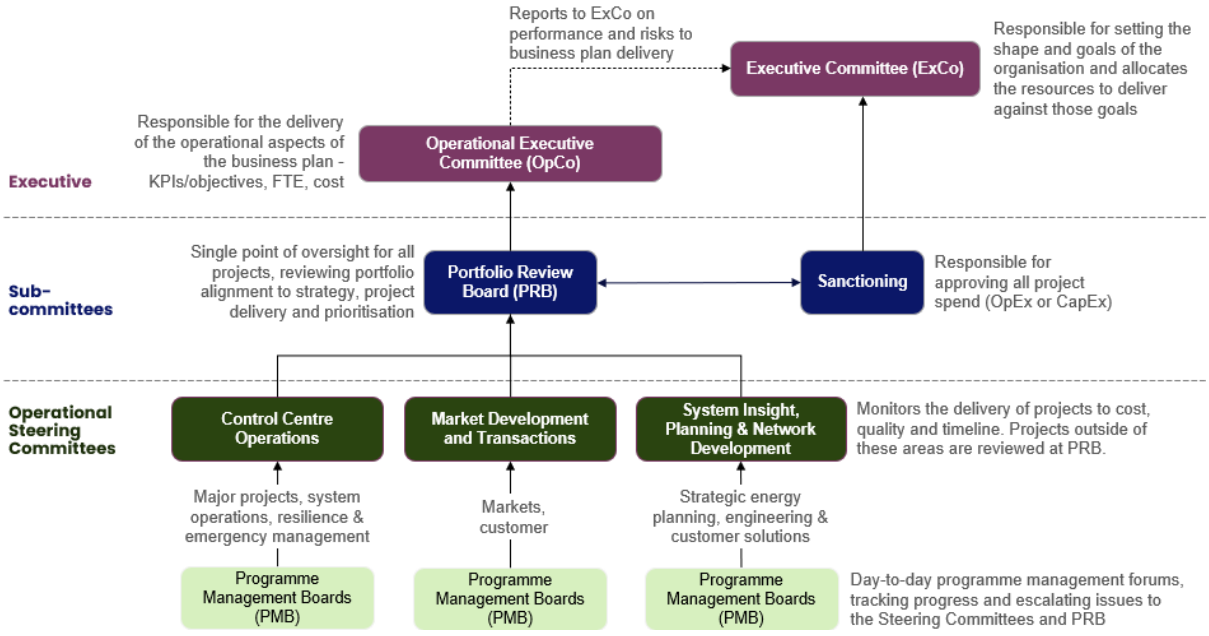
This section sets out how we proactively manage the RIIO-2 BP2 delivery plan. To maximise delivery and consumer benefits and mitigate risk, our Portfolio PMO team monitors delivery through regular plan testing and assessments which also enable a flexible approach to delivery.

Knowledge of current and future risks

Knowledge of current and future risks to the delivery of our Business Plan is reviewed on a monthly basis and any risks are escalated to the Portfolio Review Board (PRB) and on to the Operational Executive Committee where necessary (see "Governance Landscape" below). These governance forums can help remove blockers and get delivery back on track. In addition to flagging risks of delay, we also assess and monitor delivery confidence every month. Delivery confidence is driven by internal and external dependencies such as resourcing and reliance on external parties. Where appropriate and where possible, we put mitigating actions in place to bring any forecast risks and delays back on track.

There was an example of this at the January PRB when risks of delay were flagged because of the Clean Power 2030 work. From this escalation, we identified that Delivery D1.1.6 'Operability Strategy Report Publication' would be delayed. This was due to the OSR team being reassigned to the Clean Power 2030 analysis (as commissioned by DESNZ). Although delayed, it was still delivered within the BP2 period.

Governance landscape



Proactive plan testing

We undertake proactive plan testing on BP2 deliverables every month to capture any in-month changes. We carry out a more comprehensive test every quarter, including the update of all current and future delivery milestones along with updated progress and commentary on progress. This ensures all system data is current and up to date. This

process is clearly embedded into our Workfront Programme and Project Management tool (PPM) which Project Managers, Programme Managers and Project Sponsors are familiar with and update commentary regularly.

