Public

Technology Stakeholder Focus Group

21 October 2024

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Welcome & Agenda

Time	Title	Details
12:00 – 12:10	Welcome & setting the scene	
12:10 – 12:25	EDL/EDT Transition	• Update on EDL/EDT transition plan inc. key check points & how to get involved in testing
12:25 – 12:40	NBM API updates	• Progress update re: NBM API for OBP following Industry consultation
12:40 – 13:10	Digital Development Beyond 2025	• Interactive whiteboard session re: suggestions & ideas for digital development in the balancing space beyond 2025 • Feedback of ideas & discussion
13:10 – 13:25	Q&A	• Live Q&A session
13:25 – 13:30	Next steps	• Future engagement opportunities
13:30	Close	

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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 NESO 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
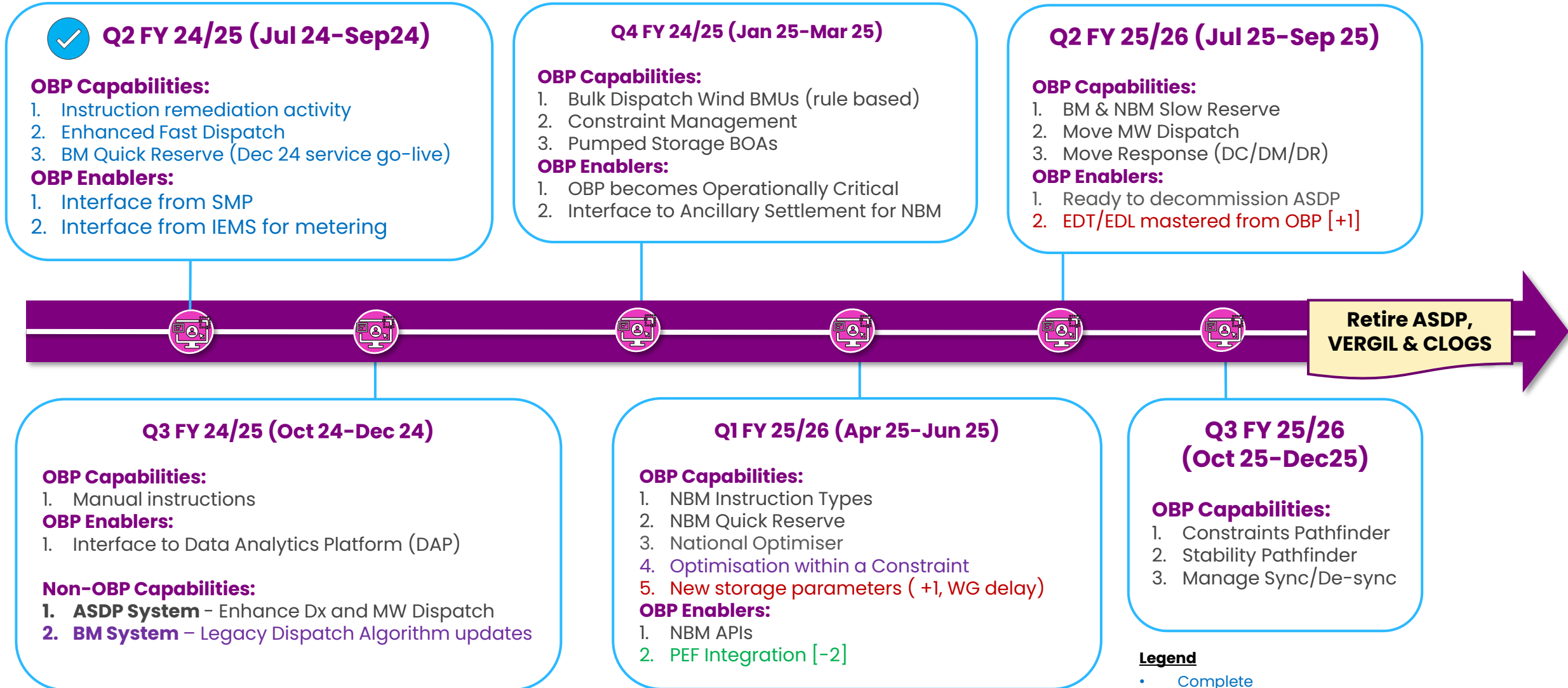
If you have any further questions after the webinar, please do not hesitate to get in contact with us at box.balancingprogramme@nationalenergyso.com
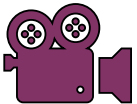
Please note this session will be recorded and published on the NESO website

