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MHHS Industry Playback Briefings

CR022 Plan Playback Briefings
11 – 14 April 23

This approach and plan is a proposal based on information available to MHHSP at the time of drafting. It has not been approved by Ofgem.

The plan review process has been designed to arrive at a credible, robust, and achievable plan that sees MHHS implemented as early as possible, to secure a swift introduction of MHHS and to allow the generation of the benefits that MHHS will bring, in particular for customers and in supporting broader activity to drive towards net zero.

Based on MHHS-DEL842 Implementation Approach Version 2.0 (Issued 05 Apr 23)
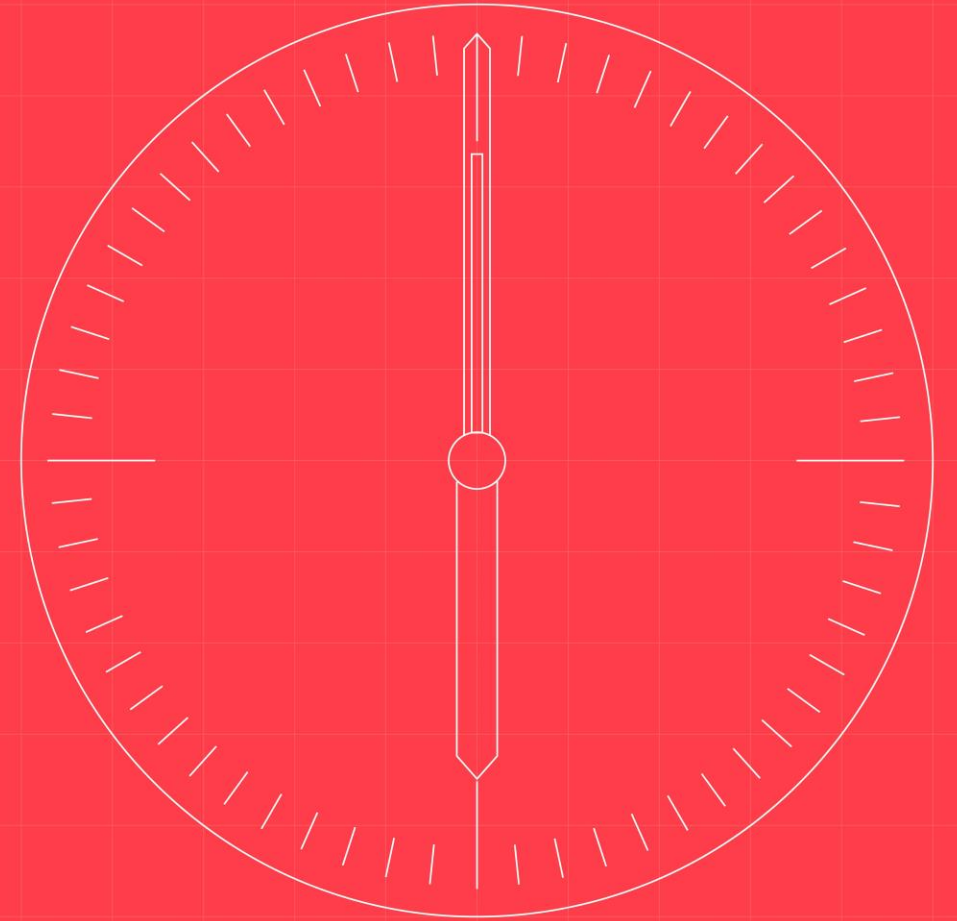
Agenda

#	Item	Lead	Time
1	**Welcome and Introduction**	KC	*15 mins*
2	**CR022 Overview**		
3	**Key Updates by Phase since Round 3**	KC & SME Leads	*15 mins*
4	**Q & A**	All	*30 mins*

Change Request CR022

Executive Summary:
Extract from PSG (5th April 2023)

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CR022 Replan Change Request - Background and Context

The Case to Re-baseline the plan

- **MHHS Implementation Arrangements Decision Document (August 2021).** Ofgem stated a clear intent to re-baseline the plan once Core Capability Provider procurement was complete. With the DIP Provider appointed in January 2023, it is entirely appropriate to reset the plan now.

- **Changes in approach.** There have been significant developments and refinements in approach across all areas of the plan end-to-end (see right). The most fundamental is the move to phasing with implications for SIT, qualification and migration as set out at PSG in November 2022.

- **Interim Plan extensions not tenable. I**t is not sustainable to continue with short-term extensions. MHHSP needs to articulate the long-term plan internally and externally to all stakeholders as a matter of urgency, in particular in relation to benefits realisation and timing.

- **Round 3 Evidence.** Excellent response rate at Round 3 (c. 50%) evidenced broad support for the timescales and planning envelopes derived from Rounds 1 and 2 for those that responded. Insights and conclusions from Round 3 need to be fully reflected in an updated plan now, whilst they are still valid and relevant.

- **Minimum Viable Cohort (MVC).** Round 3 is further evidence that MHHSP has the support of a strong cohort of PPs who wish to participate in SIT and have DBT plans enabling SIT (CIT) entry from M9. MHHSP is confident of forming an MVC based on Round 3 responses, which is a critical successful factor for the Programme and fundamentally underpins the plan as proposed.

Revised Plan – Features

- **Round 3 Timescales** – All Tier 1 milestones remain the same as for the Round 3 plan.

- **Tier 1 Date Ranges (M10 - M16)** – Given known risks under impact assessment, the CR specifies a range of dates, based on baseline milestones.

