

# Balancing Programme: Programme Increment 8 Closure Report

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### Executive summary

Programme Increment (PI) 8 was a short programme increment, brought about by modifying the schedule to not interfere with school holidays, as well as the quarterly investment paper cycle; this has not meant that we have fallen short. We have delivered our highest number of features to test within the PI, and have increased programme velocity too, whilst keeping value delivered against business objectives high. The PI also saw us get hands on with Critical National Infrastructure (CNI) and albeit later than planned, the platform team have worked with the Data Centre Enablement (DCE) team to recover the time lost in delivery at the expense of our contingency for later on. PI9 planning was completed on 18<sup>th</sup> July, the details of which are listed in more detail below. The key focus is to stabilise the environments as we look to close out System Testing (ST)/System Integration Testing (SIT) whilst proving a level of performance/operational readiness, and letting the business have a taste of what’s been delivered to date in Pre-User Acceptance Testing (UAT).

### PI8 Completion Report (We said & we did)









#### PI8 Objectives Summary

















The overall PI8 Objective was to: Deliver a working, functional Minimum Viable Product (MVP) for Release 1.0 of the Open Balancing Platform (OBP).

This high-level objective was refined into 12 committed objectives (6 delivery (develop), 4 elaborate & 2 forward looking (outlook)) detailed in the table below.

#### Committed Objectives (What ‘We Said’ & ‘We Did’ deliver):

 Exceeded 
  Met 
  Partially Met 
  Not Met

PI	Objective	Status	Description	Delivered Value
	Finish off development of OBP Release 1.0 (R1.0) functional capabilities.		All remaining functionality required for OBP Release 1.0 to be completed in PI8. These are predominantly edge cases in Optimisation logic, Energy Profile calculation and enhancement of the Requirement Editor journey.	86% of Functional Features have been delivered to System Test, rest lined up for PI9.
	Complete necessary documentation for 11 critical modules in preparation for Stage Gate E governance.		Submit documentation for wider design reviews in preparation for passing Stage Gate E.	Design reviews have progressed well, albeit documentation of 7 modules did not conclude as a result of prioritising functional scope and defects and are lined up for PI9.
	Development of OBP Release 1.0 Non-Functional Requirements (NFRs)		All OBP applications must meet the non-functional requirements. This is done by implementing appropriate resilience, monitoring, performance & scalability, security on a per module basis.	NFRs for OBP R1.0 have been defined and approved. PI9 has planned work to stabilise the platform further in PI9.
	System testing of OBP Release 1.0 functional capabilities		System testing of functional code delivered in PI7.	ST progressing to plan (60% complete) and is due to finish as planned in 9.5 subject to defect numbers remaining low and platform stability.

	<p>Start SIT, UAT and ORT Testing (based off signed off NFR's)</p>		<p>Start wider test phases in pursuit of production launch.</p>	<p>All phases underway in Azure with Multi-Zone enabled for Pre-UAT which will start in PI9. Initial setup in UAT room validated with Subject Matter Experts (SMEs).</p>
	<p>Build initial CNI Services required for OBP in CNI (Data Centre delivered mid-June)</p>		<p>This is a pre-requisite to any further environment builds – and puts in place all foundation services; incl. the automated platform build pipeline to create subsequent environments.</p>	<p>Day 0 - 100% Complete. There were delays due to CNI (inc. Vodafone managed by CNI) dependencies not being met, and programme had work to catch up. This has resulted in us losing all planned contingency ahead of integrating with Integrated Operational Network (ION) BM environments for 25<sup>th</sup> August.</p>
	<p>Continued work on route to live improvements</p>		<p>There are a number of improvements required to the OBP route-to-live that will help the quality and speed of delivery.</p>	<p>Great work on all areas. ST uplifts stable all PI, smoke test refinement for Elexon Application Program Interface (API) ready and enhancements to requirement traceability presented back.</p>
	<p>OBP Release 1.1 Capabilities and preparation for Development to start in PI9</p>		<p>Prioritised and elaborated capabilities ready for squad design and development.</p>	<p>Refinement for 1.1 going well but development will be prioritised to protect R1.0.</p>
	<p>Preparation for Business Change, Training Activity</p>		<p>A set of training materials and change collateral as part of train the trainer readiness.</p>	<p>Positive improvements in this area. Training content preparation on plan in readiness for rollout next PI.</p>
	<p>Define OBP Release 2 CNI design to enable procurement</p>		<p>OBP R2.0 requires a design to meet the business's operationally critical requirements – to support a system that is essentially “always-on.”</p>	<p>Initial high-level architecture provided to DCE team. Work to continue in PI9 as per the revised integrated plan with DCE team.</p>
	<p>OBP Release 1.1+ Backlog Prioritisation</p>		<p>Management and ongoing prioritisation of the backlog, ensuring that the major functional areas are developed, along with the background stream of continual improvement of existing functionality.</p>	<p>Complete - albeit will be ongoing updates as per Scaled Agile approach. Plans in PI9 to develop the Product Squad to accelerate capability discovery and elaboration.</p>
	<p>Industry Engagement; Focus groups and Wind Advisory Group</p>		<p>Supporting and presenting with industry sessions. Key sessions - Industry Engagement Event (15/6/23), and the multiple focus groups (e.g., Storage, Optimisation etc.). With the development of Wind in OBP, proposals and feedback are sought from the Wind Advisory Group.</p>	<p>Solution shared with Industry Engagement, Energy Steering Group (ESG) &amp; Wind Advisory Group - broad acceptance of the approach.</p>

In PI8 planning, 80 features/enablers were committed to be delivered to the definition of done.

