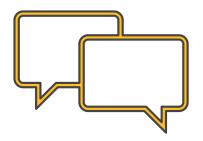


Welcome & Agenda

Time	Title
11:30 – 11:40	Welcome & setting the scene
11:40 – 12:10	Understand and address impact of change on industry stakeholders
12:10 – 12:50	Understand and feedback on Market technology challenges and pain points
12:50 - 13:00	Next steps
13:00	Close



Structure of the Session



Please post any questions you have for us in the Teams chat or raise your hand – when asking a question, please introduce yourself, and your organisation, this will enable us to follow up with you after the event if necessary



Out of scope questions will be forwarded on to the appropriate ESO team or expert for a direct response. We may ask you to contact us by email to ensure we have the correct contact details for the response



If you have any further questions after the webinar, please do not hesitate to get in contact with us at box.balancingprogramme@nationalgrideso.com



Please note this webinar, including the Q&A, will be recorded and published on the ESO website

Technology Stakeholder Forum Terms of Reference

Forum Purpose: Facilitate open & honest discussions between the ESO & Industry Partners re: Balancing Programme technology developments.

Forum Remit:

- Work together to understand and address current / future business and technology pain points and define roadmaps to resolve these
- Align balancing technology enhancements with industry expectations
- Active involvement in sessions to identify and work through challenges and opportunities
- Provide details on delivery plans, milestones and technology roadmaps
- Look for opportunities to collaborate on pre-release testing
- Review and discuss data exchange principles and designs
- Review and discuss service levels and security
- Review and discuss current and future integration and data sharing protocols and patterns

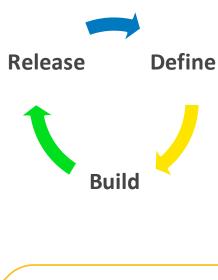
Logistics

- Regularity: Quarterly with more frequent engagement based on demand
- Location: Remote & in-person (meeting invite will specify)
- Accessibility: The stakeholder group will be an open forum for new attendees to join at any point.
- Group Sign-up: Sign up details will be through <u>MS forms</u> and will be shared on the website and via email.
- Meeting Invites: We will send meeting details by email.
- Information Sharing: We will share the outcome of each event following the 1st phase, as well as questions and answers on the ESO website.
- Chair: Nisha Bhamidimarri, OBP Programme Manager.

Engagement

We propose to have dedicated collaborative Technology Stakeholder forums to gather your views as set-out below:

Define	 Outline current technical capabilities as they relate to balancing Outline roadmap of capabilities planned for transformation 	 Understand and feedback on Market technology challenges and pain points Capture future requirements Challenge and clarify assumptions
Build	 Prioritise capabilities that will give the greatest benefits Share delivery plans, look to collaborate 	 Understand how to transition from existing to new capabilities Understand and address impact of change on industry stakeholders
Release	 Deploy new capabilities that support the roadmap for the balancing programme Collaborate on testing Maintain clarity on current and future developments 	 Plan for future industry engagement and collaboration Keep stakeholders involved and informed on a regular basis





Open Balancing Platform Release Plan Timeline – Technology Impact

Legend

Industry Technical impact

Summer 2024

Capabilities:

1. BM Quick Reserve

Enablers

Interface from Single Market
 Platform

Winter 2024

Capabilities:

- 1. New storage parameters
- 2. Bulk Dispatch Wind BMUs (rule based)
- 3. Constraint Management
- 4. Pumped Storage BOAs

Enablers

- 1. OBP Strategic second Data Centre
- 2. Interface to Ancillary Settlement for NBM

Summer 2025

Capabilities:

- 1. NBM Quick Reserve
- 2. BM Slow Reserve
- 3. NBM Slow Reserve















Spring 2024

Capabilities:

- 1. Fast Dispatch
- 2. Balancing Reserve

Enablers

- 1. Support for Clock Change
- 2. Interface from SCADA for metering

Autumn 2024

Capabilities:

1. Manual instructions

Enablers

Interface to Data Analytics
 Platform

Spring 2025

Capabilities:

- 1. NBM Instruction Types
- **Enablers**
- 1. NBM APIs
- 2. EDT/EDL mastered from OBP

Autumn 2025

Capabilities:

- 1. Move MW Dispatch
- 2. Move Response (DC/DM/DR)

Enablers

1. Ready to decommission ASDP

Abbreviations

BM: Balancing Mechanism DC: Dynamic Containment DM: Dynamic Moderation DR: Dynamic Regulation ASDP: Ancillary Services Dispatch Platform BOA: Bid Offer Acceptance

New Storage Parameters for State of Charge (SoC)

- Time-varying Maximum Delivery Offer/Bid (MDO/B) + a SoC future estimate had been in discussion in latest GC0166 workgroup meeting
- Data format not yet finalised
- Two additional workgroup meetings have been requested as there is no agreement yet regarding whether parameters should be commercially set

Will impact Electronic Dispatch & Logging / Electronic Data Transfer (EDL/EDT) and Wider Access API (WA API)

For timelines and Work Group output please see <u>GC0166</u>: Introducing new Balancing Programme Parameters for Limited Duration Assets | ESO (nationalgrideso.com)



OBP Strategic – More than a Second Data Centre

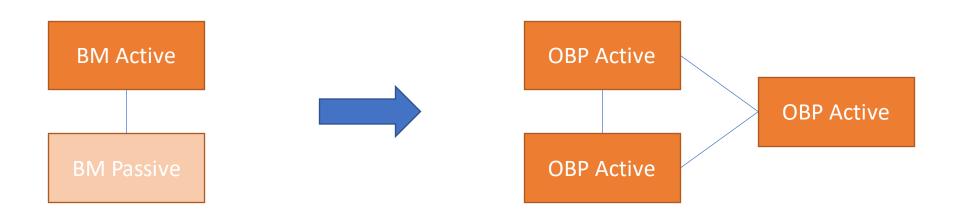
OBP Strategic is the *platform* and *operate capability* that will enable an <u>operationally critical</u> *product* that will support the transformation roadmap

