

Balancing Programme

Events 2023 – 2025

Answers to your questions

Introduction

This document holds all the questions we have received during our Balancing Programme events. You can find out more about our events and what was covered in the Balancing Programme area on the NESO website – [Click here](#).

Contents

We have grouped the questions into themes to make it easier to view our responses. We will update this document regularly with responses to all the new questions we receive from our customers.

- [Dispatch Transparency](#)
- [Systems \(Balancing & Forecasting\)](#)
- [Markets](#)
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Dispatch Transparency

Received	Question	Answer
18 Nov 25	Optimisation within a constraint 2026 – will this mean you could provide skip rates for assets behind a constraint?	Yes, we are currently developing a methodology for skips behind constraints and will be sharing that with industry in January. If there is broad agreement with the methodology, we will then look to implement it

Public

18 Nov 25	How do system operating plans (SOPs) & scheduling feed into dispatch? Does SOP feed into the National Dispatch Optimisation (NDO)?	<p>We use the decisions in the SOP covering syncs and desyncs as an input the NDO.</p> <p>This is a manual process</p>
18 Nov 25	When optimising behind a constraint, how do you avoid being gamed by asset operators in that constraint area	<p>Thanks for the question. We have a market monitoring function which monitors behaviours and can report suspicious activity to Ofgem. In addition, market participants can also report suspicious behaviour to the market monitoring function. Our system operations function will be starting an operational review on how to best manage constraints following concerns raised around consumer cost.</p>
18 Nov 25	What are the primary reasons for Skipping of assets in balancing? There are substantial differences between some BESS Optimisers' Skip Rates and it's not clear why.	<p>There are several different reasons for skip rates including and not limited to the following: Zonal allocation, mandatory frequency response holding, BOA rejections, difference between optimisation and how we measure, management of operational risk, asset technical parameters.</p>
16 Sep 25	Now that emergency instructions are now being mastered in OBP, can we finally have more specific real time dispatch transparency on them?	<p>Control engineers can now issue emergency instructions using OBP. These instructions are sent from OBP to the BM and will only be sent directly from OBP to market participant control points once the EDL/EDT transition has completed. All emergency instructions are informed to the market using the Balancing Mechanism Reporting System (BMRS) and operationally are logged there as soon as is reasonably practical.</p>

Public

24 Jun 25	With the RTP are we going to be able to see "real" demand rather than TO demand?	The Real-Time Predictor will initially replace the Demand Predictor within the control centre. It will continue to operate at TO demand. Further work would be required to implement changes on the demand curve due to distributed energy resources, and this will be considered as part of our Beyond 2025 workstream.
24 Jun 25	If you are managing constraints can you share constraint information with the market? Or require the TOs to share information – in line with REMIT?	We do share Day Ahead constraint data now. If more information was required, we would expect there to be industry consultation first to agree the details.
24 Jun 25	OBP should result in a more neutral consideration and dispatch of different plant by NESO. How does this affect the nature of instructions to participants and how these are reported to Elexon for use in Imbalance calculations (which currently differentiate how BOAs and BSAs are processed)?	<p>It is true that BSAs would now be within OBP – OBP has the concept of a "unit" and some can participate in the Balancing Mechanism (BMUs) and some are outside of the BM (NBMs). If new rules are agreed for how to publish data OBP can be adapted to do this. We have the flexibility to publish data in different ways.</p> <p>Our C9 license statements detail what we will report to Elexon and we have recently updated these for the start of the nBM QR service.</p>
24 Jun 25	Are the upcoming updates in optimisation behind constraints expected to address skips behind constraints? How Control Room is making sure batteries are dispatched behind	The optimiser will choose the most economic service to manage a constraint. The responsible desk is determined by where the constraint is on the system. .

Public

**constraints- North desk or
Battery desk?**

Data from GC0166 will help to make longer term decisions on the use of batteries.

18 Mar 25

Can you say a bit more about what a trading agent is, will it have a formal definition of the role in the BSC or is this just an internal NESO function ?

The Trading Agent is the party responsible for sending the EDT data to NESO. This is described in the Grid Code and Balancing and settlement code.

See BSC Section Q: Balancing Mechanism Activities - Elexon Digital BSC for further details.

At NESO we refer to the BSC Party responsible for sending EDT data (PN, MEL, MIL, BOD) as the Trading agent

The BSC party responsible for sending EDL data to NESO (Dynamic data, MEL, BOD) and receiving Instructions from NESO as the Control Point

18 Mar 25

Does the instruction include the change of Bid Offer level & cost? or does it assume There is only one price? Is the instruction is a fixed price agreed at tender?

Only the Availability price is agreed at tender under Pay as Clear. The Utilisation price is declared as part of the Availability declaration and will be the (utilisation) price used for the costing of the instruction.

6 Mar 25

Does the dispatch efficiency monitor consider the consequences of (for example) synchronising a CCGT hours ahead of real time to cover uncertainty? The

The Dispatch Efficiency Monitor is consistent with the LCP methodology.

CCGTs with a long notice period (MNZT, MZT, NDZ >= 31 minutes) are excluded at Stage 5, so the stage 4 skip rate includes these units. The skip rate for all

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stage 5 LCP skip tool does not consider actions like that as possible skips.

stages is published in the summary dataset on the data portal.

For more information see the Skip Rate Methodology and Implementation Guide accessible [here](#).

27 Nov 24 **Re: BM and NBM – what does optimising them together in the control room mean? And what’s the value to NESO keeping these distinctions?**

NBM and BM follow different rules and integration (such as Open Instructions v Closed BOA, “All or Nothing” v MEL/SEL). Within OBP, we will look to harmonise the units so that OBP will treat them equally within the process but when communicating to providers, will do so in the manner that is needed. Initially, the migration of NBM (from ASDP) and BM (from the BM system) will need to maintain the separation, but OBP will move to an agnostic and harmonised approach when possible.

27 Nov 24 **Do you have a day and time for publication of the LCP skip rate report? (Should we expect 5pm on Friday?)**

At the time of publishing the Q&A, the LCP report has now been published on the NESO website and can be accessed [here](#). You can read more about skip rates [here](#).

27 Nov 24 **Are there any plans / reviews/ updates to remove the zones ? The arbitrary split of battery and small BMU zone seems unneeded now with your automated tooling + the fact the prices are higher based on which one you are in seems a worse outcome overall for consumers.**

We have identified this in our backlog for beyond 2025 once we have fully transformed to the Open Balancing Platform. Currently we have to send data between the two systems and we need to break that link to do this work.

27 Nov 24	You are creating an entire new interface for OBP/ASDP with A LOT of changes - the overwhelming feedback from MPs has been to not do this on SOAP. If you are planning to change this in 2026, we need a very good reason for why MPs are going to have spend huge amounts of time/ money just to redo it – (thoughts?)	As a programme we committed to honouring existing interfaces in order to ensure we continue to deliver on our regulatory commitments and customer requirements detailed in our Markets Roadmap (e.g., new reserve and response products) – changing the interfaces now would likely cause a delay in these services going live. We will undertake a review of our interface requirements in the next regulatory period in 2026.
27 Nov 24	Can we expect more non BM dispatch from Summer 25 with the upcoming optimiser?	This would be subject to Control Room operational usage for NBM Quick Reserve and Slow Reserve from September 2025. OBP would facilitate the Control Room to making those decisions and the benefits that OBP has already delivered for the battery and Small Zone will be afforded to NBM.
27 Nov 24	Will sFFR be migrated from ASDP to OBP along with Dynamic Response?	Static FFR is not managed through ASDP or OBP currently. The procured amounts of static FFR will be communicated still to operators to maintain situational awareness
27 Nov 24	Are there plans to make the additional forecasting data available to the market via BMRS? Such as the higher interval forecasts, more zonal data or the ranges given by the ensembles?	<p>Thank you for the suggestion we will take it away and see how/when we can implement this</p> <p>As part of our requirements for Electricity System Restoration Standard (ESRS) regional demand data will be made available on BMRS. However, the NESO Data Portal is our platform for publishing additional supplementary data. This could be an interesting topic for our next Forecasting Forum to pick</p>

Public

up the value and benefits associated with sharing specific data so that we can prioritise this internally.

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| <p>27 Nov 24 When will the extra resource in the control room to reduce battery skips as committed to in last month's round table become permanent? As just heard the resource is not yet there for every shift?</p> | <p>We have undertaken a recruitment process and some engineers are still training. We are covering the need for battery despatch over the most needed times of the day, which for winter are morning demand rise and evening peak. We will optimise resource to meet the needs of the system which may mean at times 24/7 or extended 12-hour days. We expect engineers to have completed their full training in early spring.</p> |
| <p>27 Nov 24 Will moving BM registration to the SMP remove the fixed cadence we currently have with the SORT registration process?</p> | <p>No, the move to the Single Markets Platform (SMP) will not change the cadence of SORT Static. This activity is included in the schedule of work which coordinates the update, maintenance and improvement activities carried out to support the suite of Balancing Mechanism systems.</p> |
| <p>27 Nov 24 Currently, what are the barriers to getting export and import 5 minutely battery outturn data similar to pumped storage? Is this something we can expect at some point?</p> | <p>We are presuming this question is in reference to data published on BMRS here: https://bmrs.elexon.co.uk/generation-by-fuel-type. The basis for the production of this data is the primary fuel type data field. In the case of batteries these are contained within "OTHER" fuel type in the generation by fuel type. We have had previous questions on this subject and are</p> |

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looking to include a category for batteries.

We are developing the implementation plan to ensure the successful implementation of the expansion of fuel type categories available for the Balancing Mechanism and in Elexon data. We appreciate you would like to see this change made quickly but we need to clearly understand the impacts on downstream datasets, systems and tools before we make these changes. We will update at the OTF when we have the timeline for delivery.

27 Nov 24 **Will the improved optimisation in SORT (for next hour) also be applied to SPICE (longer term)? Will this then be migrated into OBP?**

National Optimisation in OBP will look at dispatch timeframes initially. Any advice which may impact scheduling decisions will be fed back into the scheduling process. In the first instance this will need to be a process change. As SPICE is replaced by OBP we will be considering a scheduling optimisation capability. This aligns with our Beyond 2025 planning which is currently underway.

27 Nov 24 **Is there any merit in publishing live constraint data in order for the market to help relieve a constraint before it becomes an issue for the control room?**

We are currently undertaking a review of the data we can make available to the market to improve dispatch transparency and will feed this into that review. In addition, this suggestion will be fed back to our Markets team who are currently undertaking a Thermal

Constraints Collaboration project,
further information available [here](#).

26 Sept 24 **Do any of the algorithms optimise an instruction across multiple zones, or do they all optimise within a particular zone?**

Currently, BM's Legacy Dispatch Algorithm (LDA) optimises across multiple zones and provides a cost-optimal power and response loading of each Balancing Mechanism Unit (BMU) to balance generation and demand whilst satisfying constraints and response. This advice is then aggregated to a zonal target in the BM which is also transferred to OBP. OBP provides capability to run an optimisation to meet the zonal target, bulk instructions are created and sent automatically to the selected units. In 2025 a new National Optimiser will be built in OBP which will replace and improve the LDA functionality.