Critical milestones

Tracking the BP2 milestone position against end-scheme forecast has been a regular agenda item at the Portfolio Review Board since October 2024. This has allowed for additional scrutiny at a directorate level and helped to give heightened confidence levels in our end of scheme position.

In November 2024, we reviewed all of the milestones to identify those deemed to be critical. This was defined as whether a milestone was deemed 'critical' to the completion of a deliverable or related to any obligation, with the knowledge that not all milestones carried the same weighting. The Regulation team, and Senior Managers from individual Directorates assessed the remaining milestones and provided an indication whether these fell into this category. While we recognise this exercise had an element of subjectivity, it allowed for a deeper assessment and challenge of initial status versus forecast, and whether any intervention was required to alter the forecasted position.

Critical Milestones

CRITICAL Milestones 22		Forecast End BP2			
		Complete	Delayed-Internal	Delayed-External	Delayed-Consumer Benefit
Current Status	Complete	3			
	On Track	5			
	Delayed-Internal	5	7		
	Delayed-External	1			
	Delayed-Consumer Benefit	1			

See appendix 3 for breakdown by directorate

In Q3, a criticality exercise took place alongside the Regulation team and senior managers- **22 milestones were been deemed critical.**

- **3 Critical Milestones** have been **completed** as of the Q3 update.
- **5 Milestones currently on track** are still **expecting to complete** by end of BP2
- **7 Milestones that are currently delayed/missed** are forecast be **recovered and completed** by end of BP2.
- **7 Milestones currently delayed/missed** will **not be recovered** within BP2.

The above is an extract from the January 2025 PRB. This was supported by a detailed account of status. The exercise didn't result in any recovery of predicted delayed milestones, rather it confirmed the milestone position, including whether any additional support was required to enable delivery and allowed this to be tracked through to their logical conclusion.

Continual re-assessment of plans to maximise value to consumers

Continual re-assessment also takes place as part of the monthly and quarterly updates so that customer value can be monitored, and deliverables amended if appropriate to maximise customer value. In these cases, a milestone can be flagged with a status of 'Delayed – Consumer Benefit'. This status is relevant when more consumer benefit can be realised by delaying an activity. We developed a prioritisation approach based on a set of principles as shown in the diagram below, which we also shared at mid-scheme. This prioritisation decision support framework will allow us to dynamically respond to external or internal environmental changes to the baselined business plan, help support our narrative behind any deviations to the plan and identify any support requirements in the interim.

Data and Information

Please refer to BP2 Mid Scheme Report 2023-24 Evidence Chapters (pp227-229) which provides evidence around how we ensure that data and information is easy to find, accessible and consistent in messaging.

NESO Policy

We continuously seek feedback and input from others on the breadth of work we undertake. We take a transparent approach where possible to decision making. We demonstrate this below with two specific case studies.

NESO Policy Case Study

Constraint Collaboration Project

The Constraints Collaboration Project was set up in January 2024 for us to work with industry on addressing issues associated with constraint management. Its initiation was prompted by several separate stakeholders talking to us about constraints and this led us to develop a more collaborative way of working on this challenge. Our approach was different because we took the problem to stakeholders and asked for their suggestions about how best to resolve the issue of increasing renewable curtailment, increasing constraints actions and therefore increasing balancing costs.

Initial participation in the project was high, with over 30 different ideas submitted to us for consideration. Through regular engagement, webinars, reports and bilateral meetings, we explored the potential of the different options suggested. We wanted to understand stakeholders' ideas, so our webinars were increased in length after their feedback and described as 'Show and Listen' meetings, where stakeholders spoke to us, rather than the other way around.

When it came to assessing the ideas, we used our existing Market Design Framework, which outlines the objectives of our markets and 10 principles any new market needs to consider. We did a preliminary assessment of consolidated options using this framework and then spent a day working through our assessment with stakeholders (in person and online). Based on their feedback and clarifications, we determined which ideas we could take forward for further system studies, detailed risk assessments and cost benefit analyses to fully appraise the options.