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Balancing Systems Release Plan

✓ Q2 FY 24/25 (Jul 24–Sep24)

OBP Capabilities:
1. Instruction remediation activity
2. Enhanced Fast Dispatch
3. BM Quick Reserve (Dec 24 service go-live)

OBP Enablers:
1. Interface from SMP
2. Interface from IEMS for metering

Q3 FY 24/25 (Oct 24-Dec 24)

OBP Capabilities:
1. Manual instructions

OBP Enablers:
1. Interface to Data Analytics Platform (DAP)

Non-OBP Capabilities:
1. **ASDP System** - Enhance Dx and MW Dispatch
2. **BM System** – Legacy Dispatch Algorithm updates

Q4 FY 24/25 (Jan 25-Mar 25)

OBP Capabilities:
1. Bulk Dispatch Wind BMUs (rule based)
2. Constraint Management
3. Pumped Storage BOAs

OBP Enablers:
1. OBP becomes Operationally Critical
2. Interface to Ancillary Settlement for NBM

Q1 FY 25/26 (Apr 25-Jun 25)

OBP Capabilities:
1. NBM Instruction Types
2. NBM Quick Reserve
3. National Optimiser
4. Optimisation within a Constraint
5. New storage parameters (+1, WG delay)

OBP Enablers:
1. NBM APIs
2. PEF Integration [-2]

Q2 FY 25/26 (Jul 25-Sep 25)

OBP Capabilities:
1. BM & NBM Slow Reserve
2. Move MW Dispatch
3. Move Response (DC/DM/DR)

OBP Enablers:
1. Ready to decommission ASDP
2. EDT/EDL mastered from OBP [+1]

Q3 FY 25/26 (Oct 25-Dec25)

OBP Capabilities:
1. Constraints Pathfinder
2. Stability Pathfinder
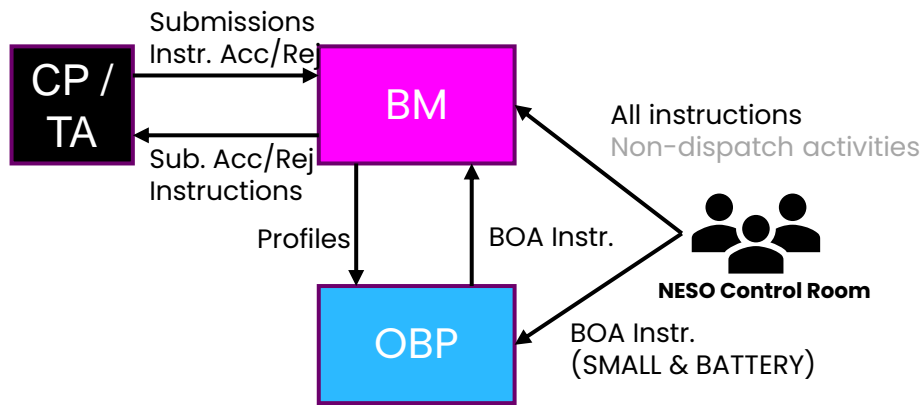3. Manage Sync/De-sync

Retire ASDP, VERGIL & CLOGS

Legend
- Complete
- Moved to a later date (no. of quarters moved)
- New addition to the release plan
- Moved to an earlier date (no. of quarters moved)
- No change