26 Sept 24 **Is the merit order used for constraint management purely based on pricing? Are there any other factors considered or co-optimised (BMU technical characteristics)**

The effectiveness of a BMU on the constraint has to be considered. For instance, if one BMU is twice as effective on the constraint compared to another one but isn't twice as expensive then it could be taken ahead of the unit which appears lower on the price stack.

26 Sept 24 **What impact do you expect the changes to LDA for the battery zone will have on dispatch rates for battery in the BM?**

Previously the control room have been manually estimating zonal targets for the battery zone as advice has not been available, which can be challenging. The LDA changes we are implementing in October will provide the control room with a cost optimal solution to follow.

What net impact should changes to LDA for the battery zone have on dispatch rates for batteries in BM? (expect some situations a manual calc is feasible, some not).

Given the output of the advice currently is manually adjusted, it is difficult to accurately forecast the impact on dispatch rates of the improved advice, but as this change will reduce manual calculations and support improved advice across all zones, it will contribute

to improvements in overall dispatch efficiency.

26 Sept 24 **Encouraging to see the reduction in the number of voided instructions. Is compliance with the ramp rates the main reason for these voided instructions?**

In part – there are multiple reasons for this, but fundamentally, the need to start and stop on an integer MW or minute drives this. It could be the declared ramp rates that we would need to honour, but also that a unit may be already ramping with a completely different rate.

An example could be a unit may have a profile where its PN is slowly changing 20MW over 7 minutes. There is no point where the unit is at an integer MW during those 7 minutes. By shifting the start/end point to fit, it may mean that there would be a breach of Minimum (Non) Zero Time which would lead to voiding.

The instruction remediation work has removed much of these issues to the extent that we have <0.1% void volume.

26 Sept 24 **What improvements are taking place alongside the systems change to report the costs by constraint boundary as the Monthly Balancing Services Summary (MBSS) is too high level.**

There are other publications of our cost data and breakdowns of costs. A more detailed breakdown of constraint costs based on significant boundaries can be found by clicking [here](#).

We are always wanting to improve our accessibility to data and visualisations. We will provide updates to these datasets when possible.

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26 Sept 24	<p>There doesn't appear to be any updates in the presentation pack on the LCP report reasons for delay and updated timeline.</p> <p>When will the LCP analysis on skip rates be published and will the data be refreshed to be up to date?</p> <p>I believe ESO is seeking to get a better views of skips in real time themselves (rather than ex post assessment) in the control room, any progress on this</p>	<p>In July, we announced a delay to the publication of the independent report on skip rates, due to the knock-on impacts of complications with data processing by our third-party provider.</p> <p>Since then we have continued to work closely with LCP Delta to ensure that an updated report and suite of findings can be presented to the industry as soon as feasible. Additional data validation and report assurance activities continue to take place.</p> <p>We understand the level of interest in the report and apologise for the inconvenience caused by this delay. The methodology is due to be demonstrated to industry during the week commencing 04/11.</p> <p>The actual date and time will be advertised at the OTF on 23/10. This initial session will be to explain the methodology employed by LCP to determine skip rates. It will be an MS Teams event, and the expectation is that it will be 45 minutes.</p> <p>An expressions of interest will also be circulated at OTF on 23/10 giving 2 weeks to register.</p> <p>Queries can be sent to .box.battery-storage-strategy@nationalgrideso.com and Box.Battery-Storage-Strategy@uk.nationalenergyso.com.</p> <p>We will be publishing the full report in November following the webinar.</p> <p>We are continuing with all other initiatives to drive down and understand root causes of skips. This includes improvements to dispatch algorithms, delivery of live dispatch efficiency tools and bolstering the headcount within the</p>
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Public

shift Energy teams in our control room.

26 Sept 24	Is there an update on the resourcing in the control room (extra people) that are supporting the control room on the skip rate issue?	We have undertaken a recruitment campaign recently, and new full time-time engineers have accepted roles within the control room. In addition, we have agreed internal secondment opportunities to the control room, Individual start dates are a bit flexible and are tailored to training and business release dates.
27 June	With respect to constraint management - if an asset is in a constrained zone and marked as 'in constraint' what does that mean? e.g., would you take bids but not offers?	It means that if it is an export constraint we won't move the unit up, and if the opposite, we won't move the unit down. We take into account the direction of the constraint. The demand pattern may mean the constraint is temporary - it is determined in SORT.
27 June	Please can you talk through the changes that have increased the volume and number of system-flagged actions being delivered by batteries and how this might change in the future.	Thank you for your question - we are currently looking into this and will provide a response shortly.

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| 27 Mar | For the planned Non-BM dispatch functionality, how will real-time dispatch transparency be shared? | <p>We are working on the “Discovery” stage of non-BM onboarding roadmap, in line with the rest of the OBP Roadmap. Further details will be shared once the functionality and integration are finalised.</p> <p>For current system dispatch, ASDP instructions are published on the Data Portal within 1 minute. We expect to publish similarly when issuing instructions using OBP, but subject to Discovery. We also have our Operational Transparency Forum which can be used to answer questions on dispatch of non-BM assets.</p> |
| 27 Mar | When will arming instructions be published from a transparency perspective? | <p>We have started to publish inter-trip arming data on the portal since 2 weeks ago. The data is located here https://www.nationalgrideso.com/data-portal/constraint-management-intertrip-service-information-cmis</p> <p>The files are updated monthly.</p> |
| 27 Mar | Wasn't the LCP analysis due in December 2023? Please can you explain what has delayed this so much? | <p>LCP analysis phase 1 was due to complete in December and has been completed. We are continuing to work with LCP Delta on a second phase of the analysis to ensure the methodology is consistent, its more granular, and includes essential operational data. The methodology has been going through an iterative validation process with our data scientists and Control Room teams over the last couple of months and will be published in May based on a revised plan of delivery with LCP Delta. In addition, key resources within the ESO have been focusing on other industry priorities including GC0166 and the change of the 15-minute rule to 30 minutes which have impacted this delivery.</p> |

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11 Dec	Will small BMUs be scheduled for, e.g., the evening peak, then dispatched using bulk dispatch.	If small BMUs are in merit then they will be scheduled and then dispatched using OBP. The Control room have all had training and have been asked to use OBP as their first dispatch tool for both the Small BMU and Battery zones.
11 Dec	What is the timescale for implementing any changes following the Dec 15th MEL/MIL guidance?	We aim to publish this guidance on the w/c 19th December. This is slightly later than originally planned as we had to include EDT guidance too, following feedback from stakeholders.
11 Dec	What testing has been done to ensure that the BMRS and other transparency platforms can handle the ~100x increase in BOA data, given they're already struggling with MELS?	Testing was undertaken with multiple software providers of the EDT/EDL, market participants, and also with Elexon.
11 Dec	How many ZBEs are there now and what zones/geography does each look after?	There are two Zonal Balancing Engineers (assistant National Balancing Engineers) and one National Balancing Engineer. The Zonal Balancing Engineer south dispatches the South Conventional Zone, South Wind Zone and the small BMU zone. The Zonal Balancing Engineer North dispatches the North Conventional zone and North Wind zone. The National Balancing Engineer dispatches the pumped storage zone and the Battery zone (both these zones are national).
11 Dec	With so many BOAs published, will the Operational Transparency Dataset still be kept up to date with Alternative BMU actions?	Yes, we don't anticipate any changes to the existing transparency dataset due to OBP go-live.
28 Nov	From Summer 24 will all wind BMU be instructed to follow PN when necessary, or just those in a particular zone / region?	We don't intend to change the way we manage wind BMUs from an external standpoint. Our release in 2024 is designed to alleviate workload in the control room by automating the actions they take now.

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28 Nov	How will the Fast Dispatch functionality (expected Spring 2024) impact on battery dispatch?	Fast dispatch provides an enhanced optimisation algorithm targeting the flexibility of fast acting units. This will enable the National Balancing Engineer to manage frequency control using OBP in the first instance and will replace functionality currently provided by Vergil.
28 Nov	Can batteries and small BMUs in new zones be filtered by location to manage constraints from 12 December?	All units within a constraint boundary can be identified by a price stack within the current BM systems. If units are tagged as system within a constraint OBP will be made aware of these and will not dispatch those units.
28 Nov	More detail on the scheduling of storage would be helpful	We currently do not have visibility of battery reserve and do not have bulk dispatch capability. We are delivering bulk dispatch and in parallel are undertaking some quantitative analysis to enable the ESO to schedule reserve on batteries based on historic performance. This policy change will go-live once approved and close to the time of OBP Bulk Dispatch going live. A system change has been implemented in the BM to enable scheduling of some storage.
28 Nov	Can batteries be used for constraints management by August 2024?	Yes, they can be. If units are behind constraints, they can be tagged as system and excluded from optimisation. However, there is the opportunity to issue manual instructions.
28 Nov	Can control room still dispatch batteries that are in OBP zones manually?	Yes, they can. All assets can still be dispatched via SORT.
28 Nov	It is a fact that energy data transparency leads to more efficient system & lower costs to consumers...what is ESO doing now to release OBP data real time?	All instructions sent from OBP to BM and on to market participants are published on the BMRS system. The programme continues to be as transparent as possible publishing information on our website and via these engagement

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events. If there are more specific requirements, please provide your feedback and we will consider this.

We will consult internally around future data transparency plans, e.g., for NBM data.

28 Nov	Will you publish which BOAs were submitted by BDO vs manually?	The systems involved do hold confidential data and are part of Critical National Infrastructure. We will consult internally around future data transparency plans including this request. Thanks for the feedback.
28 Nov	Demystifying dispatch: could you publish “requirements” as generated by LDA and as fed into BDO? Real-time ideally, ex-post would also be valuable.	The systems involved do hold confidential data and are part of Critical National Infrastructure. We will consult internally around future data transparency plans including this request. Thanks for the feedback.
15 June	Great stats on increase in battery dispatch. Is it possible for future updates to include comparison with other technologies (e.g. CCGTs) and perhaps MWh/MW?	Very good suggestion, looking at what can share and overlay. And sharing in other forums. Any more suggestions let us know.
15 June	How does the NBE construct programmes for tech grouped zones (Small BMU/BESS) when either zone could flex more or less? Isn't that is what the BDO is designed for?	The current Balancing Mechanism (BM) System has a despatch algorithm which calculates the programmes for each individual zone. The despatch algorithm runs every 5 minutes. The National Balancing Engineer (NBE) checks the programmes and then issues them to the Zonal Balancing engineers. Once the programmes are accepted by the Zonal Balancing Engineers, they will then transfer automatically to OBP. The Bulk Despatch Optimiser will sit in OBP and will develop an optimised set of BOAs which are automatically sent back to the BM systems. They are then issued to the BMUs via EDL.