- **Go-Live** – Targets M10 / M11 in March / April 2025 respectively but reflects known risks (e.g. migration Design Build & Test) in 3-month contingent Go-Live range which if needed will impact M12 - M16.

- **New Settlement Timeline (M16)** – moves from Oct 25 in original timetable to December 2026. Contingent range of up to 6 months based on risk of M10 - M15 moving and need for stabilisation period.

- **SIT (CIT) Exit** – Staggered entry for MPRS means a small 2-week re-balancing of timescales between SIT stages since Round 3.
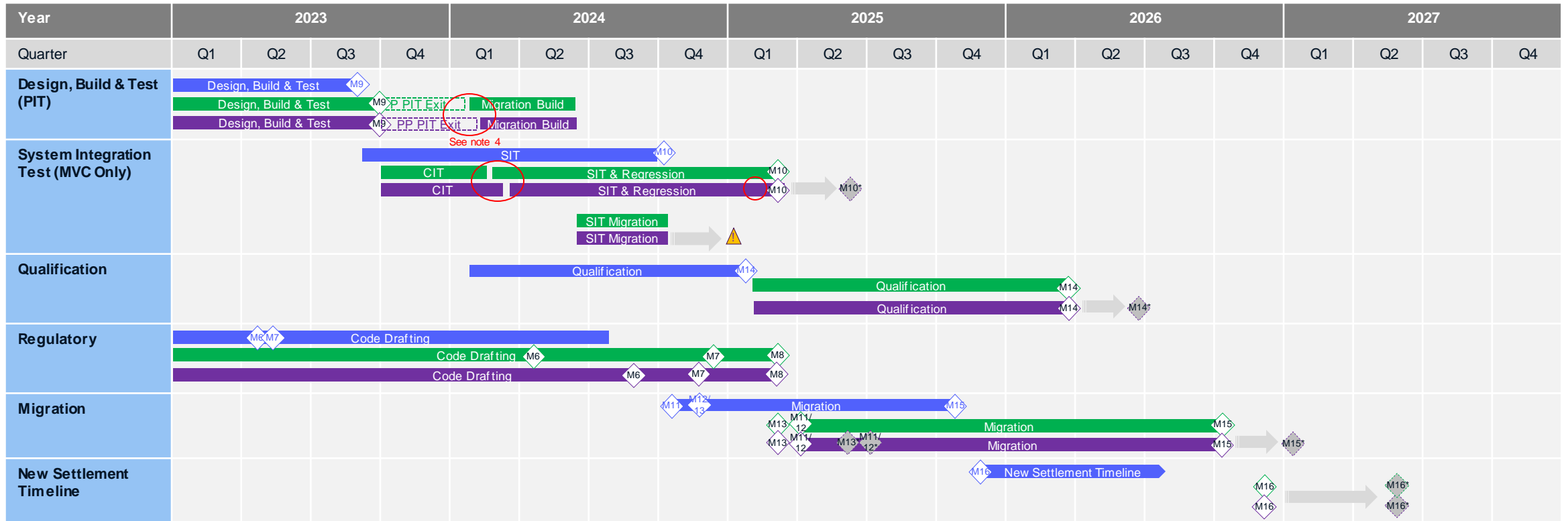
Why now given the risks?

- **Governance.** A credible plan is fundamental to effective governance and control on a programme of this scale and complexity; to proceed further without one is a risk in itself.

- **Enduring Planning Artefact.** Re-baselining is not a 'one-off'; updates are inevitable and will be managed by sound governance and change control. Change is inevitable.

- **No guarantee risk profile will change.** With MHHSP firmly in flight, there is no guarantee the prevailing risk profile will be more favourable in a few weeks or months.

- **Risk Factored In.** Incorporation of date ranges at M10 and M16, formally acknowledge the risks being carried by MHHSP around SIT timescales and SIT entry for some parties.

- **Change Criteria Unchanged.** Baselining does not change MHHSP posture toward future CRs. Some prevailing risks may materialise, potentially requiring further CRs soon after baselining. These CRs will not be prejudiced in any way.

What has changed since original timetable?

- **Phasing.** Each PP will be allowed to progress at their own pace through testing and into migration. The advantage is MHHSP can move at the pace of the fastest PPs without being held back by the slowest, enabling benefits to be realised earlier for faster PPs (and consumers).

- **SIT Strategy.** Amended to allow SIT PPs to enter into SIT (CIT) in a staggered manner and delay PIT completion. This will mitigate any potential impact on Tier 1 milestones. SIT PP volume is also larger that original timetable assumed.

- **Equivalence**. Enables PPs to use SIT exit evidence as deemed equivalent to Qualification need for BSC / REC market entry. SIT PPs have the incentive of being able to enter the market up to 6 months earlier, avoiding qualification testing.

- **Placing Reliance.** PPs choosing to Qualify via the non-SIT route may, where appropriate, *place reliance* on MHHS industry-wide testing successfully undertaken by other PPs.

- **Qualification Tranches.** Directly stems from phasing and will enable PPs to enter qualification testing at the next available tranche post-PIT.

- **Migration.** PPs enter migration in phased manner over extended period as SIT and each qualification tranche completes. Phased entry to migration helps drive early achievement of benefits for SIT / MVC PPs from 2025.

- **Reverse Migration.** Mitigates any impact on consumer choice for consumers who wish to move to a non-MHHS supplier, from one that has migrated. Key enabler for qualification and migration being run in parallel to support phasing.