Abbreviations: **DC:** Dynamic Containment **DM:** Dynamic Moderation **DR:** Dynamic Regulation **BOA:** Bid Offer Acceptance
DX: Dynamic Response **WG:** Work Group for GC0166 **CLOGS:** Contingency Logging System **VERGIL:** Versatile Graphical Instruction Logger
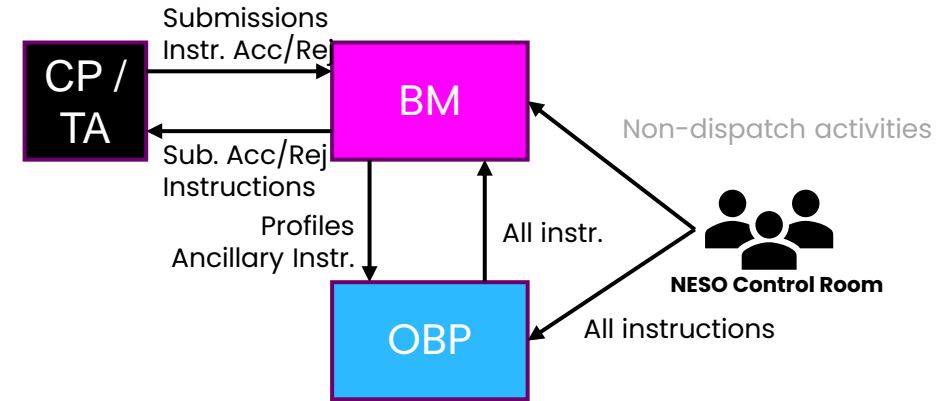
EDL/EDT Transition

Dave Uzzell, Operational Manager

EDT/EDL Transition Strategy Refined to Avoid Big-Bang Cutover of Trading Agents (TA) & Control Points (CP)
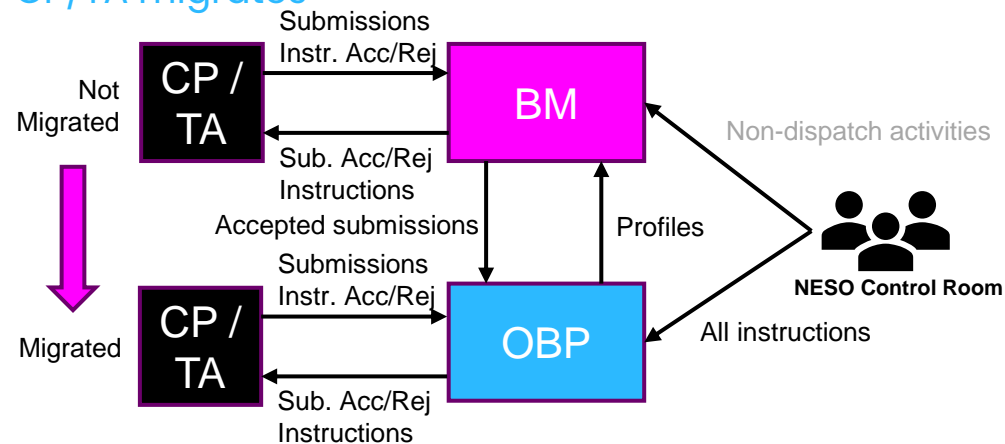
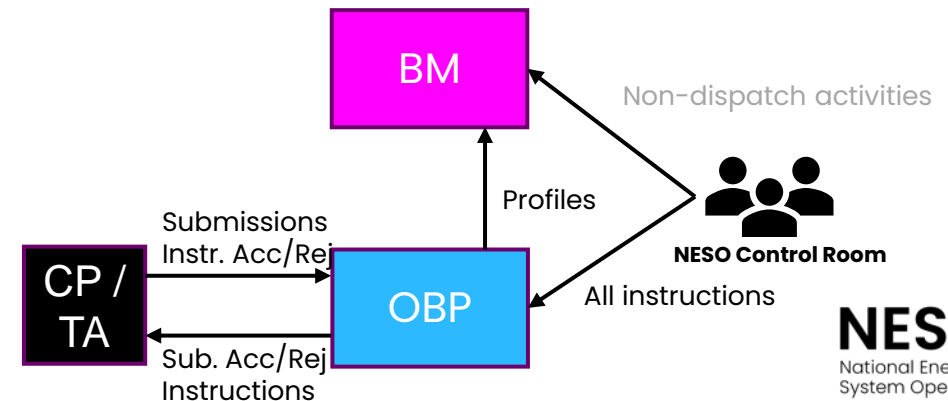## TODAY: BM is master; OBP provides bulk dispatch