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15 June	<p>How do you consider long actions such as warming thermal plant with respect to skip rates? Pre-procuring headroom means flex doesn't even get chance to be skipped.</p>	<p>We are very careful with our decisions to either warm or stand down coal units. Prior to warming coal units, the availability of flexible units is considered in the System Operating Plan and can be used to reduce reserve requirements in scheduling timescales. Warming coal may take place up to and beyond 12 hours ahead of real-time and invariably there are occasions where changes can occur via forecasts, redeclarations of BMUs or on the hourly intraday gates which influence decisions closer to real-time. There have been occasions where coal has been stood down and subsequently flexible units have also redeclared their availability down prior to the peak. This is a risk which needs managing and can result in running higher cost units in contingency or Short-Term Operating Reserve to maintain margins.</p>
15 June	<p>NBE has more advanced tools for dispatching – can you elaborate</p> <p>Expectation of industry that batteries are going to be dispatched more efficiently. Worried that batteries will be ignored if not in Small BMU Zone</p> <p>Follow up question – hopefully better with multi dispatch</p> <p>Want to see a more efficient utilisation of storage</p>	<p>A decision was taken earlier this year to move the batteries into a separate zone on the NBE desk, with the intention of improving the despatch of the batteries. The NBE uses an additional tool Vergil which has also been developed this year to enable more efficient despatch of batteries. This despatch performance of batteries has improved with these changes. Following feedback at our latest Industry event we have agreed to prioritise inclusion of the battery zone in the OBP December release, however this is a stretch target for the team and we will confirm in the months ahead.</p> <p>Based on our experience from previous deliveries and in-line with our agile methodologies, our aim is to deliver value early and incrementally, in order to prove that our solutions meet</p>

required outcomes in the most efficient and cost-effective way.

15 June	The skip rate figure considers limitations in tools available to the Control Room like valid reasons (not a skip). This definition completely misses the point.	We do recognise this feedback and the limitations both in the systems and in how this is reported. We are talking around the 10% of actions where the dispatch transparency dataset has a code allocated or not.
	We understand human errors happen but care about improvements to ensure dispatching is in merit order. Can skips be redefined to reflect the reality? The quoted 0.4% is not what is going on.	We will be engaging further on how we explain our actions and any updates to the dispatch transparency dataset and reason codes to be more transparent in this space.
9 Feb	Do you have any stats on how effective the recent changes made have been on reducing skips rates – especially for batteries!	We do not currently have stats on this. Our dispatch transparency dataset tracks the number of unallocated skips – from October we’ve seen between 0.4 and 0.3% of actions which are unallocated reason codes. We do not break this down by technology type. To be clear, we are seeking to reduce unallocated skips, there will likely always be occasions when we will need to take actions out of merit depending on the operational situation.
9 Feb	Can we change the definition of a skip to cover reasons under Frequency – time to make decision, complexity of decisions and efficiency of dispatch process?	Thanks for the feedback, we will this away and will try to make the terms we use for the classifications more specific and try to explain logic behind skips in more detail.
9 Feb	There is a miss match between industry’s definition of a skip vs ESO’s definition of a skip. Can we provide additional narrative?	We will continue to publish reason codes for action out of merit order – our regularly reported evidence 2E in our monthly report has between 0.3-0.4% of actions taken out of merit which do not have a reason code assigned.

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9 Feb

Skip rate explanations are qualitative. Tesla would like more objective, measurable metrics around skips. They believe that 70% of actions outside of merit order are marginal and could be interpreted as skips.

Over the next financial year, we will work to provide additional information and clarification on our despatch decisions and resulting actions.

In the September example, 3 of around 2700 total actions did not have a reason code assigned. Providing specific additional narrative against this small number of actions is resource intensive and outweighs the benefit we believe would be achieved.

We'd welcome additional ideas for metrics that would be of use to the industry so please do engage and give us your ideas. We'd like to understand what additional transparency you'd like to see and the benefit behind this for the industry.

Our new platform will give us auditable reasons for some of the actions taken (documented, logic based bulk dispatch decisions). Moving towards this means the reasons are captured at the time of the decision, providing greater insight into dispatch decisions.

Systems

Received	Question	Answer
18 Nov 25	How do you group units in areas of responsibility – what criteria do use & does it change ? Can zone assignments be public? How	OBP will allow units to be grouped dynamically using filters once decoupled from the BM systems. This can then be used to manage workload more efficiently across dispatch desks. With the

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	does scheduling break down – to units or zones? Does it relate to any actions to the market?	introduction of areas of responsibility, the concept of zones can be removed in the future as this a legacy system concept.
18 Nov 25	When do we start thinking about coordination with distribution system operator (DSOs)?	We are working with some DSO with the implementation of MW Dispatch. We have also spoken to representatives from the Market Facilitator on the use of standard APIs.
18 Nov 25	When will NESO be providing industry with the technical specification for GC0166 related data (MDO, MDB, FSOE models) & business logic docs?	For MDO/MDB a new version of the Data Validation, Consistency and Defaulting rules was released with the GC0166 Work Group consultation. A new EDL message spec is being prepared. FSOE models are one off and will be discussed with each BMU.
18 Nov 25	The future of BESS is NOT small and distributed, it is large and transmission connected – How are you preparing for this?	Scaling OBP, implementation of GC0166, continued investment in our infrastructure and bulk dispatch capabilities. Transmission level connections as pointed out here aren't a challenge and we have built for the future to fully integrate smaller flexible units as well as larger units. Continuing work with industry and the market facilitator to ensure we are fully prepared.
18 Nov 25	How will GC0166 help with scheduling?	The FSOE model will be used to help with scheduling – it allows NESO to estimate the effect of moving Limited Duration Assets of future scheduling decisions
18 Nov 25	Lack of dates on scheduling timeline – why is this?	Currently under discovery, we have added the dates for major milestones in our business plan but to further explain the work to achieve these we have added interim steps which are currently under discovery. They may be completed in parallel or a different sequence which will

		be determined following completion of discovery.
18 Nov 25	How does the Volta Grand Optimiser work fit into the roadmap around dispatch optimisation?	The Volta Grand Optimiser is an innovation project looking at future state of the art options for the whole end-end optimisation process. The project will first provide a design. We may then consider proof of concepts or building within our production systems depending on the outcome of the innovation project.
18 Nov 25	Are there any interdependencies of deliverables? For example, EDL/EDT migration & GC0166 Grid Code change implementation.	There are quite a few dependencies in the plan to enable us to start the EDL/EDT transition. For instance, OBP strategic needs to be proven in the control room, all instruction functionality needs to be available and used including voltage dispatch. The EDT & EDL network and software changes need to be completed. However, the delivery of GC0166 is decoupled from the EDL/EDT transition to smooth our delivery.
18 Nov 25	What are the difficulties running OBP & BM alongside each other from an efficiency point of view?	Currently the control room must work with both legacy systems and OBP in parallel which can make it challenging operationally. As legacy functionality is moved across and new tools are built it becomes easier as situational awareness is improving and more automation is built into the processes which helps improve control room efficiency.
18 Nov 25	Will non BM units be punished/skipped for unavailability in the new system ? Eg if it's a behind the meter asset that needs to manage local network constraints during some days (hence unavailable) and	If the units are available in OBP they will appear within the National price stack, if they aren't available then the wont. They will be dispatched based on their availability and price.

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other days is available for an aggregator to optimise

18 Nov 25	<p>What is the long-term plan for PEF - will it continue to be run in parallel with OBP?</p> <p>What is the difference between scheduling & forecasting? Going forward do they merge?</p>	<p>We will integrate PEF with OBP in early 2026 but both platforms will continue to run in parallel, PEF will provide forecast data to OBP for use in the scheduling and dispatch process. Forecasting refers to national demand, wind, solar and Grid Supply Point forecasting whereas scheduling refers to creation of a secure and economic plan which can be delivered by the energy team.</p>
16 Sep 25	<p>Thanks for the note on SR delays. Can we get an early indication for when MPT can begin? And on that, when can the Ofgem response be expected?</p>	<p>There will be a further update on our slow reserve service from our Markets team in early October.</p>
16 Sep 25	<p>Can I please clarify whether the maximum delivery volumes and maximum delivery period, as they appear on BMRS, are currently being used by the control room for BESS assets or whether those parameters will be used as part of the GC0166 changes?</p>	<p>MDV and MDP cannot handle bi-directional assets and will be removed as part of GC0166 and replaced by MDO/MDB</p> <p>We use the 30 minute rule now that depends on MIL/MEL</p>
16 Sep 25	<p>For GC0166, do MDO and MDB parameters allow ramp values and will the control room be able to handle these? For current MEL/MIL values with the 30 minute rule, we have been advised that ramps (although theoretically possible) risk the OBP dispatch optimiser not working correctly.</p>	<p>MDO and MDB do allow ramps and Instructions issued within OBP will continue to observe ramp rate and other dynamic parameters.</p>

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16 Sep 25	For clarification, will all performance files for D* services migrate to the new interface being used for Quick reserve phase 2?	<p>In relation to NBM Dynamic Response performance and settlement metering related data – these remain integrated via the NorTech iHost and NESO STAR interfaces. Please reference the NBM-OBP Interfaces Integration slide presented during the webinar.</p> <p>Essentially, interfaces that are pointing to ASDP (WS02), will need integrating to OBP.</p>
16 Sep 25	Is PEF data currently being published? If not, when will it be?	<p>The new Restoration Regional Peak Demand Forecast as part of the Electricity System Restoration Standards (ESRS) have already been deployed and are published to Elexon from PEF 3 times a day.</p> <p>Other published data is currently fed via different tools including EFS and BM to Data Portal and Elexon, some of which originates in PEF. As part of the decommissioning work for EFS we are actively decoupling these from the legacy tools and will provide them directly PEF.</p> <p>The first of these will be the Wind BMU forecasts to Data Portal, followed by European Transparency Regulatory (ETR) reports to Elexon and a raft of others over the next 6 months.</p> <p>There will be no changes to the data structure or how it is accessed.</p>
16 Sep 25	Just to confirm, did you say that new BMUs wouldn't be able to onboard during the Jan-Mar 2026 transition?	<p>As part of the onboarding process there is a step to register and update the BMUs within our current balancing systems. This update runs every 6 weeks today and we are planning the transition to happen between 2 such updates. Therefore, you can start the onboarding process as</p>

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today and your overall registration should not take longer than it does today.

16 Sep 25 **Can you please explain more about what the OBP real-time predictor entails and how it works**

The Real-Time Predictor (RTP) is a new capability within the Open Balancing Platform (OBP) that delivers faster and more accurate national demand predictions. It uses live operational metering data to calculate minute-by-minute outturns, which are then processed by two prediction algorithms running in parallel to produce demand predictions up to 24 hours ahead.

Users can view and refine these predictions through a dedicated screen in OBP, comparing them against historical data and providing key adjustment points. In the future, RTP will also feed predictions directly into the National Dispatch Optimiser (NDO) to further support real-time balancing decisions.

Existing Demand Predictors use Box-Jenkins algorithm – we have replicated similar algorithm on OBP and aspire to add new machine learning algorithms in future.