Key objective is continuous availability – no planned or unplanned downtime

We will prove this capability before proceeding to move functionality from existing BM system – so initially combined OBP/BM system will still be subject to BM outages

Changes will become visible once EDT/EDL is moved to OBP:

- No planned outages
- Active / Active / Active



EDT/EDL Mastered from OBP

EDT/EDL will not change, but cutover will impact all Trading Agents (TA) and Control Points (CP) and WA API users (which uses EDL/EDT internally)

Detailed plan being worked through and will be communicated later in the year, but expect two phases:

- Phase 1 move processing of EDT/EDL from BM to OBP ← Spring 2025 on the release plan
- Phase 2 move network from old to new data centre

Not currently expecting TA/CP to need to make any changes, but cutovers will need several outages that need to be managed. Investigation is continuing on:

- Whether TA credentials can be migrated from BM to OBP
- Future of ISDN (leased line)

A series of de-risking activities will be undertaken prior to this including:

- OBP will run in 'shadow' mode receiving copies of EDT files and EDL messages from BM to confirm correct processing
- Trial cutovers will be undertaken to confirm connectivity likely to seek volunteers to pilot

Non-BM Mastered from OBP & New Reserve Services

Non-BM services are currently supported on the ASDP system and need to be migrated to OBP Non-BM STOR and Fast Reserve (FR) will be phased out and replaced with Slow and Quick Reserve

Working assumption:

- Short Term Operating Reserve (STOR) and FR will remain on ASDP until they are phased out
- Slow and Quick Reserve will be built on OBP using the current V3 web services interface
- Dynamic Response and MW Response will be migrated from ASDP to OBP using the current V3 web services interface

Detailed plan being worked through and will be communicated later in the year

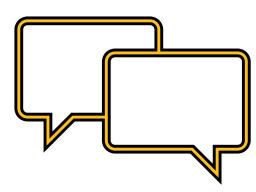
Cutovers will likely need one or more outages that need to be managed

Understand & Feedback on Market Technology Challenges & Pain Points

We will honour existing interfaces through the BM & ASDP transition to OBP

Potential areas for discussion:

- BM interfaces (EDL/EDT and WAAPI) and Non-BM (Ancillary Services Web Services AS WS)
- Interface format, e.g., REST vs SOAP
- Interface usage across different services
- Interface network, e.g., Internet
- Interface network direction (service provider vs. ESO initiated)
- Interface onboarding and testing

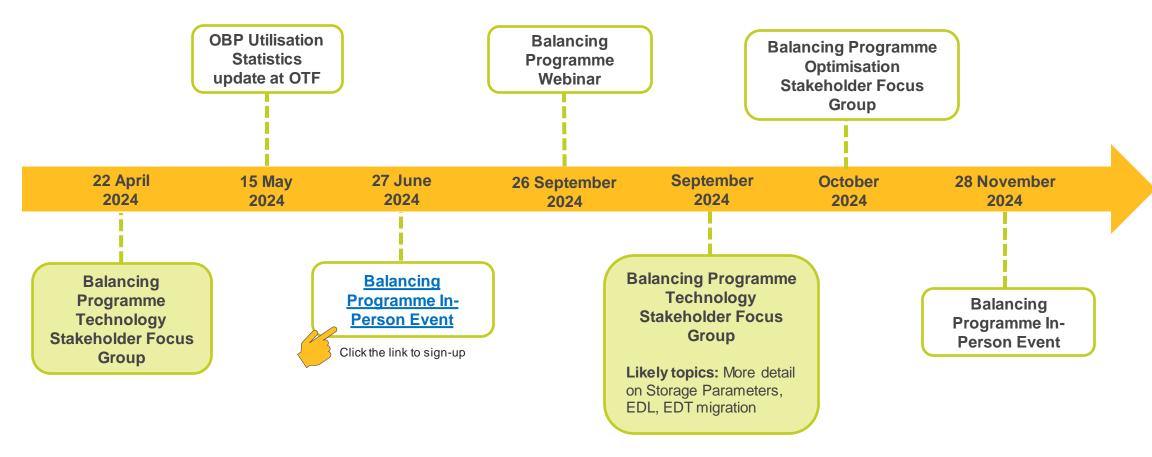


Currently Supported Service Provider Interface for Balancing

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		Connectivity	Details	D	1	M
BM	EDT / EDL	Optel	CSV file - Inbound ftp	√		
			Outbound 'messages' over socket	\checkmark	✓	
BM	WA API	Internet	Bi-directional Web Services (signed JSON payload)	✓	✓	
BM	Data Concentrator	Internet	Availability/Outage CSV file	✓		
BM	Fax		Miscellaneous			
Non-BM	AS WS	Internet	Bi-directional Web Services (SOAP)	\checkmark	\checkmark	\checkmark
	Via intermediary	Via intermediary				

Future Engagement Opportunities . . .







Next Steps . . .



We welcome further feedback – please get in touch via the email address below



Slides from today's session will be published on our website, along with the webinar recording



You can reach out to the Balancing Programme team via email – box.balancingprogramme@nationalgrideso.com



Sign up to the Balancing Programme Newsletter for more regular updates - <u>Get</u> the <u>latest from ESO - Balancing Programme (nationalgrid.co.uk)</u>



Sign-up to our other Stakeholder Focus Groups for Optimisation & Forecasting - Balancing Programme Stakeholder Focus Groups