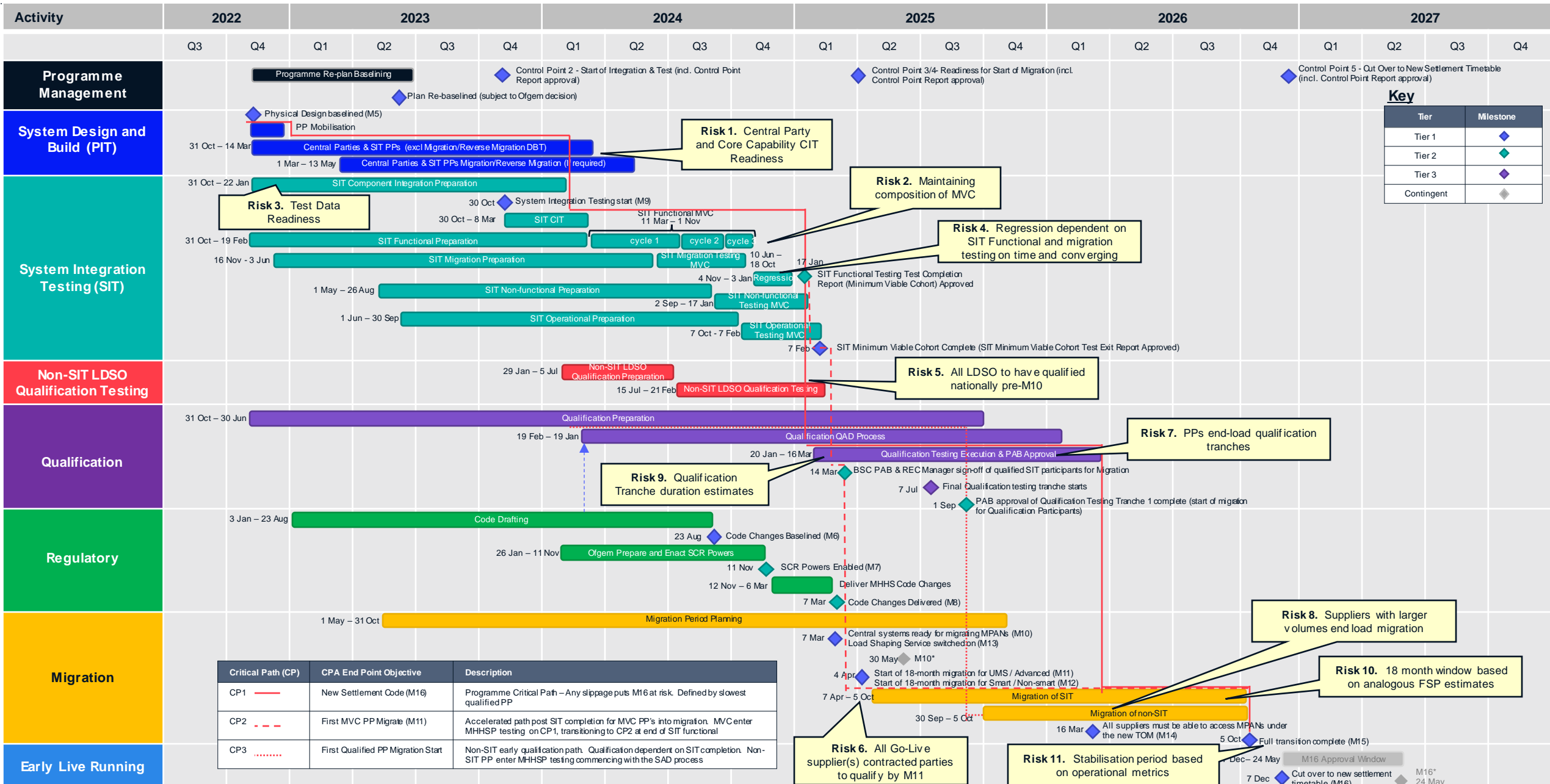# Evolution of Plan (Simplified View) from CR009 to Re-plan CR022 – Comparison of Key Critical Path Phases

Year	2023				2024				2025				2026				2027			
Quarter	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4

Phases:
- Design, Build & Test (PIT) — Design, Build & Test; M9; PP PIT Exit; Migration Build; See note 4
- System Integration Test (MVC Only) — SIT; CIT; SIT & Regression; M10; M10*; SIT Migration
- Qualification — Qualification; M14; M14*
- Regulatory — Code Drafting; M6, M7, M8
- Migration — Migration; M11, M12, M13, M15; M11/12, M11/12, M13, M15*
- New Settlement Timeline — New Settlement Timeline; M16; M16*

Key

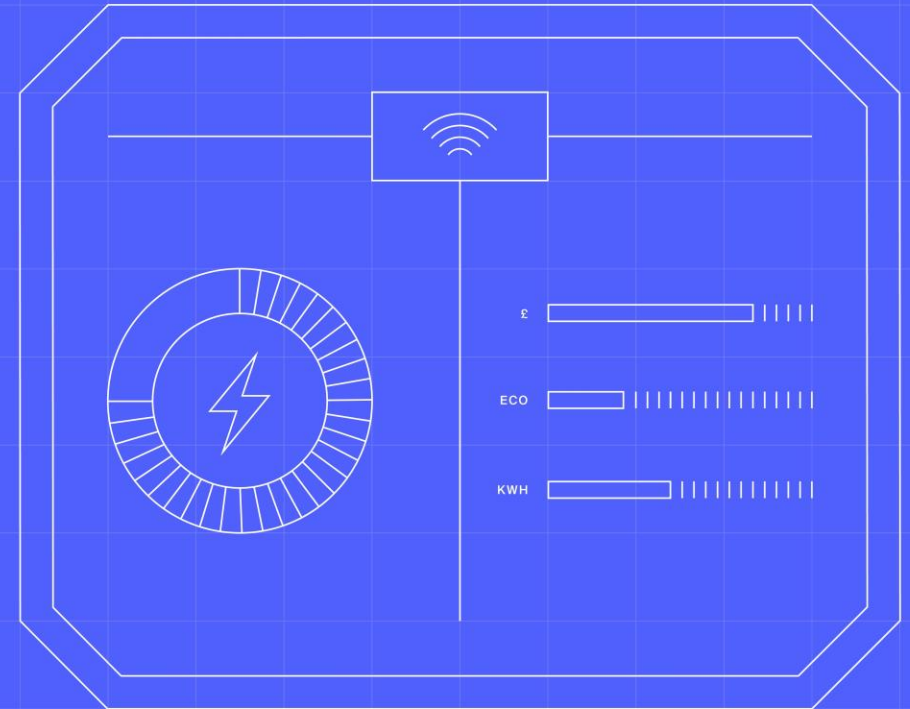| Version	Description
CR009	Original Timetable Overlaid with CR009 changes
Round 3	Plan as issued for Round 3 Consultation
Re-plan CR022	Latest Plan for issue with Replan CR
◇ (Starred)	* Starred - contingency milestone