Throughout the more detailed investigations, we have regularly updated stakeholders and proactively contacted them when we needed further information from them about design features, investment cases, and technical implications. This included talking to broader industry stakeholders who didn't participate initially but who we recognised as potentially being affected by the different options (for example DNOs).

The result is that we've identified some options which we think can help to reduce the volume of constraint actions, which are also supported by market participants. These relate to some technical options to help increase the flow of power over a boundary and market-based solutions to reduce constraint costs. Importantly, this process has helped us to develop a clearer narrative for how we are approaching the issues of constraints and which we've had the chance to discuss and explain to stakeholders over the course of the year. Given the positive working relationship established (evidenced through positive feedback from the likes of ADE's Demanding More report, page 37), we plan to continue this project so that we are able to keep benefiting from a collaborative approach with industry.

For more detail on the project and to see how we maintained a transparent and open approach to collaboration, please click here.

NESO Policy Case Study
Clean Power 2030

In August, the Department for Energy Security & Net Zero (DESNZ) commissioned NESO to provide advice on how to reach its clean power by 2030 (CP30) target. This was a short programme, lasting three months.

Engagement approach

- To drive maximum impact given the programmes short timeframe, we decided to be targeted and strategic with engagement. Drawing on similar approaches used previously in system planning processes, we established stakeholder forums to capture a mixture of views over a short period of time.
- We targeted a representative sample of trade bodies, special interest groups and membership bodies and encouraged these stakeholders to collaborate with their members throughout the process. The purpose of this was not only to widen the pool of those engaged but to also expand the communication routes available to us to cascade information effectively.
- We drew on previous experiences of undertaking sensitive and widespread system planning exercises and ensured that we took a whole-systems approach to engagement. As a company we have previously received some criticism for engaging just with energy sector representatives. We therefore established a societal stakeholder forum which focused on listening and engaging with community, environmental and land use representatives.

Results

Our engagement timeline was as follows:

Stakeholder forum creation and engagement *September 2024*	We created two strategic stakeholder forums - Societal and Industry. Half-day sessions were held with stakeholders to keep them informed and seek input.
Written evidence window *September 2024*	A written evidence window was open to forum members and their own members (trade bodies & those representing members).
Stakeholder engagement forum *October 2024*	The two forums met again. Half day sessions were held with stakeholders to keep them informed and seek input.
Written evidence window *October 2024*	A written evidence window was open to forum members and their own members (trade bodies and those representing members).
Advice publication *November 2024*	On 5 November 2024 we published our advice here.

Throughout this period, we held ongoing strategic bilaterials and roundtables on specific topics and sought feedback and insight.

Overall, we engaged with 318 individuals from 124 organisations (65% energy industry, 20% societal delivery partners, 15% government organisations). There was a total of 247 methods of feedback collected, made up as follows:

- 114 bilateral meetings
- 91 formal feedback submissions
- 25 literary reports
- 12 engagement events
- 5 industry and society forums

Utilising best practice across NESO

- The approach we took to engagement throughout this advisory programme was well received by the majority and has now been applied to other NESO programmes.
- For example, the Strategic Energy Planning directorate has built upon the industry forum to create an Industry Working Group and has established a number of societal stakeholder forums with a range of interest groups who do not normally engage with the energy sector to feed into NESO's longer term system planning processes.

NESO Policy Case Study

Network Services and new markets for Stability and Voltage

1. Background

Since the launch of the very first Pathfinder tender in 2019, we have evolved our activities to the procurement of network services. The Pathfinder projects served as a crucial testing ground for innovative technologies and approaches to meet the operability challenges of voltage regulation, system stability and constraint management.

However, new markets for these services were required to provide investment signals to attract new build assets while also offering a route for existing assets to provide capability to NESO and deliver consumer value. Through engagement and collaboration between a range of stakeholders, we continue to develop and implement a new suite of markets to support the move to a clean power future.

2. Policy / Market design decisions and communication to stakeholders

Drawing on the insights and experiences gained from the early Pathfinder tenders, we committed to develop new stability and reactive power markets. This was initially done through innovation projects to collect feedback and evaluate options, followed by the implementation of new markets to replace the ad-hoc Pathfinder tenders.

