Public

Technology Stakeholder Focus Group

EDT/EDL Transition to Open Balancing Platform

28 April 2025

NESO
National Energy System Operator

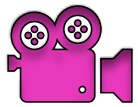
Audience Participation

There is time allocated to Q&A towards the end of the session - we will take all questions during this part of the agenda to ensure we get through all pre-prepared content.

Please post any questions you have for our speakers in the Microsoft Teams chat ensuring to list both your **full name and organisation -** this will enable us to follow up with you after the webinar if necessary. During the Q&A section, you can also use the 'raise hand' function and come off mute to ask your question.

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 Focus Group, please get in contact with us at **box.balancingprogramme@nationalenergyso.com.**



Today's Technology Focus Group will be **recorded and published online** after the session, along with the slide pack.

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Programme Vision

The aim of the Balancing Programme is to maintain and bring change into our current balancing capabilities to support Control Room operations, whilst we transform to new balancing capabilities that the NESO needs to deliver reliable and secure system operation, facilitate competition for the benefit of consumers and meet our ambition for net-zero carbon operability.

1. Manage increased **number of market participants**

2. Quickly **adapt** to new requirements, innovation and services

3. Enable **level playing field** for new flexibility services

4. Optimise **balancing cost**

Clean Power

We will enable a zero-carbon electricity system by 2030

Decarbonised Energy

We will develop integrated plans for a decarbonised, efficient and flexible energy system fit for the future.

Consumer Value

We will have unlocked around £3 billion of consumer benefits by 2026 by driving competition in the market.

Customer Centricity

We will understand and balance the different needs of our customers to form meaningful partnerships and operate a fair market operation

Digital Mindset

We will unlock the potential of technology and teamwork through a digital-first approach, enabling a future of seamless connectivity and innovation at pace.

Valuing our People

We will invest in our people, to ensure we are prepared and empowered to embrace the opportunities of the future.

Balancing Systems Release Plan

Key:

- **Technical Impact on Industry**
- Complete

Programme Increment 14 (Oct 24 - Jan 25)

OBP Capabilities & Enablers:

1. Interface to Data Analytics Platform (DAP)
2. BM Quick Reserve Business Go-Live

Non-OBP Capabilities:

1. ASDP System – Final release
2. BM System – LDA updates (NEW)
3. VERGIL – addition to improve economic dispatch (NEW)
4. Dispatch Efficiency Monitor – real-time monitor (NEW)

****Please note** – GC0166 implementation date is dependent on the outcome of the Grid Code Modification process**

Programme Increment 16 (Apr 25 - Jul 25)

OBP Capabilities:

1. **Non-BM Instruction Types**
2. **Non-BM Quick Reserve**
3. National Optimiser
4. Pumped Storage BOAs
5. Bulk Dispatch Wind BMUs (rule based)

Programme Increment 18 (Oct 25 - Jan26)

OBP Capabilities:

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

OBP Enablers:

1. Ready to decommission ASDP
2. **EDT/EDL mastered from OBP**
3. PEF Integration

Programme Increment 15 (Jan 25 - Apr 25)

OBP Capabilities:

1. Constraint Management
2. Manual instructions

OBP Enablers:

1. Interface to Ancillary Settlement for NBM
2. **Non-BM APIs**

Programme Increment 17 (Jul 25 - Oct 25)

OBP Capabilities:

1. **BM & Non-BM Slow Reserve**
2. **Move MW Dispatch**
3. **Move Response (DC/DM/DR)**
4. Optimisation within a Constraint

OBP Enablers:

1. Ready to decommission ASDP
2. OBP becomes Operationally Critical

Programme Increment 19 (Jan 26 - Apr 26)

Capabilities:

1. Interface to NCMS for constraints
2. Response and Inertia

Abbreviations: **DC:** Dynamic Containment **DM:** Dynamic Moderation **DR:** Dynamic Regulation **BOA:** Bid Offer Acceptance **DX**: Dynamic Response **VERGIL:** Versatile Graphical Instruction Logger **NCMS:** Network Control Management System **EDL:** Electronic Dispatch & Logging **EDT:** Electronic Data Transfer **ASDP:** Ancillary Services Dispatch Platform **CLOGS:** Contingency Logging System