16 Sep 25 **Regarding the EDT \ EDL to OBP update. Are you still on track for an EDT FTP test server being available from 24th September?**

Yes – our latest update is that we will be ready for that. However, we will keep you updated 1-2-1 if this changes.

16 Sep 25 **Can you confirm that ASDP decommissioning has moved to early 2026? Does this include decommissioning of ASDP for D* as well, or will that be earlier than for STOR?**

Yes, decommissioning of ASDP has moved to early 2026. We need to maintain ASDP for issuing non-BM STOR which will be kept available until Slow Reserve is implemented.

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We are targeting the migration of dynamic response providers from ASDP to OBP in the coming months. As discussed today, non-BM MPT will begin in October and the final cutover will take place in January 2026.

16 Sep 25	How does bulk dispatch work for actions that might cross a period boundary? Or does it have a hard constraint that they can't cross?	It wouldn't be used in those cases – that is why we continue to develop our optimisers which take this into account.
16 Sep 25	GC0166 testing: will you need the timestamps for when we would have *sent* the updated MDO/MDB parameters as well as the time it is *for*. As we may well be updating MDO/MDB after receiving a BOA post Gate Closure.	Yes, we are simulating real time experience so would expect to have the relevant timestamps of when data was “sent” and when it would have been effective from. In our sharing of the results of this PoC to our wider customers we will be explicit in data definitions etc.
16 Sep 25	GC0166 testing: Do participants have to submit FSoE? My understanding of the proposed mechanism in the GC0166 text is that this would be calculated by NESO (not providers) based on asset models and current SoE?	This is correct that NESO will be calculating Future State of Energy. We are asking as part of the proof of concept that participants provide additional parameters e.g. upper and lower SoE, but we are not asking for Future State of Energy.
31 Jul 25	If no Heartbeat signal is received , does it mean no availability for all DR services or no availability for all NESO services	Heartbeat message is for the whole NBM unit, not per service. Hence if no heartbeat signal is received, we assume the NBM unit is unavailable for all services. We ignore the “Service Type” present in the message.
31 Jul 25	Will there be a sandbox available for OBP endpoints for dynamic response?	It will be available from September when we begin Market Participant Testing. Contact contract managers & the

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Balancing Programme for any queries regarding NBM Market Participant Testing & Migration

commercial.operation@neso.energy / box.balancingprogramme@neso.energy

31 Jul 25	Do these availability declaration only apply to NBM, because if you are a BM unit why do you need additional declarations? For NBM, presumably they are automated?	For Reserve services (QR & SR), Availability Declaration applies to NBMs only. But for Dynamic Response service, we expect an Availability message only if/when the BM or NBM unit is "unavailable" for Dynamic Resp services for any period. If there is no Availability message (to declare "unavailability"), then we assume the unit will be available as per the contract
31 Jul 25	When can we expect the business logic document for dynamic response services under OBP to be published?	Document will be published mid- August.
31 Jul 25	Since these are purely IT changes, can MPT be completed on a "per IT solution" basis, instead of per market participant or unit?	Yes, MPT will be done per service - Reserve (QR+SR) & Dynamic Response for each market participant. It is not per unit We are happy to test the IT solution with the software providers however every market participant has to do Market Participant Testing (MPT) per service as part of their Pre-qual process.
31 Jul 25	Do we think the timing is sensible given - people are still trying to make connection applications, the CM pre-qual has been delayed and AR7 is running?	This changes and services targeted for parties who are already interacting with the current balancing systems - ASDP and BM. This is related to Balancing programme and not other NESO programmes.

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| 24 Jun 25 | How easily will OBP dispatch & optimisation functionality as is pivot should we end up in a zonal market? Or will it set back the programme materially? | If a decision was taken to implement a zonal market then this would affect the Balancing Programme. A detailed system impact assessment would be required. We would likely need to change some microservices and build some new microservices but it would not materially affect the platform itself. The platform is agnostic to market design and is flexible and adaptable to changes. |
| 24 Jun 25 | What steps are NESO taking within OBP to harmonise the terms and conditions for each service being provided by all market participants – so that BM and Non BM units follow exactly the same T&Cs – otherwise NESO gets a distorted price stack if parties are providing the same service on different T&Cs | We do not anticipate any particular distortion from the current design but will always keep it under review. This has been the case for other services with mixed participation e.g. STOR or Dx response services. |
| 24 Jun 25 | The Balancing Programme is introducing improvements to how forecasting and planning is performed by NESO. Are these improvements reflected in NESO's provision of Loss of Load Probability data for Imbalance Settlement? (edited) | The improvements to forecasting are two-fold, firstly to increase accuracy of the forecasts, but also to reduce the manual activity and workarounds that exist today. |
| 24 Jun 25 | How might options being considered by REMA affect delivery of BP or more likely how much might BP need to change post delivery to accommodate REMA options? Eg zonal markets, lower participation thresholds (from 50 to 10MW), shorter ISP etc? | OBP is designed using microservices which makes it easier to make changes. We don't yet have details of what will be needed for REMA but if we had to use a new optimiser or receive and send new data the current design makes this easier to accommodate. |

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24 Jun 25	With the planned BMU growth are there any plans to obsolete the very expensive MPLS "cornerstone" of EDT/EDL? For example, promote Wider Access API as an equal alternative?	We have a plan in the new regulatory period to promote Wider Access API and bring it into our system via our new Secure Internet Gateway. However, we will continue to support MPLS for resilience and backward compatibility.
24 Jun 25	Do NESO have indicative timelines for when the work will be completed on the Future State of Energy (FSOE) model that was a key feature of GC0166, and that is expected to have a massive impact on reducing BESS skip rates. It hasn't been featured on any plans today.	Our optimisation team has been involved, and proof of concepts have been developed. We will be implementing these new FSOE in late 2025 after we have moved NDO to OBP
24 Jun 25	Do you publish inertia forecasts?	We do not publish inertia forecasts.
18 Mar 25	Once the change has been made will you be able to upload new BMU parties more frequently than now?	We are working through the business process and should be able to provide more information in the coming months.
18 Mar 25	For existing providers of Fast Reserve and DFR, who will be using ASDP already, how is the switchover going to be managed? Is the new URL running on new hardware or is it just a URL change? Do we	NBM DR and QR are transitioning in separate phases from ASDP to OBP. ASDP and OBP are separate platforms, so during that period you will be communicating with different URLs and different systems.

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move everything over to the

18 Mar 25

Is the move of EDT from FTP to sFTP confirmed or is this still a maybe? Does this also bring the NESO EDT FTP up to a more modern FTP server supporting the full standard commands or is it just sFTP wrapper around the current limited FTP functionality?

OBP will deploy a new sFTP server. The supported configuration will be communicated in April Webinar.

18 Mar 25

Are you envisaging using the existing set of IPs already in place in the BM or new IPs?

We are working through our network design and plan to give you more details in April Webinar

18 Mar 25

Regarding heartbeats, after being declared unavailable due to missing 2 consecutive heartbeats, from what period would a unit be considered available again after providing a recent heartbeat? e.g. current period of new heartbeat, period+1...?

Until heartbeats returns, the unit would be deemed uncommunicable potentially indefinitely. The heartbeat checks for communication, and not whether the unit is operational.

As soon as the Heartbeat returns, we will consider the unit is available to be instructed (i.e. it is not subject to Gate Closure)

This is different from "Unavailable due to Emergency Declaration" where the unit is deemed unavailable.

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| 18 Mar 25 | Are you going to raise a Capacity Market Rule change to deal with the fact you could delay parties complying with the CM rules? | We will get back to you on this after discussing internally with relevant business teams. |
| 18 Mar 25 | Regarding the networking impact we have a 3-6 month road map that has the change pencilled in but we need to the details to ensure we have the correct resource. When are we going to get the relevant details so we can secure the correct resource? | We will come back on this in April with more details on this. Also details will be shared in a document to be issued in April. |
| 18 Mar 25 | If going from a contracted to an uncontracted period, are you not going to send a cease instruction? | <p>Yes, OBP will issue a cease for the end of the instruction, however, we expect SPs to manage the return to PN as per the profile in case of comms issues.</p> <p>For the avoidance of doubt, once the unit is returned to PN, the unit should not deviate from PN unless another Dispatch is issued</p> |
| 6 Mar 25 | What is the difference between PI15 OBP constraint management and PI 17 OBP optimisation within a constraint ? | <p>PI15 Constraint Management allows for the Control Room to resolve a constraint in a bulk manner utilising a rules based/heuristic approach. Optimisation within a Constraint utilises the "Bulk Dispatch Optimiser" and optimises against a requirement profile and looks to solve the overall requirement. To optimise a Constraint, we need to be able to optimise all unit and fuel types, such as Wind; which will be supported later as</p> |

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part of the Wind/Constraint optimisation improvements.

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| <p>6 Mar 25 Is there any future scope to further utilise/integrate the PA signal into the dispatch optimiser?</p> | <p>Yes – where Power Available is available, then it will be used to manage the “Return to PN” journey, not just in the Dispatch optimiser, but is also relevant to the situational awareness OBP screens.</p> |
| <p>6 Mar 25 PI17 says that DC/DM/DR will be moved to OBP, so will it be possible to bid on a combination of DC/DM/DR and QR at the time of PI17?</p> | <p>QR is a reserve service whereas DC/DM/DR are response. Having everything on OBP combined allows us to monitor and dispatch across different services but we will defer to our colleagues in Markets about the rules for “stacking”. So, at the end PI17 we will have all data in one IT system, but we can only implement the rules for stacking as they are now.</p> |
| <p>6 Mar 25 When do you anticipate ASDP getting decommissioned?</p> | <p>ASDP is planned to be retired by the end of 2025. NBM services will be transitioned to OBP throughout 2025, with new Quick Reserve and Slow Reserve services implemented in OBP only and MW Dispatch & NBM Dynamic Response migrated across to OBP. The existing NBM Fast Reserve and STOR services will be retired on ASDP.</p> |
| <p>6 Mar 25 What are the main limitations and areas for improvement for the Bulk Wind dispatch?</p> | <p>The current tools require Control Room engineers to send instructions one unit at a time. Once an instruction has been sent, it can be resent automatically with the same target value and duration. We are looking to increase the options around repeating instructions and also the ability to set a volume target and the tool will</p> |

select the appropriate units and the target output for each unit. The later work will look at optimising the units to dispatch against a specified magnitude and duration requirement.

6 Mar 25 **Is the nBM API in PI15 the same as the ENA's common dispatch API project, or is that being considered as a later initiative?**

It is the existing PAS/ASDP API Interface we currently have for Non-BM STOR and Fast Reserve and is updated to the new NESO branding. As a programme we committed to honouring existing interfaces to ensure we continue to deliver on our regulatory commitments and customer requirements detailed in our Markets Roadmap (e.g., new reserve and response products) – changing the interfaces now would cause a delay in these services going live. We will undertake a review of our interface requirements in the next regulatory period in 2026.

We will be going over these details in the Technology Forum on 18th March and feedback received from industry will feed into our Beyond 2025 workstream.