CP / TA → BM: Submissions, Instr. Acc/Rej
BM → CP / TA: Sub. Acc/Rej, Instructions
BM → OBP: Profiles
OBP → BM: BOA Instr.
BM ↔ NESO Control Room: All instructions, Non-dispatch activities
OBP → NESO Control Room: BOA Instr. (SMALL & BATTERY)

GETTING READY: OBP able to send all instructions via BM

CP / TA → BM: Submissions, Instr. Acc/Rej
BM → CP / TA: Sub. Acc/Rej, Instructions
BM → OBP: Profiles, Ancillary Instr.
OBP → BM: All instr.
BM ↔ NESO Control Room: Non-dispatch activities
OBP → NESO Control Room: All instructions

CUT-OVER: OBP takes over profiling, defaulting and reporting; BM validates and forwards submissions until CP/TA migrates

Not Migrated → Migrated

CP / TA → BM: Submissions, Instr. Acc/Rej
BM → CP / TA: Sub. Acc/Rej, Instructions
BM → OBP: Accepted submissions
OBP → BM: Profiles
CP / TA → OBP: Submissions, Instr. Acc/Rej
OBP → CP / TA: Sub. Acc/Rej, Instructions
BM ↔ NESO Control Room: Non-dispatch activities
OBP → NESO Control Room: All instructions

TRANSITION COMPLETE: OBP is master and continues to provide data to BM for non-dispatch activities

CP / TA → OBP: Submissions, Instr. Acc/Rej
OBP → CP / TA: Sub. Acc/Rej, Instructions
OBP → BM: Profiles
BM ↔ NESO Control Room: Non-dispatch activities
OBP → NESO Control Room: All instructions

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Transition Activities

GETTING READY

New EDT/EDL interface on OBP – **same interface spec**

New OBP **Market Participant Test environment**

Software Supplier **Type Testing**

Participant **BPIT Testing**

OBP Testing by **shadowing BM**

Planning ongoing for including MDO/MDB (Max Delivery Offer/Bid) for GC0166 pending conclusion of working group