Agenda

Time	Agenda Item	NESO Presenters
11:30 - 11:40	Welcome & Setting the Scene	**Nisha Bhamidimarri**, Chair of the Balancing Programme Technology Focus Group & OBP Senior Delivery Manager
11:40 - 12:10	Context of Transition	**Dave Uzzell**, Operational Manager
12:10 - 12:30	Transition Strategy and Expectation from Parties	**Andrew Fletcher**, OBP Lead Solution Architect
12:30 - 12:40	Plan and Next Steps	Nisha Bhamidimarri & Andrew Fletcher
12:40 - 12:55	Q&A	Nisha Bhamidimarri
12:55 – 13:00	Future Engagement Opportunities & Next Steps	Nisha Bhamidimarri
13:00	Meeting Close	

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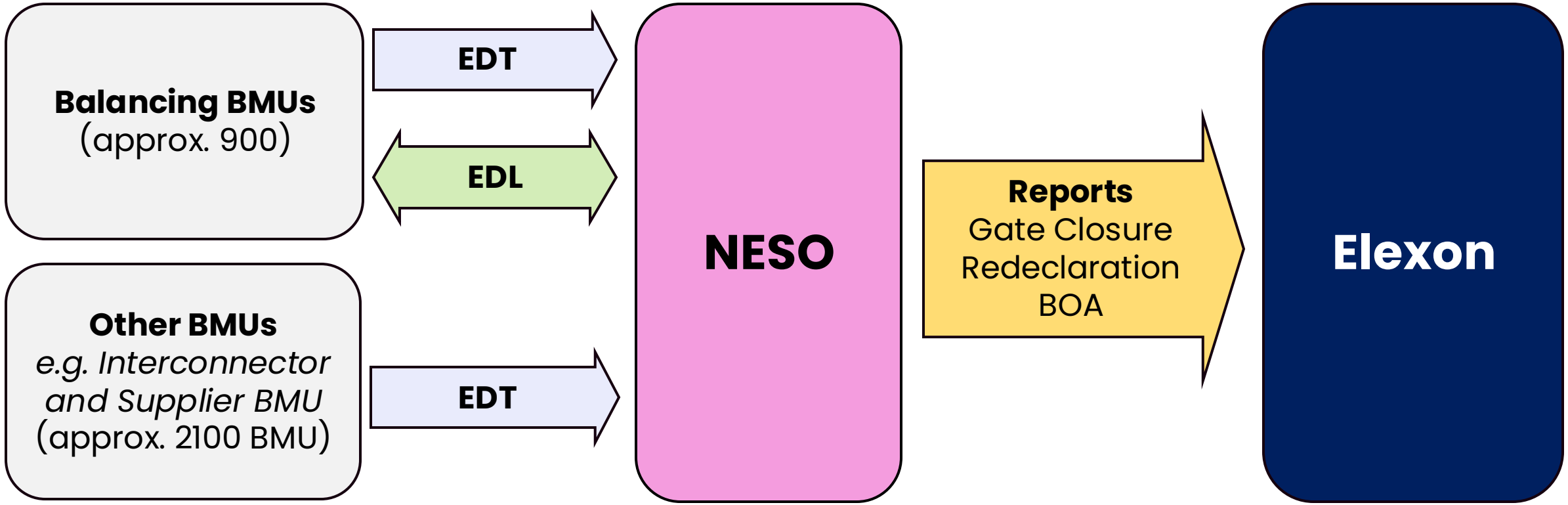
Terminology

Term	Description
BMU – Balancing Mechanism Unit	Balancing Mechanism (BM) Units are used as units of trade within the Balancing Mechanism. Each BM Unit accounts for a collection of plant and/or apparatus and is considered the smallest grouping that can be independently controlled. As a result, most BM Units contain either a generating unit or a collection of consumption meters. The Grid Code obliges parties to register depending on type and size criteria with NESO. Each Party that has responsibility for Exports and/or Imports onto the Transmission System must ensure that the Plant and/or Apparatus which gives rise to those Exports and/or Imports are comprised registered as BM Units with NESO. Parties may also choose to register smaller BMUs in order to participate actively in the Balancing Mechanism. Interconnector Users are required to register BMUs, regardless of capacity, in pairs (Import & Export expressed as Demand & Generation BMUs).
Asset	Same as BMU.
Lead Party	Lead Party is the owner of the BM Unit. The party who has responsibility in the BSC and Grid Code for the operation of the BM Unit.