Throughout the course of PI8, 15 committed features were reprioritised to a later PI, and 1 new feature was brought in. This resulted in a revised total of 66 committed features/enablers to be delivered to the definition of done in PI8.

In addition to the 66 committed features delivered, a further 8 stretch features were delivered. This resulted in 74 features/enablers being delivered in PI8.

## PI9 Plan (What we commit to do)

### PI9 Programme Plan

PI9 starts on 19/07/2023 and ends on the 24/10/2023 and is made up of seven, two-week sprints. The final sprint is where the programme focus is on Inspect & Adapt activities including preparations for and performing PI Planning for the next PI

At the Balancing Transformation ‘PI9 Planning Event’ the team produced the ‘PI9 Programme Plan’. This plan details out the ‘PI Objectives’ and the plan of which Features & Enablers will be delivered by the squads during each sprint of the PI (including the related Risks, Issues & Dependencies to ensure successful delivery).

In the ‘PI9 Programme Plan’ the squads committed to delivering 79 Features & Enablers and identified a stretch target of 17. Please note although the stretch target is not committed to being delivered by the squads, they will be worked on if the squads have available capacity during the PI. This enables a clear focus on the next level of priority.













Below is an extract of the PI9 Objectives from the ‘PI9 Programme Plan’.















Committed



Stretch Target

PI9	Objective	Status	Description	Delivered Value
	Complete build of non-Prod CNI environments		Final build of all non-Prod CNI environments	This will allow us to progress with pathway to live with test phases in CNI environments and preparation for CNI operational support
	Finish off remaining functional and non-functional R1.0 Features and resolved critical defects		Completed development and defects for R1.0	This provides the Control Room with the ability to specify requirements for Zonal energy balancing and bulk optimisation and instruct the Small BMU and Battery zones
	Continue through the testing phases – risk-based prioritisation on ORT		Progress with key test phases and start Operational Readiness testing in preparation for Production	Confidence in functional and non-functional delivery; with a view of operational support readiness
	Implementation of new WoW principles: route to live improvements, observations process.		New ESO improved Ways of Working processes for development, testing, and delivery.	Improved processes and methodologies will deliver increased governance and ability to develop at scale for an increasing Roadmap
	Pass all remaining Stage Gate E document checks and prepare remaining documentation (operational procedures, training material) and operate onboarding		Governance and assurance processes in line with Stage Gate delivery	This will provide ESO stakeholders assurance that the programme is delivering in line with architectural, operational and development principles, along with ready for production Training and Operational procedures
	Addition of Battery Zone and NBE including Battery capability		Changed scoped for R1.0 to include Battery Zone to align with production zone re-configuration for	This will allow the Control Room to bulk dispatch batteries, whilst honouring the “15 min MEL” rule.

			batteries/storage to be managed in a separate zone from Small BMU. Addition of NBE role for R1.0	
 Elaborate	Elaborate the OBP Interface strategy, preparation for integration with priority interfaces (Single Markets Platform, Data Analytics Platform, IEMS, BM, Platform for Energy Forecasting)		Architectural analysis to refine integration strategy, principles, and high-level design for all interfaces up to OBP 2.0 timeline	This provides architectural plans aligned with ESO programmes. With scaled agile, the architectural guardrails provide the ability to work at scale cross programmes, whilst providing ability to work flexibly within programme
 Elaborate	OBP Strategic high-level design		Artefacts and designs for delivering a highly resilient and available OBP solution	This allows the programme to plan forward for the architecture and infrastructure to deliver High resiliency and availability for OBP R2.0 onwards
 Elaborate	Defining the Roles & Responsibilities to support future discovery & elaboration		Definition and creation of the Product Squad (or similar) to support Product discovery and elaboration of the Balancing Transformation Roadmap	This will support the programme's desire to develop at scale, by building the Product backlog at a Capability level ready for planning and development in future PIs
 Elaborate	Defining post Release 1.0 release model including deployment & continuous training strategy		Whilst the programme has been focused on R1.0; we will need to continuously deliver new "big ticket" capabilities as well as continuous improvement on delivered functionality. This objective is to develop the process to deploy regularly post R1.0	This will allow ESO and the Control Room to receive business benefit in a timely manner, with minimal disruption to business operations.
 Outlook	Functional plan to take us all the way to Release 2.0		Alignment of the functional build plan with Roadmap, with all Epics and capabilities up to R2.0 in plan and aligned with ESO programmes	A functional plan through to Release 2.0 will offer confidence in delivery aligned with the BP Roadmap and other ESO programmes
 Outlook	Presentation of storage strategy to Grid Code Development Forum		Development of the Storage strategy, coupled with proposed Grid Code changes to better serve Control Room and industry usage of limited delivery energy storage	This will deliver more efficient use of storage units for the Control Room, and increased use for storage stakeholders