Notes

1. Tier 1 milestones designated Level 1 require Ofgem approval to move more than 3 months
2. Any slippage in M10 will impact M11 – M16
3. M16 is potentially impact by movement in M10-M15 milestones and/or duration of stabilisation period needed post M15, hence extended contingent range
4. Regression testing duration reduced marginally to accommodate 2 week extension to SIT (CIT) due to staggered MPRS versus Round 3 plan

Milestone	Description	CR009	Round 3	CR022 (vs CR009)
M5 (Level 1[1])	Physical Baseline Design Delivered	Oct 22	Oct 22	Oct 22
M6 (Level 1[1])	Code Changes Baselined	Apr 23	Apr 24	Aug 24 (+16 months)
M7	Smart Meters Act powers enabled	May 23	Dec 24	Nov 24 (+18 months)
M8	Code Changes Delivered	Nov 22	Mar 25	Mar 25 (+28 months)
M9 (Level 1[1])	SIT Start	Aug 23	Oct 23	Oct 23 (+ 2 months)
M10 (Level 1[1])	Central Systems ready for migrating MPAN	Sep 24	Mar 25	Mar 25 (+6 months)
M10*	Central Systems ready for migrating MPAN – Late Exit (Up to 3 months)	n/a	n/a	Jun 25 (+9 months)

Milestone [2]	Description	CR009	Round 3	CR022 (vs CR009)
M11 (Level 1[1])	Start of migration for UMS/Advanced	Oct 24	Apr 25	Apr 25 (+6 months)
M12 (Level 1[1])	Start of migration for Smart/Non-smart	Nov 24	Apr 25	Apr 25 (+5 months)
M13	LSS Switched On	Nov 24	Mar 25	Mar 25 (+4 months)
M14	All suppliers must be able to accept MPANs under the new TOM (one way gate)	Feb 25	Mar 26	Mar 26 (+13 months)
M15 (Level 1[1])	Full Transition Complete	Oct 25	Oct 26	Oct 26 (+12 months)
M16 (Level 1[1])	Cutover to New Settlement timetable	Nov 25	Dec 26	Dec 26 (+13 months)
M16* [3]	Cutover to New Settlement timetable – Contingent Milestone	n/a	No milestone defined, but 6 month window defined	May 27 (+19 months)

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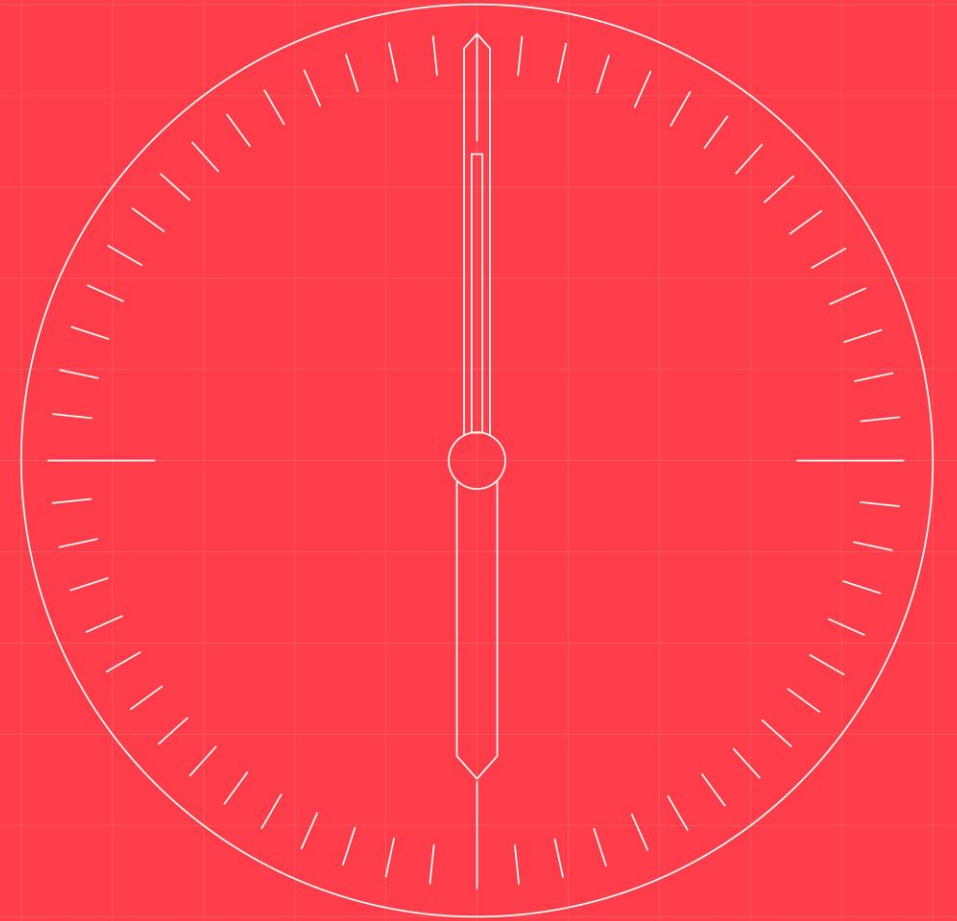# MHHS Programme Re-baseline POAP and Key Risks (refer to Implementation Approach v2.0 Slides 12 & 13)