26 Sept 24 **The OBP will bring together BM and Non-BM activities into one system, does that mean that all instructions will look the same?**

Within OBP, whilst there is an architectural principle known as “Harmonisation” to allow OBP to treat units equally such as within optimisation or price stacks, OBP will honour the instruction types for NBM and BM.

For example, NBM receive open instructions, and are Service based, and BM have closed BOA.

- OBP will “de-harmonise” before sending instructions to units in the manner that are expected.
- 26 Sept 24 **Are there future plans to upgrade/replace EDL/EDT?**
- Our current focus is to transition EDL/EDT across to OBP as is, honouring the existing interfaces. Beyond BP3 we will begin looking at how we might improve the interfaces. Changes to the interfaces at this stage could cause delays to Market Services introduction of new services and increase cost for providers in the near term.
- 26 Sept 24 **Can we expect any changes to the SORT upload for new BMUs in the future? Will new BMUs need to follow the SORT upload dates or can we expect them to become more frequent as the changes are implemented.**
- Whilst OBP and BM are operating in parallel, the SORT update timelines will need to continue to be followed. In the future, the registration and prequalification processes will transition to the new platforms including Single Markets Platform (SMP) and would be integrated directly with OBP. This will allow for a more flexible and frequent onboarding process.
- The architecture to support this is within 2025 timeframe, however, changes to the registration process will be part of wider NESO and industry work.
- 26 Sept 24 **As far as I know, there is only one uploaded video of the ‘real’ OBP in action. It was very helpful to see how the platform is used to generate instructions to the different zones. Are there any plans to upload other videos to display how the platform is used for constraints? This is very valuable and appreciated,**
- We’re very glad you find the demo videos useful!
- OBP demo (working) videos are premiered in the Balancing Programme in-person events and are shared afterwards with the material.
- The most recent instance was in the June event where Fast Dispatch was

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and makes it very tangible!

demonstrated, comparing with the Target Optimisation model delivered on the first release in December 2023. Prior, we had shared how the R1.0 OBP operates, and during our run up to R1.0, we shared our path to first release.

We will have another OBP demo video for the next Balancing Programme in person event in November 2024.

You can access previous videos from event content [here](#).

26 Sept 24 **Where is the link to the system constraints video?** You can access the video by clicking [here](#).

26 Sept 24 **Excellent run-through from Bernie of how Control Room plans / manages constraints and how this dovetails with BDO was very good. Please could we see a more detailed run through at the next in-person event?** Thank you for the feedback, we are really pleased to hear you found the Constraint Management section useful. We will look to host a further breakout session on constraint management at the November 2024 event.

26 Sept 24 **Re: Wind forecasting improvements, you mentioned improving the quality of outage data. Can you say more? Can this be published live so that everyone benefits?** The new platform is better integrated with our own and external system. The outage data we use is mainly provided by the industry to us.

Outage data comes in many forms with different types of outages, and it is not necessarily owned by the NESO, some of this is already published and therefore available.

Some data can be related to system security which we have access to but would not be able to share.

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- 26 Sept 24 **Will there be an option in OBP for the Control Room operator to automatically extend the instructions, similar as possible for wind behind constraints?**
- Yes – within OBP’s backlog is the ability to manage requirements in a more automatic manner. This may be extension of individual or sets of instructions, or automatic extension of requirements which would lead to optimisation and extension of instructions, or reduction/increase of instructions.
- This aspect has previously been shared in Balancing Programme Industry Quarterly engagement events and external groups such as the Wind Advisory Group and Technical Advisory Council.
- 26 Sept 24 **Do improvements across forecasting, scheduling and optimisation systems enable improved calculation of Loss of Load Probability (LOLP)?**
- The loss of Load Probability (LOLP) calculation is a dynamic calculation which reflects the uncertainty of demand and generation/energy resources. More accurate demand forecasts and generator availability submissions would both improve the accuracy of the derated margin and LOLP forecasts because they would effectively tighten the probability distributions used in the calculations and so reduce the error or variance in the distributions and hence in the calculation results. There is unlikely to be any impact of improved scheduling and optimisation as these are about meeting the requirements not defining it.
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27 June **Do ESO have detailed worked examples of how a day / part of a day is managed from Day-ahead through to delivery, including different stages of the legacy systems / process through to OBP BDO / FD timescales. If not, how best can we learn about this / who best at ESO to contact about this?**

We have provided previous webinars regarding our control centre scheduling and dispatch processes, and these are recorded. Here is a link - [Dispatch Transparency Event 23.06.02](#) - we will consider internally how we might do another learning session in the future. Thank you for the feedback.

I'm making an observation about the terminology you used - is there any documentation about how you actually manage the system? Where the legacy systems start and end and where OBP comes in with actual examples. That would help us at these sessions to be up to speed more quickly.

27 June **Will OBP drive to lower balancing cost?**

Over time OBP is designed to reduce balancing costs by providing Control Room engineers with improved decision support tools and better visualisation across BMUs and non-BMUS and multiple services for energy, response and reserve.

27 June **Is there anything that providers have to change on their systems ahead of the EDL/EDT transition?**

For both EDT and EDL the interface protocols will remain the largely the same. Each participant will be required to prove their ability to connect to the new OBP system prior to cut-over. There will be a series of opportunities before go-live for this test to be performed.

Ahead of the Market Participant tests we will be working with all EDT/EDL software

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suppliers to prove their software against the new system.

We will be making contact with all participants to establish the correct points of contact and will then update on our plans as the dates become available.

27 June **Could you please give more details on planned developments for constraints management? Is it going to be a separate zone with batteries for each zone or any other solution?**

We have split developments in constraint management into two stages. Currently we use a “node and line” model for constraints. In the first stage we are looking at ways to improve this so that bulk dispatch can take into account the time varying nature of constraints. In the second stage we are working with colleagues from another programme to use a new “look ahead” capability to predict future constraints using a full network model

27 June **With the OBP changes mentioned in the Current System presentation, will the change actually deliver instructions across all assets / zones or is this a change that will happen subsequently? It was slightly unclear on the slide. Is this expected to increase in merit dispatch?**

OBP will be receiving more data from our current systems so that OBP has more visibility across all zones. This is required for constraint monitoring across the national network. This also builds our capability so that in the future OBP will be able to send manual instructions in other zones.

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- 27 June **Why do you need to maintain the concept of separate zones? Surely the optimisation, and best / most economic outcome, will be achieved by having all units together? The distinction feels arbitrary and limiting so any extra context if there is any would be helpful.**
- Is there a future scenario where Battery and OBP zone could be combined to one OBP Zone? If not is this an OBP shortfall or a market/logistical requirement?**
- The configuration of zones in the Balancing Mechanism is historic and not all zones are locational. The small BMU zone, Battery Zone, Interconnector Zone and STOR zones are all national, Wind is split into two zones North and South and we have conventional generation which is split into North and South. There is a national dispatch algorithm which sits above these zones which sets the target for each zone. Instructions are issued per zone to manage workload. There is a future capability which will bring assets within a single group for National Optimisation at the instruction stage but this is later in the roadmap. We need to move functionality across in pieces and have prioritised the Battery and small BMU zones which are the only zones to currently have a bulk dispatch optimisation. We also need to bring non-BM services into OBP to have all assets within OBP before considering National Optimisation for instructions. Any changes to market design could also impact the roadmap and the design of future zone management.
- 27 June **For wind BMU's, you talk about using rules / heuristics. Are you considering alternative ways to manage them better, for example using more real time data and parameters, similar to limited duration assets?**
- We are currently looking into improving both the forecasting capabilities for wind, and the process of dispatching based on underlying uncertainty.
- 27 Mar **A mapping of the new and old platforms would be useful**
- We have given some high-level views in previous engagements (see December 2023, slide 10). I'm sure you will appreciate

we do not give too much detail as these systems are part of Critical National Infrastructure.

27 Mar **Can I please clarify when Dynamic Services for Non-Balancing Mechanism Participants will transition to OBP? It was mentioned in the OTF last week that it might happen this year but my understanding from today is that it will happen in Autumn 2025?**

We did look at the possibility of moving response earlier but we realised we could not make the necessary architectural changes to support this and so after evaluation we reverted to our original plan.

27 Mar **RDP Can the DSO handle the situation where an ESO trip instruction affects distribution security? Do we need advanced control at DSO level with the interface to the ESO. Important as more DER connected and covering OBP DER instruction**

Under MWD the ESO doesn't trip the DER but they are reduced in output to zero using the DNO DERMS / ANM. Both partner DNOs involved in MWD so far have built in safeguards at their end to ensure that a MWD instruction will not impact distribution security. The DNO also has an option to make an asset unavailable to the ESO for MWD instruction ahead of time, or in real time, which gives the DNO the ultimate control over the use of an asset in MWD.

The RDP, N-3 Operational Tripping Scheme (OTS) has been carefully considered from its inception. The use of N-3 to secure the network is evaluated and coordinated in operational planning timescales between the ESO and DSOs and in operational timescales the ESO contacts the potentially impacted DNO/DSO to get approval to arm the N-3 intertrip on embedded generators. It is the DNO/DSO who confirm that their network is secure and that their

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operations will not be adversely impacted by the potential triggering of the intertrip.

RDPs are being considered and slowly migrated as appropriate into the OBP space. Please refer to the regularly updated roadmap for details.

27 Mar **Can you please explain in a little more detail what 'Bulk MVAR dispatch' involved and how the performance savings were achieved?**

Previously Control engineers needed to issue individual instructions to generators to either import or export MVARs. This was done practically by issuing manual instructions from different screens within the BM and due to the time it takes to navigate between the screens they operated with a large volume of screens open. The improved functionality reduces the number of screens and key stroke actions required by control room engineers to dispatch MVARs to generators.

27 Mar **Not a question but just a comment that slide 13 (the OBP release plan timeline showing changes compared to last time in green/red) is really helpful, thank you!**

Thank you!

27 Mar **Please can you explain what activities are included in the 'Constraint Management' programme? (as the timeline shows this +1 delay on the timeline). Thank you**

Firstly, we are moving across constraint management for the majority of BMUs and this work is currently in progress. The next phase looks at Wind and requires forecasting capability. So, although we have delayed constraint management by one season, we will get early value but the full benefit is not expected for another season.