Terminology

Term	Description
Trading Agent	The point, designated by a market participant, from where Physical Notifications, Export & Import Limits and Bid Offer Data prices are submitted to NESO via EDT.
Control Point	The point at which a market participant receives Bid Offer Acceptances and Ancillary Service instructions from NESO and submits Export & Import Limits and Dynamic Parameters to NESO via EDL. This would normally be a site from which the participant exercises real-time control of demand, or in the case of a power station, the point where this is physically controlled by the BM Participant.
Virtual Lead Party	Lead Party of Secondary BMU.
Wider Access Provider	Providers using Wider Access API to provide and receive data from NESO.
Market Participant	Market Participant is ANY participant in the UK electricity market. Market Participants can perform a number of roles within the market such as Lead Party, EDT Trading Agent or EDL Control Point or Supplier or Interconnector Party.

EDT / EDL Submissions



Market Participant Journey – Balancing Mechanism Unit

Connection

Prequalification based on unit parameters and behaviour

Connection to Transmission or Distribution System

Registration

Register Unit with NESO & Elexon

Setup Communication channel – Trading Agent, Control Point Agent or Virtual Lead Party

Entity Established in Balancing Systems (Sort static)

Submit Data

Submit Data relevant to Balancing Mechanism or Ancillary Service through EDT, EDL or WA API

Impacted by transition

Balancing Requirement

NESO identifies requirements for

Balancing actions

Constraint Resolution

Reserve and Response

Issue System Warning if margins are tight

Scheduling

Create Energy Strategy for 4 to 24 hours ahead of real time

Instruct plants to create margins or resolve constraints

BM Startup Instructions

Balancing

Balancing and System Actions

Bulk Dispatch

Manual BOA

Ancillary Instructions

Impacted by transition

Reporting

Settlements Reporting

Regulatory Reporting

Audit

Settlement

Settlement for ancillary services

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Reason and Timing of Transition to OBP

Operational risk due to limitation in performance and scalability for the current balancing system

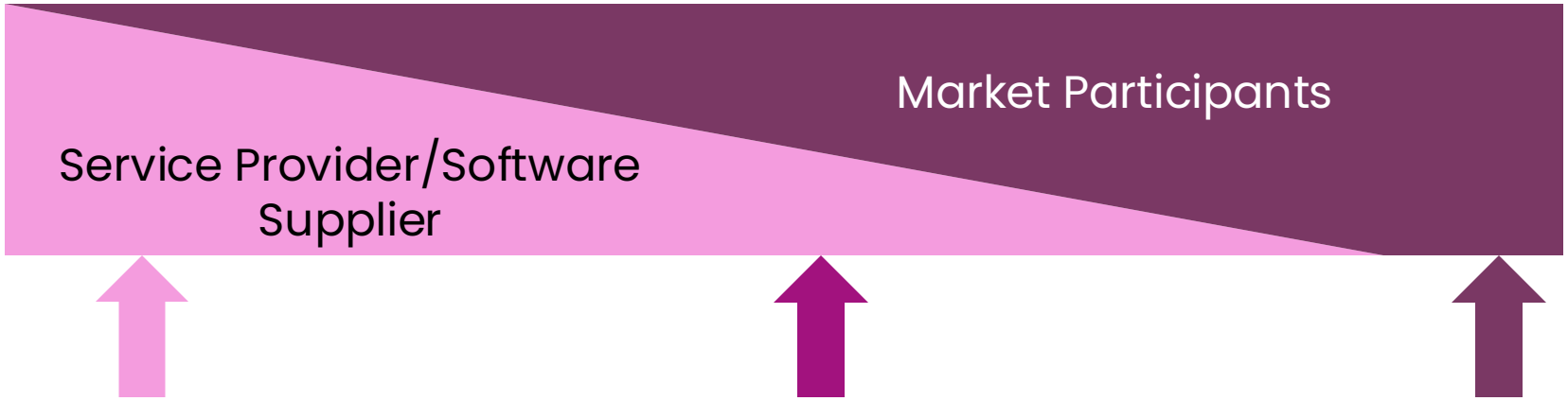
Minimize the planned outage for software deployment or unit onboarding

Prepare for DER (Distributed Energy Resources) and CER (Customer Energy Resources)

Logical step in the transition from BM to OBP allowing SORT decommissioning

Patterns in Connectivity Solutions

Each Market Participant will either have developed their own bespoke software for EDT and EDL or use Software supplied by an approved Software Supplier



Managed Service Provider
- Host Software for Trading Agents & Control Point Agents
- Connect to NESO