Activity	2022		2023				2024				2025				2026				2027			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4

Programme Management
- Programme Re-plan Baselining
- ◆ Control Point 2 - Start of Integration & Test (incl. Control Point Report approval)
- ◆ Plan Re-baselined (subject to Ofgem decision)
- ◆ Control Point 3/4- Readiness for Start of Migration (incl. Control Point Report approval)
- ◆ Control Point 5 - Cut Over to New Settlement Timetable (incl. Control Point Report approval)

System Design and Build (PIT)
- ◆ Physical Design baselined (M5)
- PP Mobilisation
- 31 Oct – 14 Mar Central Parties & SIT PPs (excl Migration/Reverse Migration DBT)
- 1 Mar – 13 May Central Parties & SIT PPs Migration/Reverse Migration (if required)
- **Risk 1.** Central Party and Core Capability CIT Readiness

System Integration Testing (SIT)
- 31 Oct – 22 Jan SIT Component Integration Preparation
- **Risk 3.** Test Data Readiness
- 30 Oct ◆ System Integration Testing start (M9)
- 30 Oct – 8 Mar SIT CIT
- SIT Functional MVC 11 Mar – 1 Nov
- 31 Oct – 19 Feb SIT Functional Preparation — cycle 1 — cycle 2 — cycle 3
- **Risk 2.** Maintaining composition of MVC
- **Risk 4.** Regression dependent on SIT Functional and migration testing on time and converging
- 16 Nov - 3 Jun SIT Migration Preparation — SIT Migration Testing MVC — 10 Jun – 18 Oct — 17 Jan
- 4 Nov – 3 Jan Regression
- ◆ SIT Functional Testing Test Completion Report (Minimum Viable Cohort) Approved
- 1 May – 26 Aug SIT Non-functional Preparation — 2 Sep – 17 Jan SIT Non-functional Testing MVC
- 1 Jun – 30 Sep SIT Operational Preparation — 7 Oct - 7 Feb SIT Operational Testing MVC
- 7 Feb ◆ SIT Minimum Viable Cohort Complete (SIT Minimum Viable Cohort Test Exit Report Approved)

Non-SIT LDSO Qualification Testing
- 29 Jan – 5 Jul Non-SIT LDSO Qualification Preparation
- 15 Jul – 21 Feb Non-SIT LDSO Qualification Testing
- **Risk 5.** All LDSO to have qualified nationally pre-M10

Qualification
- 31 Oct – 30 Jun Qualification Preparation
- 19 Feb – 19 Jan Qualification QAD Process
- 20 Jan – 16 Mar Qualification Testing Execution & PAB Approval
- **Risk 7.** PPs end-load qualification tranches
- **Risk 9.** Qualification Tranche duration estimates
- 14 Mar ◆ BSC PAB & REC Manager sign-off of qualified SIT participants for Migration
- 7 Jul ◆ Final Qualification testing tranche starts
- 1 Sep ◆ PAB approval of Qualification Testing Tranche 1 complete (start of migration for Qualification Participants)

Regulatory
- 3 Jan – 23 Aug Code Drafting
- 23 Aug ◆ Code Changes Baselined (M6)
- 26 Jan – 11 Nov Ofgem Prepare and Enact SCR Powers
- 11 Nov ◆ SCR Powers Enabled (M7)
- 12 Nov – 6 Mar Deliver MHHS Code Changes
- 7 Mar ◆ Code Changes Delivered (M8)

Migration
- 1 May – 31 Oct Migration Period Planning
- **Risk 8.** Suppliers with larger volumes end load migration
- 7 Mar ◆ Central systems ready for migrating MPANs (M10) Load Shaping Service switched on (M13)
- 30 May ◇ M10*
- 4 Apr ◆ Start of 18-month migration for UMS / Advanced (M11) Start of 18-month migration for Smart / Non-smart (M12)
- 7 Apr – 5 Oct Migration of SIT
- 30 Sep – 5 Oct Migration of non-SIT
- **Risk 10.** 18 month window based on analogous FSP estimates
- 16 Mar ◆ All suppliers must be able to access MPANs under the new TOM (M14)
- 5 Oct ◆ Full transition complete (M15)

Early Live Running
- **Risk 6.** All Go-Live supplier(s) contracted parties to qualify by M11
- **Risk 11.** Stabilisation period based on operational metrics
- 7 Dec – 24 May M16 Approval Window
- 7 Dec ◆ Cut over to new settlement timetable (M16)
- M16* 24 May