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| <p>27 Mar Regarding the movement of constraint management by 1 season – what would the impact be on constraint management costs given that this has been quite a concern?</p> | <p>This constraint management piece of work essentially moves across our current constraint management processes from the BM to the Open Balancing Platform. Prior to this delivery the Vergil Dispatch tool for Wind will remain available to the control room to help minimise constraint costs until Bulk Dispatch capability of wind is built in OBP. We have taken a decision to bring forward the capability of issuing all instructions in OBP to de-risk failure modes when OBP Strategic goes live. Having all instructions available from one place also improves the control room transition allowing better situational awareness and positive benefits. We are evaluating the balance in these two cases.</p> |
| <p>27 Mar What does 'Automatic restrictions to inter-trips' stand for?</p> | <p>This is a control mechanism whilst OBP is co-running with other systems to ensure that OBP does not include a unit that is subject to an inter-trip contract within a separate instruction.</p> |
| <p>27 Mar When exactly will ADSP retire, is there a firm date yet?</p> | <p>We are currently expecting to retire ASDP by the end of 2025 after the slow and quick reserve services are live, and the MW dispatch and dynamic response have migrated to OBP which is due to be delivered in the Autumn of 2025.</p> |
| <p>27 Mar Is the EAC the same as the OBP?</p> | <p>No. The Enduring Auction Capability (EAC) is an auction system to deliver co-optimised procurement for our day-ahead Frequency Response and Reserve products.</p> |

		<p>The results of EAC (such as awarded contracts) are integrated with our systems including, but not limited to OBP, BM and Settlement systems.</p>
27 Mar	<p>What Integration Patterns will be available for Integrating with OBP services?</p>	<p>To minimise impact on industry participants, OBP will support the existing BM and NBM integration patterns – EDL/EDT and Wider Access API for BM, and NBM/ASDP Web Service integration for non-BM. In the future, we will be discussing options to implement new integration patterns.</p> <p>The Technology Stakeholder Focus Group will be the forum where future integration patterns can be discussed – it has its next meeting on the 22 April 2024. You can sign up to this forum via the following link: Balancing Programme Stakeholder Focus Groups.</p>
27 Mar	<p>Will OBP hosted on the public Cloud? if yes, then which cloud platform is selected?</p>	<p>No. OBP is hosted on a dedicated platform within multiple data centres to meet Critical National Infrastructure requirements.</p>
11 Dec	<p>With the planned speed at which multiple changes are planned, what contingencies are there if any developments are delayed? Also, a request to please provide industry with as much technical specification as soon as possible in advance, as there will likely be considerable work also for providers in order to interact with the new</p>	<p>The BM systems will continue to be maintained and remain the master system for despatch. This will remain the case throughout 2024. If there are delays with OBP developments, then the BM system can still be used. The Balancing Programme has an ambitious plan to replace functionality in the BM and is currently running on track.</p>

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systems.

We will engage as early as we can regarding technical specifications and any changes that impact customers. We run a technology forum and commit to discuss technology changes within this forum as well as through our wider industry engagement. Please contact the box.balancingprogramme@nationalgrid.co.uk for further information.

28 Nov **Are there plans to change GC and technical systems to allow decimal BM dispatch?**

Not currently, this is a big change which would impact both BM and settlement systems. It needs to be discussed more widely to understand the benefits and when it may be appropriate to do that. OBP has been designed to be able to provide sub-MW optimisation and is future proofed if that change was implemented.

28 Nov **We all hope for 12/12 date...however, IF operationally not possible, please advise 6/12 OTF on new date...in new year please (9/1?) so we have support ourselves(!)**

We can confirm OBP went live on the 12/12/23.

28 Nov **Great to see UAT is going well. Why 25 to 50 instructions per run? Is this what the system needs or driven by the limits of the OBP lite, or something else?**

This is driven by the typical requirement a Balancing Engineer would dispatch to rather than a limitation of OBP lite. The optimiser and instruction algorithm could create more instructions but a larger requirement may adversely affect frequency if dispatched in that way.

28 Nov **Are there plans to revise EDL and provided clients to be more resilient to the increased number of BOAs and MELs/MILs?**

Not part of our current roadmap, we have said we will honour existing interfaces and will continue to work on that basis, unless something changes. The Technology

Public

stakeholder group will be the right place for these conversations in the future, as it will require an industry-wide change.

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|--------|---|--|
| 28 Nov | No functional change for EDT? What about new API to interface to OBP? | There are no changes to EDL/EDT in OBP R1.0. OBP will be taking over EDL/EDT for resiliency in 2025. In the future, we are looking at potential changes to the integration subject to industry consultation, but our initial position is to honour the interfaces as they are now. |
| 28 Nov | Will File Transfer Protocol (FTP) be removed (and when) as underlying technology for EDT message processing? Asking because of issues with EDT not being acknowledged in time. | Not included in our roadmap at present, but we should include in the Technology stakeholder group conversations. |
| 28 Nov | Will you consult on design of new APIs replacing ASDP before they reach testing stage? We would like to avoid some problems in the design of the existing APIs. | We will welcome feedback on what those issues are, and we should discuss this within our technology stakeholder forum to understand any issues with current designs. Our approach is to honour existing interfaces. |
| 28 Nov | What is the best way for participants to engage with the ESO on the 'axe the fax' work? Is there a focus group which covers this? | Technology Forum – Fax replacement was discussed at the first meeting. You can find the details on our website . |
| 28 Nov | When will the revised MIL/MEL guidance for batteries participating in BM be published, and where? | We aim to publish this guidance on the w/c 19th December. This is slightly later than originally planned as we had to include EDT guidance too, following feedback from stakeholders. The guidance will be published on our website, an email with the link to it will be sent out to our Balancing Programme distribution list. |

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15 June	What is your plan for achieving BM/non-BM combined dispatch? I.e. is there a roadmap for integrating OBP with ASDP?	We are currently undertaking discovery and analysis to inform the decommissioning plan and migrations to OBP, we don't have a confirmed timeline yet, current projections are to initiate transition in late 2024 and complete by the end of 2025, but we will provide more details at our next quarterly event.
15 June	When will BM and NBM STOR migrate onto OBP? Will the OBP use the same API as ASDP?	See above for timelines of migrations to OBP. In terms of ASDP Web services, ESO is committed to continue to support the existing interfaces, however, are mindful that there are discussions/requests to change to newer integration protocols (moving away from SOAP etc.). We plan to set up an IT stakeholder Forum to consider this as part of their remit.
15 June	How will OBP interact with NGESO planning horizons?	The introduction of OBP will any not change any current processes in regard to our planning horizons.
15 June	Do you have any information around the depreciation and replacement of PAS?	We are currently undertaking discovery and analysis to inform the decommissioning plan and migrations to OBP, we don't have a confirmed timeline yet, current projections are to initiate transition in late 2024 and complete by the end of 2025, but we will provide more details at our next quarterly event.
15 June	Are you trying to reduce the cost and power demand of your data processing costs, or is this currently being seen as negligible cost?	Data processing costs are not negligible for the solutions we are looking to deliver. Cost reduction is not a main driver in our plans, however, we work on the principle of delivering solutions that meet our requirements and that are cost effective and deliver value for money, e.g. moving PEF to our strategic Cloud solution.
15 June	Can the ESO provide a timeline of OBP releases and what the expected	The roadmap provides a timeline of the new capabilities being delivered by the programme. For more description on

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impact/improvement is for providers at each release?

each release please see the commentary in this report [download \(nationalgrideso.com\)](https://nationalgrideso.com).

Please note the roadmap will be revised following feedback from this industry event.

15 June **How will OBP handle instructing from a negative baseline to a positive power? An instruction of this type requires 6 points (points at 0MW) but EDL only has 5?**

OBP will create instructions that conform to BOA structure. Where a unit is at a negative Physical Notification (PN) and were to be instructed to a positive MW (for a period), and return back to a negative PN, it can be formed using 4 Instruction Points (IPs). There is no need to have an instruction point at 0MW. It should be noted that if an IP is required at 0MW, then we would send an IP for 0MW. If it is simply “passing through” 0MW, then no IP would be sent.

Internally, we do generate a zero point for Settlement purposes (even for “passing through”), but it is not required to be sent as part of the BOA.

Note, if the optimised profile for a unit (from the Optimiser) is complex (i.e. requires more than 5 points), then more than 1 instruction would be created.

15 June **Does OBP allow BM instructions above the maximum pricing band volume (MWs) as the current system does?**

In our first release, OBP will not utilise MWs above the price band. More specifically, where MWs do not have prices associated, OBP will not utilise those MWs.

This is to ensure that Deemed Price/MWs are not utilised automatically without Control Room users being aware.

Control Room still have access to MWs without specific prices in BM.

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		Functionality to handle deemed price/MWs will be included in future OBP releases
15 June	Does OBP have a defined threshold value for pricing out above which an asset would never be instructed?	Not in Release 1.0. Control Room will be able to see the prices/cost of proposed instructions as part of the process, and if appropriate remove instructions/units from the instructions to be sent.
15 June	Which dynamic parameters will the OBP optimiser use in it's algorithm? Can you provide a guidance document on how each of these parameters is considered?	<p>The following are dynamic parameters that the OBP Optimiser considers:</p> <p>Stable export limit: SEL</p> <p>Stable import limit: SIL</p> <p>Maximum export limit: MEL</p> <p>Maximum import limit: MIL</p> <p>Physical notification: PN</p> <p>Run up rate: RURE (Export) & RURI (Import)</p> <p>Run down rate: RDRE (Export) & RDRI (Import)</p> <p>Minimum flat top time: MFTT (Minimum total length of instructions for a given unit before a change of direction (Export/Import) can be applied)</p> <p>Minimum zero time: MZT</p> <p>Minimum non-zero time: MNZT</p> <p>Maximum delivery volume offer: derived from MEL (implementing the current agreed model for batteries)</p> <p>Maximum delivery volume bid: derived from MIL (implementing the current agreed model for batteries)</p>

More detail will be given in the
Optimisation Stakeholder Group

9 Feb **Are there plans to replace ASDP in the near future? Our experience is that it seems to suffer from outages quite often**

Yes, our plan is to eventually migrate all services managed through ASDP over to OBP. We are currently in the early stages of planning this transition, what, how, when, so that we have a clear path to deliver this transition, involving system, process and people changes required. At present, we estimate development of ASDP functionality in OBP will commence around Winter 2024 and may take around a year to complete. We will work on the principle of seamless change to market participants, however, as these plans are firmed up, we will share them with industry for feedback and buy in.

On the feedback about often outages, I would be keen to understand this in more detail, so that we can improve the service provided. We have made improvements to the way we perform routine maintenance changes, reducing the timing, frequency, and length for those.

9 Feb **Are you keeping EDT/EDL on the participant side long term? If so, how are you avoiding design limitations like only supporting integers.**

For the immediate term we envisage EDL/EDT being retained to provide the functionality needed by ESO and the market. Longer term, our platforms will be reviewed and revised in line with the market needs and technological developments.

9 Feb **The OBP appears to introduce a new set of rules. Where is it planned to codify these?**

If changes to the Grid Code etc are required, we will initiate these in good time.

Where code changes are not required, we will publish examples of how we have implemented the codes.

9 Feb **Is there a plan to make the OBP logic auditable? OBP will evolve, industry participants**

We intend to have interactives days where participants can observe test cases and submit their own. In addition,

Public

need a way to stay informed about the current logic and proposed changes.

we will publish details of the implemented logic on our external website.