Market Participant
- Generate Data

Software Service Provider
- Write software of Trading Agents and Control Points

Market Participant
- Establish Connectivity with NESO
- Host Software purchased from software provider
- Generate Data

Market Participant
- Write Software as trading agent or control point agent
- Establish connectivity with NESO
- Generate Data

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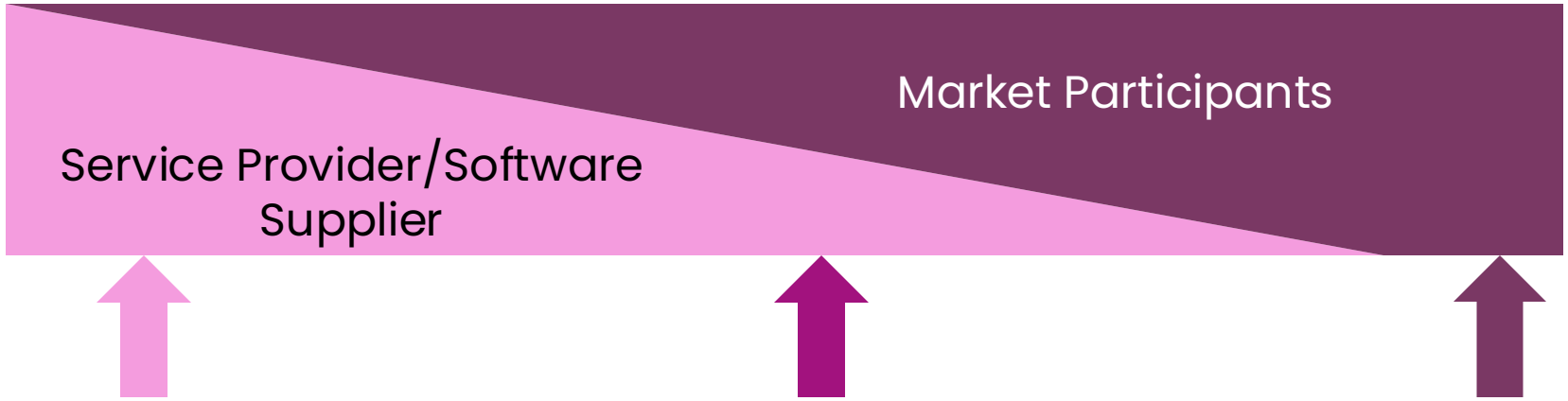
Type of Testing with NESO



Managed Service Provider
- Software testing (Type Testing inc. behavioural test)
- Connectivity Testing (NAT)
- E2E Business Process Testing for each BMU (BPIT)

Market Participant
- BMU Data inc. behavioural test

All tests for each hosting provider for select participants

Software Service Provider
- Software Testing (Type testing inc. behavioural test)