CUTOVER

Avoid BMU config changes – aim to align with 6-week cycle

Participants allocated to a cutover window

Trading Agent responsible for updating their system to use OBP (NESO) address, OBP credentials and sftp
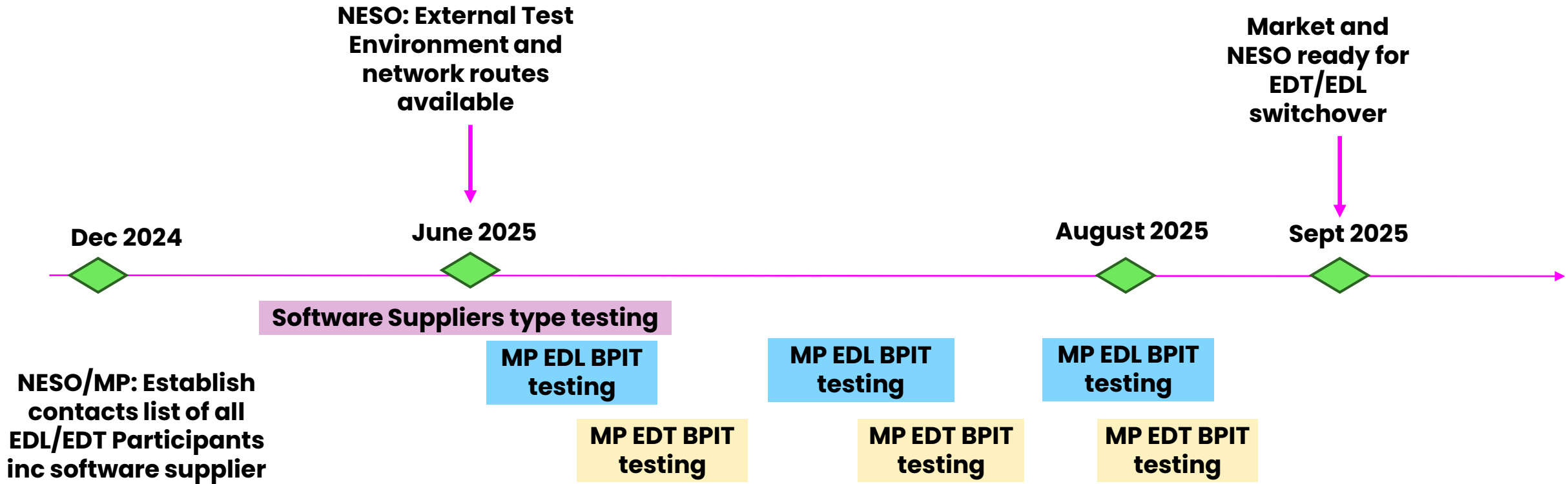
NESO responsible for updating BM to stop connecting and OBP to start connecting to **Control Points**

NESO will manage the reconfiguration internally for **WA API**

TRANSITION COMPLETE

Planning ongoing for network routing – seeking to avoid a second transition

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Market Involvement

NESO: External Test Environment and network routes available

Market and NESO ready for EDT/EDL switchover

Dec 2024 | June 2025 | August 2025 | Sept 2025

Software Suppliers type testing

MP EDL BPIT testing | **MP EDL BPIT testing** | **MP EDL BPIT testing**

MP EDT BPIT testing | **MP EDT BPIT testing** | **MP EDT BPIT testing**

NESO/MP: Establish contacts list of all EDL/EDT Participants inc software supplier

Readiness for CP testing – with MP or Software provider
1. Interlock IP address, CP name, BM unit name to be used in testing, channel for communication (Leased Line, WAAPI, Interconnector)
2. Confirmation from network team around stability of connection
3. Confirmation that it is test environment and any testing will not affect real energy
4. Connectivity test to validate EDL redecs and EDL instructions

Readiness for TA testing – with MP or Software provider
1. Interlock IP address, TA name, BM unit name to be used in testing, FTP username and password
2. Confirmation from network team around stability of connection
3. Confirmation that it is test environment and any testing will not affect real energy
4. Connectivity test to validate EDT submissions

Contact details for testing: box.balancingprogramme@nationalenergyso.com

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NBM API updates

Chi-Ho Lam, Product Manager

Update to NBM Transition and 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

- 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~~V4 web services interface

- Dynamic Response and MW Response will be migrated from ASDP to OBP using the ~~current V3~~V4 web services interface

The V4 interface has been required to address NESO rebranding

Alternative interfaces will be explored for 2026 +

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NBM API Updates

- Informal industry consultation held closed 10 September
  - SOAPv4 as proposed API
  - Operational Metering to iHost
  - Settlement metering direct to Settlement System via API (out of OBP scope)
  - Treatment of crossovers (moving from one window to next)
  - Ramp Rates as potential dynamic parameter

- Limited response and feedback obtained

- Additional feedback to be requested via Markets October Reserve forum on Dynamic Ramp rates (Q: If implemented will providers use this?)