Key

Tier	Milestone
Tier 1	◆
Tier 2	◆
Tier 3	◆
Contingent	◇

Critical Path (CP)	CPA End Point Objective	Description
CP1 ———	New Settlement Code (M16)	Programme Critical Path – Any slippage puts M16 at risk. Defined by slowest qualified PP
CP2 - - - -	First MVC PP Migrate (M11)	Accelerated path post SIT completion for MVC PP's into migration. MVC enter MHHSP testing on CP1, transitioning to CP2 at end of SIT functional
CP3 ········	First Qualified PP Migration Start	Non-SIT early qualification path. Qualification dependent on SIT completion. Non-SIT PP enter MHHSP testing commencing with the SAD process

Key Updates by Phase since Round 3

Design, Build and Test (DBT)

including PIT, Test Assurance, Design Assurance and Data

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Participant design assurance objectives:

1. To support key MHHS Programme outcomes for collective confidence in participant readiness prior to SIT or Qualification testing

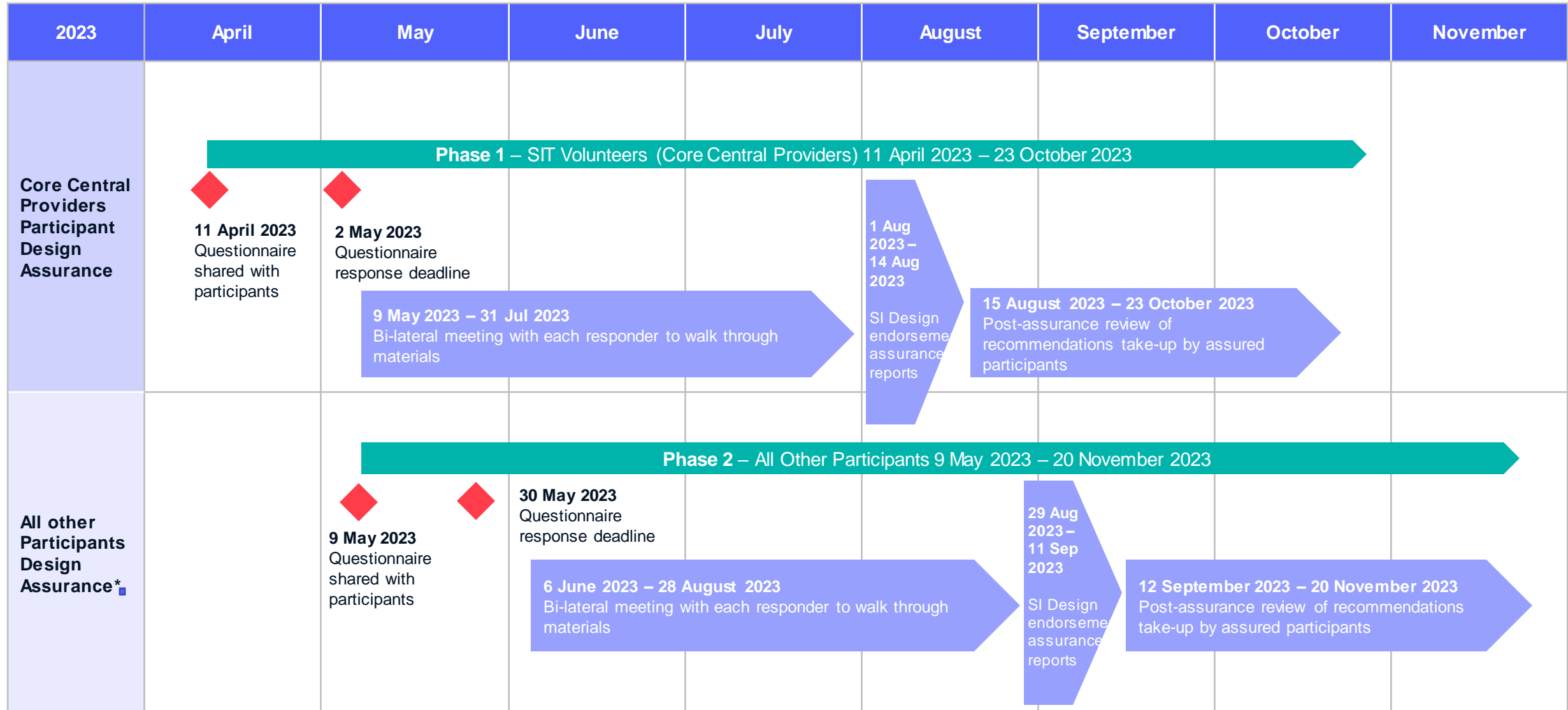2. To provide design support to individual participants through their design and build stages prior to PIT

MHHSP Outcomes…

- Participants understand the MHHS design artefacts

- Prevention/Reduction of interoperability issues in Systems Integration Testing (SIT) (and User Integration Testing/production)

- Identification (and mitigation) of design assurance risks to inform SIT entry decisions

- Assurance tailored and appropriate for materiality and complexity for participant

Participant Outcomes…

- Verification of participant design approach and understanding of design artefacts

- Identification of potential design risks or issues prior to entering SIT or qualification

- Increased confidence in design approach of central bodies, participants and service providers

- Support from Programme Design and programme assurance subject matter experts

Design Assurance: Timelines and Activities (up to M9 and SIT CIT)

2023	April	May	June	July	August	September	October	November

Core Central Providers Participant Design Assurance

Phase 1 – SIT Volunteers (Core Central Providers) 11 April 2023 – 23 October 2023

11 April 2023
Questionnaire shared with participants

2 May 2023
Questionnaire response deadline

9 May 2023 – 31 Jul 2023
Bi-lateral meeting with each responder to walk through materials

1 Aug 2023 – 14 Aug 2023
SI Design endorseme assurance reports

15 August 2023 – 23 October 2023
Post-assurance review of recommendations take-up by assured participants

All other Participants Design Assurance*

Phase 2 – All Other Participants 9 May 2023 – 20 November 2023

9 May 2023
Questionnaire shared with participants

30 May 2023
Questionnaire response deadline

6 June 2023 – 28 August 2023
Bi-lateral meeting with each responder to walk through materials

29 Aug 2023 – 11 Sep 2023
SI Design endorseme assurance reports

12 September 2023 – 20 November 2023
Post-assurance review of recommendations take-up by assured participants

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* This process is relevant to all participants whether electing to go through SIT or the qualification route

Design, Build & Test (DBT) – PIT Overview covering DBT1 and DBT2

Pre-Integration Testing (PIT):

- Includes functional, migration, non-functional and operational testing. It also includes any regression testing.