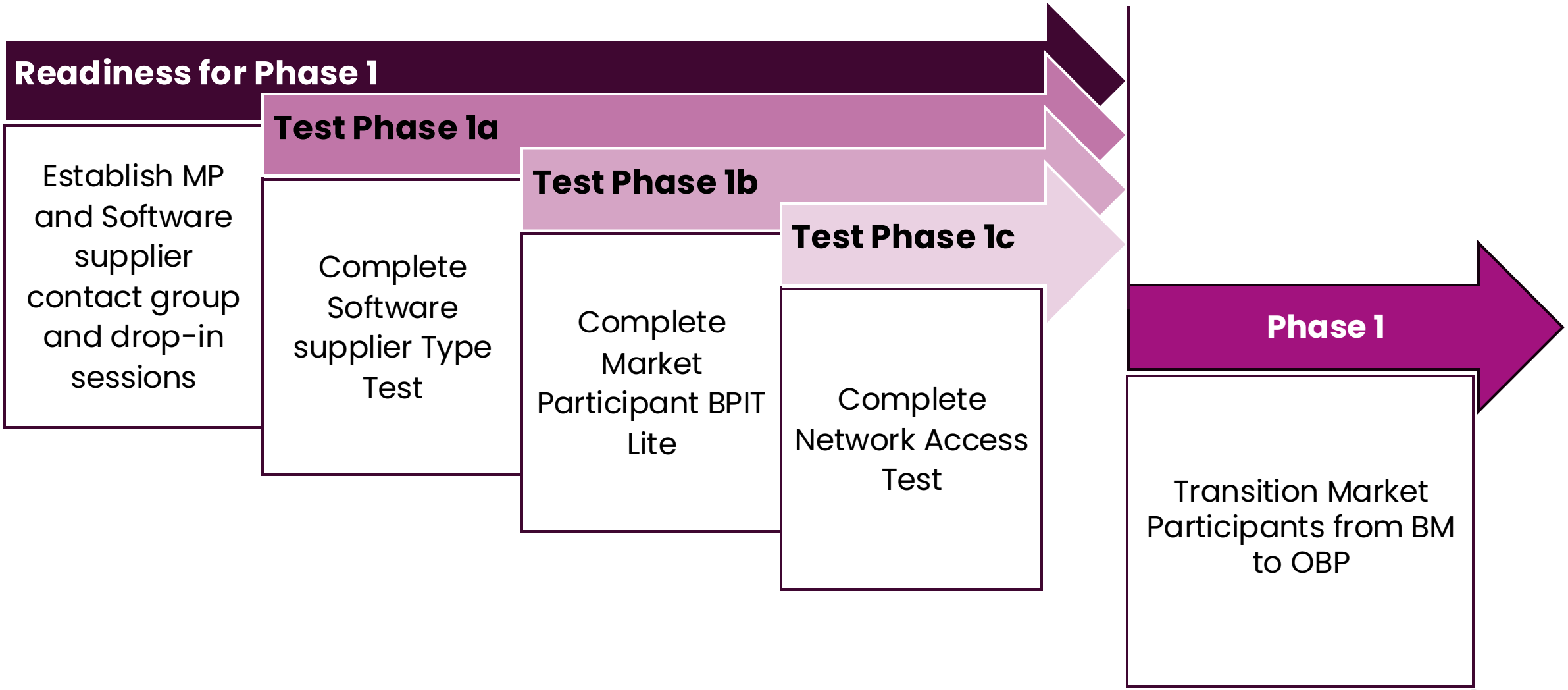
Market Participant
- Connectivity Testing (NAT)
- E2E Business Process Testing for each BMU(BPIT)
- BMU Data inc. behavioural test

Type Test for each software NAT and BPIT for each provider

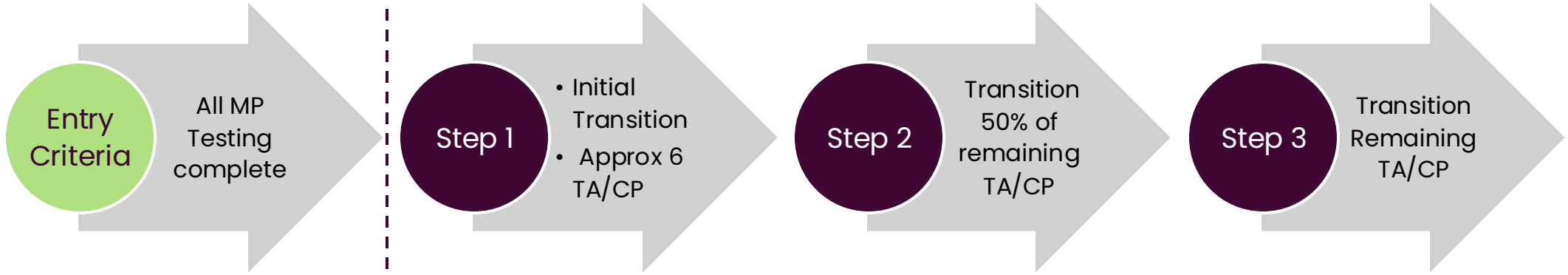
Market Participant
- Software Testing (Type Testing inc. behavioural test)
- Connectivity Testing (NAT)
- E2E Business Process Testing for each BMU (BPIT)