- Currently finalising API specification and internal governance; looking to share specification in next 2 weeks

- As part of service registration, MPs will be signed-up for testing that will occur in April 2025

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Summary of Changes for Existing ASDP Providers

- New URL for rebranding

- Revision of message schema for rebranding

- Operational metering (RTM) through iHost Data Concentrator

- Settlement metering through new interface

- PNs required on all units (not service-specific)

- Multiple starts for same unit with different power levels

- Can be available with non-zero PN
  - E.g. 50MW unit already generating 10MW can make 40MW available to ESO

- Heartbeat required for all units on all services
  - Every 5 minutes
  - Timeout if two HBs missed

- Scheduled Date Time in dispatch message to be observed
  - Start ramping up at start time

- (Subject to approval) Battery units to supply import and export capacity
  - New optional parameters in heartbeat Max Export, Max Import (MWh)
    Aligned with GC0166 (State of Charge)

- Connection to OBP will be via a new Internet Gateway; updated IP address whitelisting required
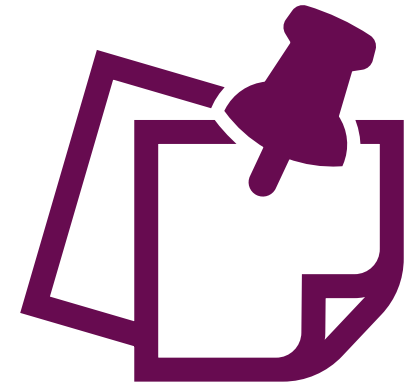
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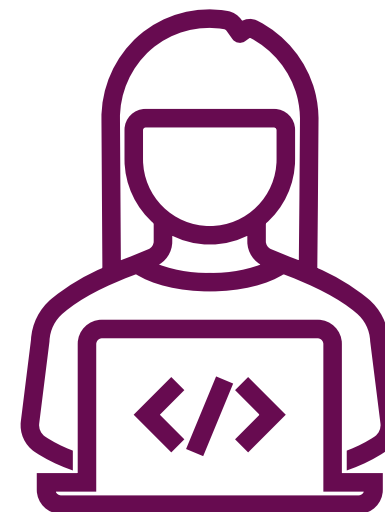
OBP Technology Development Beyond 2025

Nisha Bhamidimarri, Senior Delivery Manager

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Beyond 2025 – Interactive Mural Board

- We invite you to help shape our future technology roadmap

- **Feed back to us**

  - Current expectations

  - How the current expectations are not met

  - How we can work towards to a better digital future

- **Key themes**

  - Data transparency and data sharing

  - Enable digital access to wider range Market Participants - APIs, Protocols

  - Introduction of new services and upcoming market changes, i.e., REMA

Q&A

Nisha Bhamidimarri, Senior Delivery Manager

Engagement Opportunities . . .

Balancing Programme Webinar ✓

Balancing Programme In-Person Event ✓

Balancing Programme Technology Stakeholder Focus Group

Balancing Programme In-Person Event (London)

| 28 February 2024 | 27 March 2024 | 22 April 2024 | 27 June 2024 | 26 September 2024 | 21 October 2024 | 23 October 2024 | 27 November 2024 |

Balancing Programme Optimisation Stakeholder Focus Group ✓

Balancing Programme Technology Stakeholder Focus Group ✓

Balancing Programme Webinar ✓

Balancing Programme Forecasting Stakeholder Focus Group

⭐ NESO newsletters with Balancing Programme content issued regularly, providing updates between online & in-person events ⭐

Offer of 1-1 relationship managers within the Balancing Programme

You can sign-up to our London November Balancing Programme Event by clicking here

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Next Steps . . .

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

Subscribe to our new NESO newsletter **here**; please select **Future of Balancing Services inc. Balancing Programme** to keep up to date.

We welcome your feedback & questions – please get in contact with us at box.balancingprogramme@nationalenergyso.com.
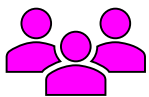
Sign-up to our other Stakeholder Focus Groups for Optimisation & Forecasting - Balancing Programme Stakeholder Focus Groups.

If you are interested in a regular meeting with a representative from the Programme and would like more information, please get in contact using the email address above.

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