- PIT may be carried out in several stages. If the participant is undertaking Design, Build and Test (DBT) in different stages (notably DBT1 and DBT2), then a separate PIT will be conducted for each stage.

What is DBT1?

It refers to the Design, Build and Test activities required to enter into either SIT or Qualification Testing, depending on the path the Programme participants intends to take.

Who conducts DBT1?

It will be carried out by all Programme participants.

What does it include:

- Design, Build and Test of all the Market Interfaces & Services that will be utilised for SIT or Qualification Testing.

- DBT1 scope will be to validate every system or service that is included in the MHHS E2E Design for compliance with its functional and technical requirements.

Programme participants are…

- Required to provide DBT1 PIT evidence in line with the PIT Guidance that requisite activities are complete ahead of entry into SIT Component Integration Test (CIT) (See note 1).

- For those Programme participants joining SIT, we acknowledge their migration related testing may be ongoing when they enter into SIT CIT and Functional testing. NFT and Operational PIT planning will be discussed and agreed in NFTWG.

- All Programme participants must complete and provide evidence of DBT1 PIT prior to the start of Qualification Testing.

Test assurance covering all testing-related deliverables and activities:

- Self-assurance will be carried out by Programme participants.

- MHHS SI Test team will assure all SIT Programme participants.

- Code Delivery Bodies will assure all non-SIT Programme participants.

- MHHS SI Test Team will additionally assure a small sample of non-SIT Programme participants as agreed at the time with SRO and Code Delivery Bodies.

What is DBT2?

DBT2 is separated from DBT1 to remove the Back-End Systems' DBT from the critical path as far as possible and decoupling from those changes required for SIT or Qualification Testing. DBT2 comprises system and process changes delivered by Programme participants that will not be tested in SIT or Qualification Testing but are needed for MHHS, such as consequential change (see note 2).

Who conducts DBT2?

It will be expected to be carried out by Suppliers (Domestic and Non-Domestic) and Network Operations.

What does it include:

- Any aspects within their estate which may not be explicitly covered by the Programme but required to ensure business processes work post Go-live but does not impact the progress of SIT or Qualification Testing (e.g. consequential change).

- DBT2 scope would be all additionally functionality required to operate under the new MHHS arrangements which is not already included in DBT1.

Programme participants are…

- Expected to produce all test deliverables associated with DBT1 either new or updated specific to DBT2.

- Expected to provide evidence of DBT2 testing in order to exit Qualification Testing.

Test assurance covering all testing-related deliverables and activities:

- Self-assurance will be carried out by Programme participants.

- Code Delivery Bodies will assure DBT2 PIT for SIT and non-SIT Programme participants.

Document Classification: Public

Overarching Test Data Approach & Plan

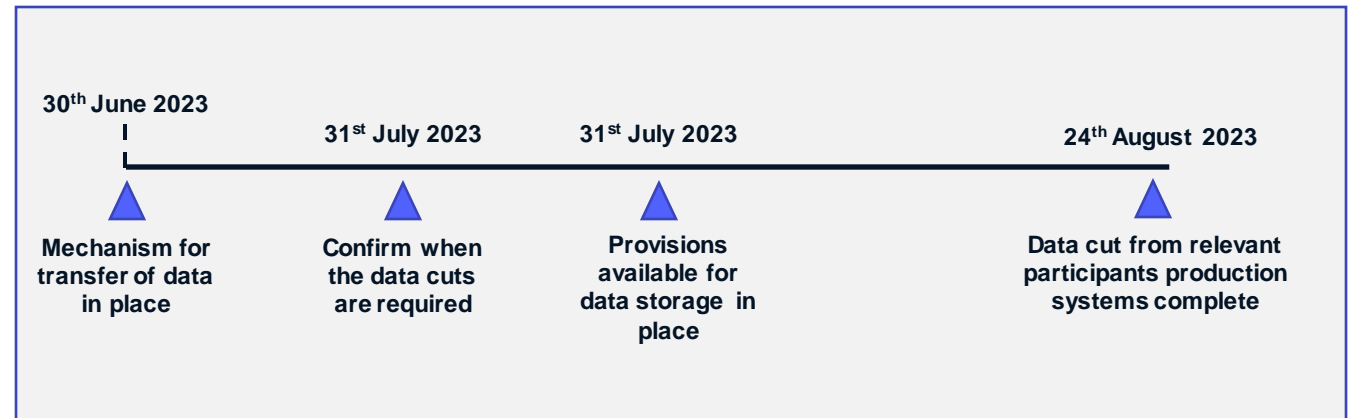**Overarching Test Data Approach & Plan Objectives:**

- Set the approach for data to be used in testing, that is the responsibility of the MHHS programme and in particular, the SI test team
- Define the test data necessary for the purposes of testing
- Identify potential risks and define mitigating actions
- Identify the responsibilities for test data management, including the production, manipulation, dissemination and securing of data
- Provide further details that supplement the (MHHS-DEL 300) Test Data Strategy

Overarching Test Data Approach & Plan covers …

- Data Management
  - Data creation
  - Cleansing
  - Manipulation
  - Storage
- Data Allocation
  - SFTP structure for Programme participants
  - Allocation methods
  - Data volumes
- Sensitive Data Protection
  - Data Protection Impact Assessment (DPIA)
  - Anonymisation
  - Security
- Data Risk Management
  - Approach to risk management

Plan Outlook …

The Overarching Test Data Approach & Plan is planned to be submitted for DWG Off-line review between 25 April 2023 and 9 May 2023 and then to the May Data Working Group (DWG) for recommendation for approval to TMAG.