All tests for each provider

OBP Market Participant Activities



Phase 1 – BM to OBP Transition

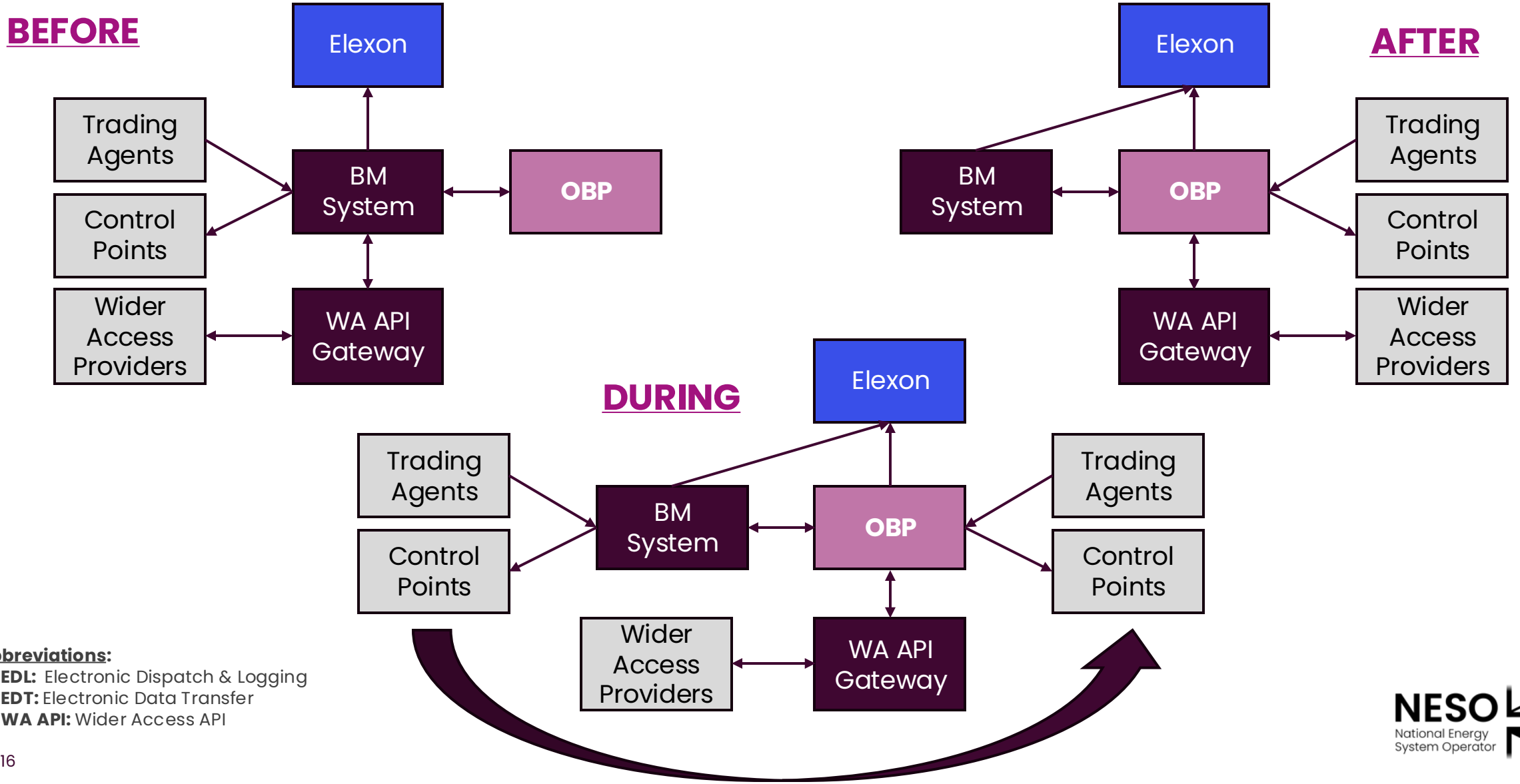


1. NATS Test Complete
2. Approved Software
3. BPIT Lite Complete

(within 6 weeks to avoid any Registration delays)
Transitions scheduled between SORT-STATIC processes

Principles of Transition

EDT / EDL Transition



Abbreviations:

- **EDL:** Electronic Dispatch & Logging
- **EDT:** Electronic Data Transfer
- **WA API:** Wider Access API