Stability market:

Building on the success of Stability Pathfinders, we worked with consultants AFRY on a Network Innovation Allowance project called Stability Market Design[1]. We leveraged their expertise and knowledge of the energy sector and capabilities in product design and operational insights. This project set out to develop ideas and consider a range of options on the design of enduring stability markets to ensure we can operate a zero-carbon system securely and cost-effectively. These options covered areas such as eligibility criteria, pricing mechanisms, whether to procure on a regional or national basis as well as many others[2].

These elements were then shared with industry through webinars and associated documents on our website, which we publicised via NESO newsletters and social media, to gather feedback from as broad a range of participants as possible. There were a number of key themes that were raised from industry, which were then considered by NESO and AFRY to determine the merits of the options for the final design of the markets.

This project recommended the design of three markets – long-term (Y-4), mid-term (Y-1) and short-term (D-1), which reflects feedback from industry on a hybrid timeframe for the market to recognise the range of potential assets and their cost drivers. In addition, there was an ask to maintain simplicity where possible, therefore a national procurement for inertia services was favoured over niche regional markets for short circuit level which would add complexity for bidders.

Voltage Market:

Similar to the Stability Market Design project, we established an innovation project to explore the elements of a future reactive market design[3]. Working with AFRY and industry, several design options were developed that were then assessed to determine which aligned with the project's objectives and success criteria. The ultimate design of any new market(s) would be one that could be implemented to enable industry to offer competitive solutions and allow us to procure the reactive power capability required.

Engagement with industry has been a central pillar through the project lifecycle. This was done to ensure that the recommendation of any market design would be suitable for industry parties to offer reactive power services and deliver the success criteria of the projects.

For example, we hosted a webinar in October 2021, soon after the project started, to outline the problem statement that the project was looking to resolve, along with an overview of approach that would be taken to develop the new markets. Further engagement took place with industry into 2022, including workshops, to provide

[1] Stability Market Design | National Energy System Operator
[2] Stability market design – Design options and assessment
[3] Reactive Power Market Design

updates and gather further views and key themes to help shape the design of the markets.

The project concluded in July 2024 and delivered a market framework designed to meet the challenges faced by both NESO and providers. It formed the foundation for the way forward, towards the implementation of a desired end-state market solution.

Following on from this, a cross functional team within NESO was mobilised; including representatives from the control room, settlements and power system engineers, to build on the framework and work to develop and implement the new markets.

3. Outcome

Stability market:

The new stability markets have been implemented and the first year of the Mid-term Y-1 Stability market concluded in September 2024 with the awarding of 12-month contracts to five sites across GB to provide 5 GVA.s of inertia. These contracts are set to go live in October 2025 and will run until September 2026 and are forecasted to deliver consumer savings of around £47m.

The tender for year 2 in ongoing for delivery from October 2026 to reflect the Mid-term Y-1 market being an annual opportunity to procure inertia capability.

In parallel, the short-term stability market continues to undergo further design work and will be launched if significant benefits can be derived from this alongside the development of mid- and long-term markets.

Voltage Market:

At the time of writing, internal approval for the recommendation to implement a Mid-Term market is ongoing with communications to industry on next steps shortly thereafter. Multiple routes for communication will be used, including website updates, operational transparency forum update and if appropriate inclusion in the latest Markets Forum newsletter.

Stability and Voltage:

Moreover, we have recently launched the first procurement tender of the long-term (Y-4) stability and voltage markets for service delivery from 2029 onwards. This tender (known as Long-term 2029 or "LT2029") will simultaneously seek to procure stability and voltage services alongside restoration in attempt to leverage the benefits of some assets being able to provide multiple services and achieve the lowest cost outcome for consumers.

Other:

Beyond the development of new markets for stability and voltage, we have sought to take on board learnings from the go-live of contracted Pathfinder units and new technologies. Example of these include requiring units in the mid-term stability market to set a fixed H constant to deliver a set amount of inertia to ensure secure system operability, and reviewing the payment mechanism to reflect better understanding of how different technologies deliver the stability service.

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