Markets

Received	Question	Answer
18 Nov 25	Data availability: How are market participants informed of the relative value between response/reserve markets?	All information in terms of our balancing services contracts and the results of our auctions/ utilisation of participants can be found on our data portal.
18 Nov 25	Response/Reserve splitting: How is performance monitoring enforced for response/reserve splitting?	This will need to be considered through the design of the service but the starting point of expectation is that providers would need to demonstrate that they had met the necessary requirements for all the services that they had won a contract for and been utilised in.
18 Nov 25	Locational Response & Reserve: Will NESO be consulting industry or seeking ofgem approval before looking to procure frequency/ reserve services on a locational basis? Can see risks on liquidity and pricing in regions depending on the	As part of retained law we have to seek regulatory approval for changes to balancing services terms and conditions which this represents. We recognise the challenges there may be for providers in these changes, however, we need to balance this against the costs of procurement for consumers and the real time capability given to our control room if too much of the capacity realised through the auction is not able to be accessed.

Public

split vs national
markets today.

- | | | |
|-----------|---|--|
| 18 Nov 25 | Locational Response & Reserve: Why is locational procurement only introduced in 2027? Seems later than expected. | <p>We need to deliver the technical transition of mastering services from legacy systems to OBP first, before we can work on this.</p> |
| 18 Nov 25 | Locational Response & Reserve:
Will locational response & reserve take constraints into account? | <p>Yes, the intent is this is aligned with the understanding of the system and any constraints at the auction stage.</p> |
| 18 Nov 25 | Instructible Dx: Will MFR completely disappear? If so, when? | <p>MFR is held on units in real time to allow for the right level of dynamic response to be held. It is non-compliant with some retained EU law and we have a derogation until 2029 to continue to operate the product as per the Grid Code and CUSC. As part of our rollout of instructible within day response we will also be considering the need for a code modification to alter MFR as it is to allow for a compliant procurement approach for a mandatory frequency response capability.</p> |
| 18 Nov 25 | Instructible Dx: How would day-ahead response interact with the new instructible dynamic response? | <p>The EAC will still be used to procure our requirements at day ahead. Within day instructible will allow us to instruct additional capability depending on system conditions or if we were unable to procure enough capability at the DA stage.</p> |
| 18 Nov 25 | General note: Collected several questions related to: Instructible Dynamic Response and | <p>Our current expectation is that the available MW and prices bid into instructible response may be revised freely until one hour before the start of the half-hour ("gate closure"). The contract is then formed when instructions from OBP are received and the provider</p> |

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Locational Response & Reserve.

will need to respond in 2 mins to that instruction. (ie arm)

Instructible Dx: How will the procurement process work? What timescales?

18 Nov 25 **What is the point of non-BM? Should all providers not follow the same entry process and operational requirements.**

We want our markets to be as deep and liquid as possible and have technical requirements that reflect the nature of the need for the service. We have had previous feedback on increasing market access and providing more opportunities for flexibility providers. Non-BM routes allows more participation in our ancillary services market without the expense of operating within the BM.

16 Sep 25 **Thank you for the update on delays to Slow Reserve delivery. Please can you confirm that the Optional Fast Reserve Market will also be staying open until after Slow Reserve goes live as some units will be moving directly from OFR to SR.**

- The Optional Fast Reserve service will continue to operate into early 2026
- As non-BM Optional Fast Reserve is also dispatched through ASDP, we had intending to cease procurement in line with the planned retirement of ASDP in December 2025. However, given that ASDP is now required to support STOR into early 2026, we intend to take the opportunity to continue Optional Fast Reserve in parallel, slowly phasing out as the Quick Reserve service (BM/non-BM) is further embedded and the eventual retirement of ASDP when Slow Reserve goes live in early 2026, as we believe this gives providers more time to complete the transition.

16 Sep 25 **Will there be any changes to how Dynamic Response commercial data is shared following the move to OBP?. i.e. will the**

No changes, the data published by EAC and other systems will be in the same form

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**existing datasets
such as Results
Summary etc, still
exist on the
current Enduring
Auction Capability
(EAC) auction
results page, as is.**

16 Sep 25	Is it possible to point me to where the NBM QR phase II data is now being published?	<p>Non-BM Ancillary Service Data from OBP is available on dedicated pages on the NESO Data Portal.</p> <p>Available data is:</p> <ul style="list-style-type: none"> • NBM Reserve Instructions • NBM Reserve Availability MW and Utilisation Price • NBM Physical Notifications <p>https://www.neso.energy/data-portal/non-bm-ancillary-service-data-obp-system</p>
31 Jul 25	When do you expect the PQ window for registrations to open for slow reserve?	<p>We are assessing technical timelines and expect to publish details on the Slow Reserve prequalification timeline in August</p>
31 Jul 25	Is the 'minimum activation period' for Slow Reserve "at least 30 minutes" as you seemed to say, or a maximum of 30 minutes as the slide says?	<p>It is a maximum value of a minimum activation period. You're right, Minimum Activation Period cannot be more than 30 mins, so max 30 mins.</p> <p>For clarity, the slide deck has been updated to reference "max" rather than "no longer than" - i.e. "The minimum period a pre-qualified unit has specified a Slow Reserve instruction should continue for. It includes Ramp to declared MW capacity, time at declared MW capacity and Ramp back to PN. For Slow Reserve this is max 30 minutes "</p>
31 Jul 25	What is the registration/ pre-qual process for DR	<p>Thanks for your question. The registration and pre-qualification process for DR (and DM & DC) can be</p>

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for BM parties? Has the eligibility/ pre-qualification changed following the spring update to service terms , specifically Dynamic Regulation

seen in the Service terms:

<https://www.neso.energy/document/359161/download>

and procurement rules:

<https://www.neso.energy/document/359156/download>

24 Jun 25 **Hi, how is NESO now planning / preparing the Balancing Programme for the legal requirements of 'dynamic alignment' for the Internal Electricity Market as per para 21 of the UK-EU agreement signed in May?**

On 19 May, the UK and EU agreed to "explore in detail the necessary parameters for the United Kingdom's possible participation in the European Union's internal electricity market." As the governments explore the parameters, NESO will support the government in identifying the nature of various trading relationships as it has done so with consideration for Multi-Regional Loose Volume Coupling (MRLVC) under the Trade and Cooperation Agreement.

The nature of alignment will only be known following agreement between the UK and EU governments. As such, NESO will take steps to ensure we comply with the requirements agreed. A system impact assessment would be required once further information becomes available to the Balancing Programme.

6 Mar 25 **Could you please explain the implications of QR being introduced via OBP, would it mean units contracted to do QR would be dispatched in a separate merit?**

Quick Reserve is a procured service and increases capacity available to the Control Room. Quick Reserve is supported by both BM and OBP (for BMUs), and NBM Quick Reserve will be delivered in OBP only.

By including NBM Quick Reserve in OBP, the Control Room will be able to manage and dispatch Quick Reserve in a combined manner as required to balance the network.

We instruct units for frequency control in merit and there is no preference on whether a unit has a Quick Reserve contract or not.

Public

26 Sept 24	Thank you for showing the Release Plan. On BM Quick Reserve, the plan shows December 2024 go live, but previously the ESO said November – is a delay expected?	<p>Quick reserve phase 1 is expected to get an OFGEM decision at the end of October.</p> <p>In terms of capability, the auction platform will go live in mid-November (opening 14 days ahead of first the auction). The first auction (co-optimised with Response) service is expected to take place in early December 2024</p> <p>OBP is technically ready for the product.</p>
27 June	How many MWs expected to be procured of quick reserve from day one, and what's the long-term procurement objective for the service?	<p>Although not firm we expect that the requirements will be ~500MW positive and ~300MW negative. We will update the market through our usual Market Information Reports (MIR).</p>
27 June	Are ESO concerned with about the potential loss of flexibility if energy suppliers agree long term contracts with large volume of batteries for balancing their own supply/demand?	<p>The ESO is the residual balancer where the market is resolving the majority of issues before the ESO needs to be involved. If the ESO is receiving a more balanced market as a result, then this potentially reduces the amount of residual balancing. We do value having flexibility to control assets in the BM. In terms of energy margins and according to the Winter Outlook report the margins for this winter are sufficient.</p>
27 June	Once OBP replaces SORT, will there be a more efficient, regular onboarding process to register new BMUs into ESOs systems?	<p>We recognise that BM registration is an area where we and all our stakeholders would like to see improvements. We are looking at how we take forward a piece of work in this area and we have committed resource to take this forward. Very happy to hear from you all on what good looks like in this space so please do come and have a conversation with us.</p>

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27 Mar	<p>Does MW dispatch not introduce another market distortion? Why not make BM and other flex markets easier to enter and more appealing rather than relying on unpaid flex (ANM) or a ringfenced market (MW dispatch)? Why is there not an equivalent option for demand turn up in these areas?</p>	<p>MW Dispatch does not introduce a market distortion. It is a congestion management service, specifically targeted to allow faster connections in otherwise congested zones. As with other constraint dispatch activities, the dispatched volumes are posted to the BMRA.</p> <p>MW Dispatch is an important pilot providing practical design solutions to primacy and stackability, and these learning points are being utilised as part of wider ENA industry design activities and will feed into other service design considerations over time.</p> <p>The service itself allows for easy participation for DERs without needing the IT infrastructure required to participate in the BM and is an engine for greater integration between nascent DSO and ESO coordinated control.</p> <p>Whilst some ANM services imposed by DNOs or the ESO are uncosted, the nature of these services is made clear to connection applicants ahead of time and their existence is there to permit early connection.</p> <p>MW-Dispatch is geographically restricted to areas experiencing congestion but is not ring-fenced and with future work on primacy and stackability, should allow greater ability to participate in other balancing service markets in parallel in the future.</p> <p>The ability to include other types of DER including demand-flexibility and storage in MW-Dispatch is a strong possibility as part of future enhancements to the service.</p> <p>Flexibility services have been developed by the DNO and ESO, often to tackle specific issues in a given locality. Lessons may be learned locally with a specific DNO, solving urgent operational issues and providing learnings which can then be worked into broader solutions. This is the principle of RDP. Learnings about</p>
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Public

stackability and primacy taken from the development of MW-Dispatch are being considered in wider operability and market rules being developed within the ENA.

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| 28 Nov | On your spring 2025 slide, you mention NBM quick and slow reserve being introduced. Is this the new timeframe for implementation of these services? | Yes, these are the dates we are working towards. We are hoping to share more details and engage further through the Reserve Reform team during December and January. Delivery of Non-BM for Quick & Slow in Summer 2025 prior to decommissioning of ASDP by the end of 2025 so that there is a transition period for the services. |
| 28 Nov | Why is NBM quick reserve delivered later than BM quick reserve? | Mainly due to the need to integrate the products in our strategic systems rather than legacy systems. BM quick reserve can be supported by OBP in Summer 2024 whereas Non-BM will be supported by OBP in 2025. |
| 15 June | When will ESO publish more accurate forecasts of DR & DM requirements, as currently the procurement does not relate accurately to the blanket forecast numbers? | The forecasts that we publish are the target volume that we aim to procure in these markets, this is typically (150 DRH, 180 DRL, 80 DML, 80 DMH). To support efficient auction outcomes, we allow overholding in both DR and DM which means we will procure up to 200MW for DRL/DRH and 100MW for DML/DMH. |
| 15 June | There was a delay recently announced to Market Wide Half Hourly metering will this have any material impact on National Grid plans in the run up to | MWHHS is a key enabler to growing the flexibility markets across GB. Whilst the delay is disappointing, we and industry still know the direction of travel to enabling Consumer Energy Resources to participate. |

Public

2035?