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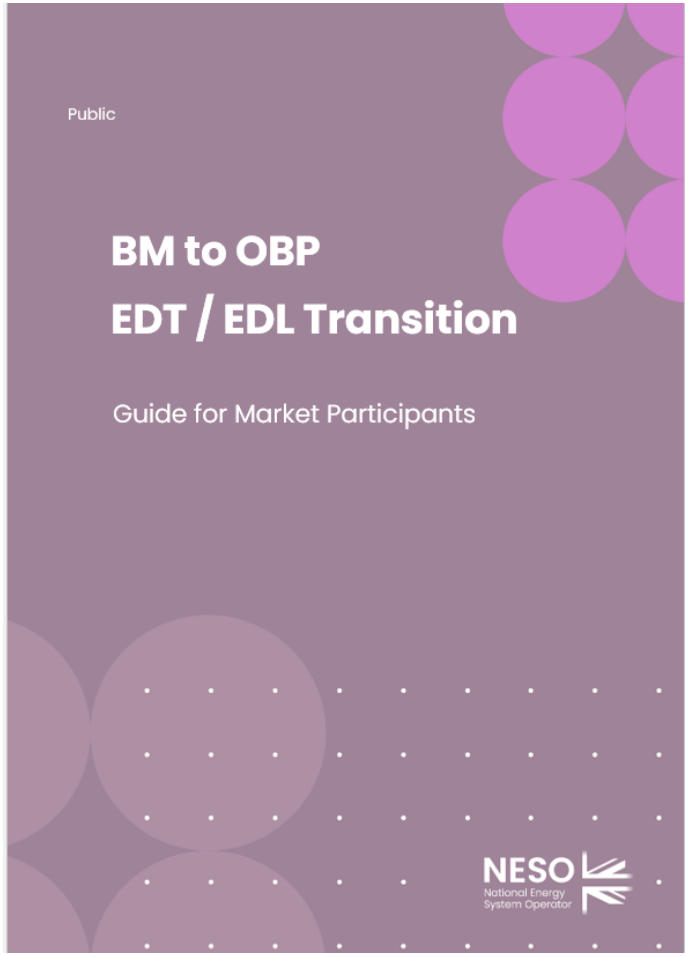
Impact on Software Vendors & Market Participants



Guidance document will be published on the NESO website and shared with this focus group:

- Transition Phases
- Impact on Software Vendors and Market Participants
- Testing Requirements

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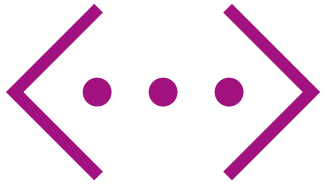
Impact on Software Vendors & Market Participants

EDT Changes

- A new Fully Qualified Domain Name (FQDN)
- A different DNS server
- For Production – IP addresses from the pool previously published but different from current BM IP addresses and for market participant test environment a new IP address
- Only support FTPS
- Different credentials



EDL Changes

- Connection established from a different IP address compared to BM
- Same pool of IP addresses as EDT but might be a different actual IP address
- Change in pattern of outage

Phase 1 – BM to OBP Transition

Start of Phase 1 Transition	• Planned BM Outage	Market readiness indication through completion of all types of testing No Lead Party/BMUs can onboard to BM systems
Trading Agents	• Transition timeslot • No NESO Mandated outage • Reset of sequence numbers	On first connection to OBP the Trading Agent's folder will be empty; there will be no migration of previously processed submission, acknowledgement, rejection or acceptance files. The first submission to OBP will reset the sequence number and therefore following this no further submissions to the BM System should be made unless there is a need to revert
Control Points	• Transition Timeslot • Small outage	Each Control Point will be allocated a specific timeslot during the transition period during which NESO will update the BM System to stop connecting and OBP to start connecting. This will involve a short outage for each Control Point
Wider Access Providers	• No change • Small outage for internal transition	This interface is provided by a separate gateway which will remain in place. No change or testing for WA API Users. NESO will manage moving the internal connection between the gateway and the BM system to OBP. All Wider Access participants will be notified of the short maintenance window to do this.
End of Transition	• All parties transitioned	

EDT/EDL plan on a page

NESO

NESO and Market

Tasks	2025
	M A M J J A S O N D
Milestones	OBP Software proven; MPT Environment available; OBP and BM Ready for transition; Phase 1 transition complete
Build EDT/EDL Adapters	
Ready OBP Infrastructure and Network	
Software Validation in Dev/QA	
OBP/BM Transition testing and dress rehearsal	
Software Type Testing	
BPIT Testing	
NAT Testing	
Transition	

MP Survey Results and Appeal

We have contacted all EDL/EDT Software Suppliers and will be planning testing with them to ensure the software interfaces successfully with our new systems.

NESO has also **contacted all Market Participants** for details of their business & IT contacts for EDL/EDT irrespective of their connectivity solution . To date, 24% of companies have responded. Even if you have a fully hosted solution managed via a 3rd party provider, we still ask that you respond to support our due diligence in ensuring every BMU is accounted for during the transition.

We will re-send out the request for business & IT contacts for EDL/EDT to those Market Participants we are yet to hear from, following this Technology Focus Group – can we kindly ask that your please do respond to support us in creating a smooth transition.

We will establish regular drop-in sessions starting in July 2025 to ensure Market Participants and Software Providers are fully supported during the transition.

Questions should be directed to box.balancingprogramme@nationalenergyso.com

Q&A

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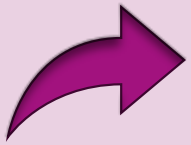
Next Steps

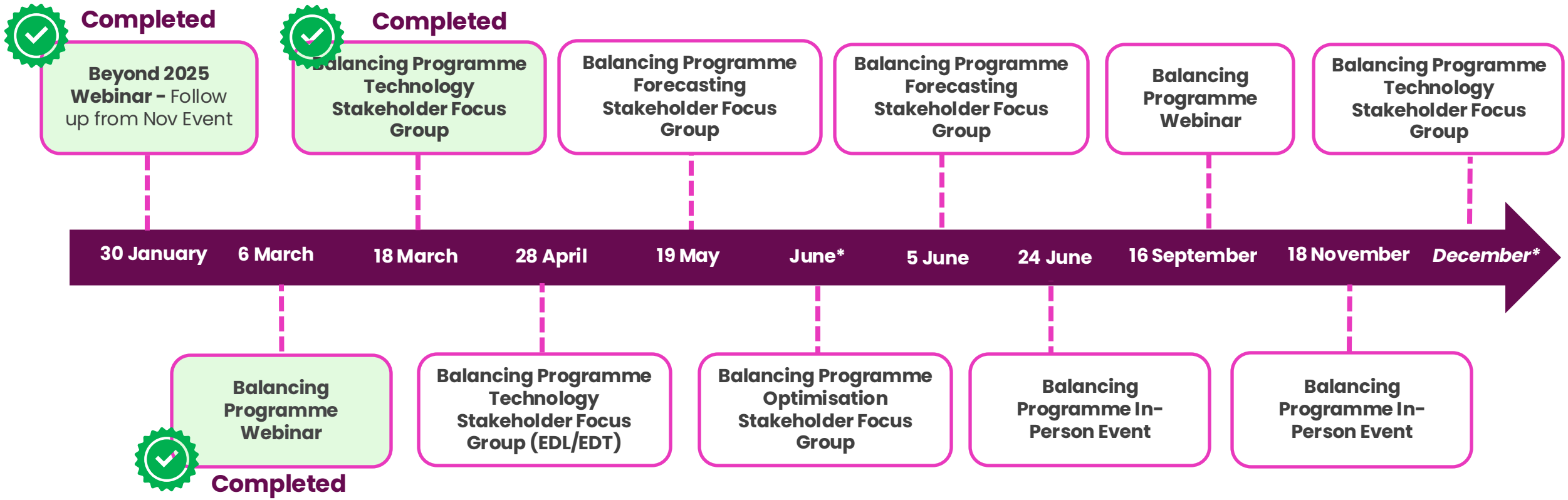


If you are a Market Participant who is yet to respond to our request for business and IT contact details re: EDL/EDT please do so by COB 02/05/25 – The request for this information will be re-sent out following this Technology Focus Group.

If you would like to arrange a meeting with the team to discuss the EDL/EDT transition from BM to OBP – please get in contact using the following email address: **box.balancingprogramme@nationalenergyso.com**

The BM to OBP EDL/EDT guidance for Market Participants will be published once approved internally & shared directly with this Focus Group. Please ensure you read through the documentation & direct any questions to: **box.balancingprogramme@nationalenergyso.com**

2025 External Engagement Timeline



**** Exact date TBC***

Balancing Programme **relationship management meetings** throughout 2025 & **external NESO newsletters 'Energising Progress'** with Balancing Programme content issued regularly, providing updates between online & in-person events. **Further Stakeholder Focus Group dates** to be added throughout 2025.

Closing Remarks . . .

We welcome your feedback & questions – please get in contact with us at **box.balancingprogramme@nationalenergyso.com.**

The recording & slides from today's session will be published on our website by the close of this week and shared with stakeholders signed up to this Technology Focus Group.

Sign-up to our other Stakeholder Focus Groups for Optimisation & Forecasting to receive invites to these sessions - **Balancing Programme Stakeholder Focus Groups.**

Our 24 June 2025 in-person Balancing Programme Event has reached capacity – if you would like to attend, please register your interest **here**, and if spaces become available, we will contact you.

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

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

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