15 June	Deciding to delay products e.g. Quick/Slow Reserve to avoid implementing in both the existing system and the OBP - will that lead to any cost savings overall?	This decision has been taken in light of the significant changes that would have been required in our existing, legacy balancing systems and processes, given the complexity of the new service designs. In the midst of a complex and rapidly evolving systems change environment, we believe it is more prudent to re-evaluate these changes to consider if implementation into our legacy systems is still appropriate, as opposed to direct implementation into our Open Balancing Platform (OBP). There are cost savings associated with not developing reserve on legacy systems that would have included some level of regret spend.
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Other

Received	Question	Answer
18 Nov 25	Thanks for circulating the slides ahead of time - very helpful. Quick ask - I notice slide 19 refers to LDES - LIMITED duration energy storage, whereas DESNZ, Ofgem refer to this as LONG duration energy storage - the opposite(!)- can NESO please align with others, to avoid confusion- many thanks.	We will correct the slide before it goes out in the final published version, GC0166 terminology refers to Limited duration assets
16 Sep 25	Will Solar BMU forecasts be published in similar way to that of Wind BMU currently?	Although we do not have a date yet, we are working with the Energy Forecasting team to publish this directly from PEF, most likely to the data portal.

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- 16 Sep 25 **Will the GC0166 parameters be published as dynamic data on BMRS?** This is being progressed as part of P499 it will be published in the Elexon sites [P499 BSC Changes for GC0166: New Dynamic Parameters for Limited Duration Assets – Elexon BSC](#)
- 24 Jun 25 **If you need more data are you going to get that out of the DNOs and if so can you get them to publish it?** If we have access to the data we would always be open to publish it. We aim to source greater visibility of the embedded generation assets, along with enhanced granularity of the underlying demand. The TIDE project (originally known as DER Visibility) is working on securing wider operational visibility of the generation sources. Our current demand models do not facilitate the immediate acquisition and use of enhanced distribution demand data, but the customer-need to progress this may form part of the Forecasting Strategy.
- 24 Jun 25 **A lot of what we have heard about today is TO related. How is NESO going to be "whole system" without seeing all of the DNO data, like constraints, etc.?** NESO is focussed on developing its whole systems role including our Whole Energy Market Strategy, Strategic Spatial Energy Plan & Regional Energy Strategic Plan.
- The Transformation to Integrate Distributed Energy (TIDE) is a transformative programme within NESO focused on improving real time operations, market facilitation, and strategic planning for Distributed Energy Resources (DERs) and Consumer Energy Resources (CERs). The programme is working collaboratively with industry partners and the objective of TIDE is to deliver the policy (codes, licenses), business capability (people, process, organisation) and technology (data,
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systems, infrastructure) changes needed to deliver visibility of and access to DERs and CERS across all timescales (real-time to long-term) – receiving, procuring, storing, analysing, and making decisions on this data – to improve operation of the whole-energy system.

24 Jun 25 **Given the broader focus on LDES and how much the system is supposed to need it, it's interesting to note that there is no plan in Future Energy Services for any longer duration service. What am I missing?**

Retained law requires TSO's to procure balancing energy as close to real time as possible. This is reflected in NESO service designs.

24 Jun 25 **How is your Balancing Programme, Beyond25 and Markets Roadmap evolving to accommodate NESO's broader, whole system role?**

NESO is focussed on developing its whole systems role work including our whole energy market strategy. Our Markets roadmap will continue to provide an important arm of this strategy by focusing on the products and services we need to meet our electricity system needs.

24 Jun 25 **You have talked a lot about the systems, what about improving the paperwork? No more BEGAs!**

We agree that there are always improvements that can be made. We will consider how best to take this forward.

18 Mar 25 **So if I have a plant commissioning in October, and I am legally required to be a BMU, I cannot commission? What is the compensation for my lost income?**

We will get back to you on this after discussing internally with relevant business teams. Currently we allow new BMUs every 6 weeks and we don't plan to breach that SLA.

6 Mar 25 **What's the timing on Storage**

Public

SoC parameters?

This is dependent on the outcome of the GC0166 code modification process. The current timeline provided by the working group is for a regulatory decision by August 2025. Following this we believe there will be an implementation period – the overwhelming feedback we have received via participants within the working group is that it would take 6 – 12 months to implement the software changes on their systems which points towards early 2026 for a go-live. Regarding the Open Balancing Platform, we will build this capability on OBP strategic and will be ready for industry; elaboration of this capability has been completed and the build and test time to implement the change and receive the data on OBP is understood.

6 Mar 25 **With regard to moving to an additional data centre, have you considered the sustainability credentials of the DC? both in terms of energy consumption/water usage? we have found that there a wide range from leading suppliers.**

Thank you for your question – we will discuss this with our data centre enablement team and come back to you with an answer.

26 Sept 24 **NGESO is meant to be taking a whole system view, but it seems to have no good view of what is going on in the DNO networks. How are you going to address this?**
How does/will Balancing Programme go beyond the Transmission System to further incorporate information from the distribution system and

NESO has established the Distributed Energy Resource (DER) Programme to deliver visibility of and access to DERs and consumer energy resources (CERs) across all timescales (real-time to long-term) – receiving, procuring, storing, analysing, and making decisions on this data – to improve operation of the whole-energy system. The programme will deliver industry transformation

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distributed assets, improve coordination and drive whole system optimisation.

covering NESO business changes, NESO data and systems changes, and industry changes (DNOs, TOs, market participants, and market platforms). This transformation will be led by NESO but includes industry collaboration to be a success.

One of the approaches of the DER Programme involves alignment with the Balancing Programme and other programmes across NESO to ensure development of digital solutions that provide visibility and access across systems, enabling network operators to manage assets in a more coordinated manner. These platforms will facilitate better demand response integration, allowing distributed assets to participate in balancing and ancillary services, ultimately improving flexibility, resilience, and reducing consumer costs.

The DER Visibility Programme is currently in Phase 3, where it will be designing and delivering the business and technology changes needed to deliver priority use cases associated with DER visibility and begin to realise some of the near-term benefits.

27 June **For the beyond 2025 sessions will you be sharing all the feedback received and the reasons for those that make it into the roadmap?**

Thanks everyone for your engagement in the Beyond 2025 session. We will be looking at the content from today very closely and it will help us prioritise our roadmap. Depending on the content we may summarise this into themes or

activities we are taking forward and those which we may not at this time, and provide feedback in our November event.

27 Mar **Off topic. The Digital Twin Cyber Physical model (Electricity) shows the Digital Spine; Open Data at centre with Resources (Main Gens, DG, Batteries, other DER), DSO and ESO as spoke corrections. They quote ESO Control systems extensively. Any indications to extent of changes to data management?**

Thank you for your question – we have passed this on to the relevant team and will update this document with a response shortly.

27 Mar **Will the June and November events still have a virtual attendance option to ensure they remain accessible?**

We will currently not be offering virtual attendance at our June and November events – we have found that in-person events really benefit from everyone being in the same room together. However, all slide content from these webinars & the Q&A will be shared on our website and newsletter after the event. We have also introduced 2 online webinars, which is new for us this year, to improve accessibility to content. If we believe there is further explanation required from in-person event topics we could consider sharing recorded versions of key messages post-event.

28 Nov **Are we going to need a BSC (or subsidiary document) change to support publishing new data items associated with the grid code change on the Balancing Mechanism Reporting Service (BMRS)?**

Yes – we have contacted our ESO colleagues who interface to the Balancing and Settlement Code (BSC) process and our intention is to present to the BSC after the Grid Code modification is accepted.

Public

15 June	In claiming carbon reduction benefits, will ESO discriminate on non-price grounds (such as co2 intensity) when making dispatch decisions?	<p>We aim to dispatch in the most economic way, taking account the operational requirements on the day.</p> <p>At this point in time, carbon intensity does not feature in our dispatch decisions – but you can see the carbon intensity of particular days on our live dashboard.</p>
15 June	Does ESO have a published study on the optimum gate closure duration as the generation mix changes (weighing generation variability and system stability)?	<p>We are working with Department for Energy Security and Net Zero on gate closure timing as part of Review of Energy Market Arrangements. But no conclusions have yet to be reached.</p>
15 June	When will you increase the procurement cap for DM/DR again, and phase out FFR?	<p>A key milestone in frequency response reform is the phasing-out of monthly Dynamic FFR (DFFR). This will happen gradually as we develop and establish the new pre-fault dynamic frequency response products Dynamic Regulation (DR) and Dynamic Moderation (DM). To enable a measured transition between the legacy and new suite of response services for frequency response providers and the ESO, we intend to reduce our DFFR requirements by 50MW for each EFA block per month whilst increasing the DR requirement by 30MW. Following the change in March 2023 to procure up to 200MW of DR a series of IT changes were required to facilitate further increases to the DR requirement. There is a final IT change that raising the requirement is dependent on to ensure the visibility of non-BM units in balancing systems. This change is on track to take place in July</p>

Public

and therefore enable the cap to be lifted from August 2023 onwards.

Further information available [here](#).

9 Feb **Is there a timeline for the Enduring Auction Capability module?**

We are aiming to have the Enduring Auction Capability platform live later this year.

- In September we will migrate Response services
- In October/November the Reserve services will be live

More information can be found on our website.

[Future of balancing services | National Grid ESO](#)

9 Feb **I think Rob mentioned earlier than the expected savings of this programme are expected to be ~£2.5bn – can ESO provide any additional information on these costs.**

Further information on our costs and benefits can be found in Annex 2: Cost Benefit Analysis, which was submitted alongside our RII0-2 business plan. These are calculated using a methodology agreed with Ofgem. The link to this document is below.

[Annex 2](#)

9 Feb **Sorry if I've missed this but is there a set of slides available from the October event? there's a summary video which is helpful, but couldn't find the slides**

Yes, these are now published on our website.

9 Feb **Given the outcomes of the Zuhlke review, have plans changed? What's been ESO's response (beyond the response to the DDs)?**

We agree that technology and data are fundamental to our role and will have greater importance as the energy system becomes increasingly complex.

Given that our technology investments play a central role in enabling substantial consumer benefits, Ofgem applied a

Public

higher level of scrutiny to this area of our plans.

As set out in our Draft Determinations (DD) response we challenged some of the technology assessment conclusions. We feel that the assessment of our technology investments in some areas is subjective, incorrect, and not aligned to either energy industry best practice or how technology of this type is typically delivered. In our consultation response supporting information annex we highlighted where we feel assessment of our investments is incorrect.

Since our DD response we have been working with Ofgem to understand the format and scope of technology investment assessments throughout BP2 and how the new proposed cost monitoring framework will aid understanding and discussion on our Technology investments and the key strategic questions we are taking.