30th June 2023	31st July 2023	31st July 2023	24th August 2023
Mechanism for transfer of data in place	Confirm when the data cuts are required	Provisions available for data storage in place	Data cut from relevant participants production systems complete

Systems Integration Testing (SIT)
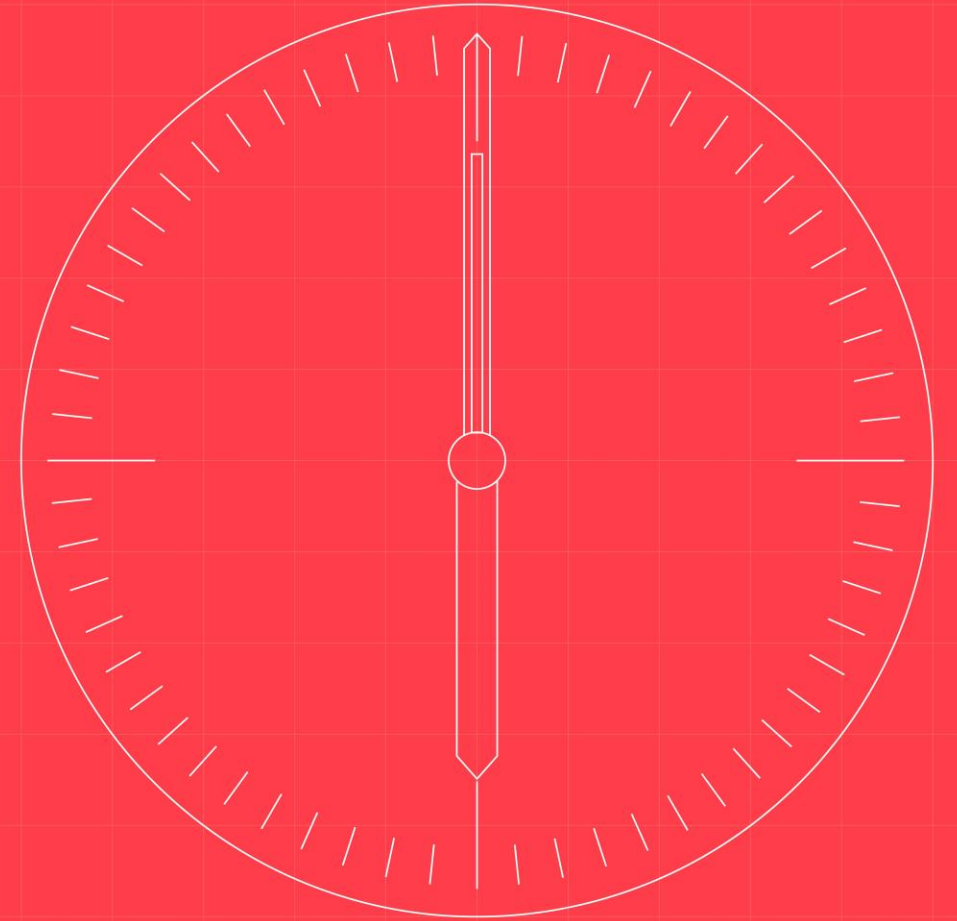
SIT – Overview of Approach

SIT Participation

- Any participant may take part in SIT provided they are acting as a defined BSC and / or REC governed MHHS Role ready to do so according to the timeline

- SIT exit is reached when a *group* representing all roles has completed the necessary testing

- This *group* is called the **Minimum Viable Cohort (MVC)** and its members will be identified early in SIT Functional Test according to the speed at which they are completing their tests

- SIT participants not in the MVC will be supported through SIT at their own pace

- Participants must declare that they are committed to participating in SIT, by 23-May-23

MVC Target Composition…

- All providers of Central Systems (DIP, Elexon, DCC, Recco, Electralink)
- One of each of St. Clements (MPRS), i/DNOs (UMSO and Network Operations Services) and Supplier agents (DV, DA, MOP services for Migration Testing)
- At least two Service Providers (providing Metering Services Smart and Advanced; Smart, Advanced and UMS Data Services)
- Two Suppliers (Change of Supply (CoS))

Participants are to…

- Produce test artefacts to the SI team. These include:
  - PIT Test Approach and Plan
  - Requirements Traceability Matrix (RTM)
  - PIT Scenarios
  - PIT Preparation and Execution Status Reports
  - PIT Testing Completion Report
  - SIT Readiness Report
- Demonstrate test environment network connectivity and test data readiness to the SI team, prior to the commencement of SIT
- Define the detailed SIT test steps and record your SIT execution results in the MHHS Test Management Tool (ADO)

MHHS SI will…

- Assure test readiness of SIT entrants, including verifying participants have met PIT exit criteria (see PIT guidance document)
- Provide Test Approach and Plans for each SIT Stage. Specify the SIT scenarios and test cases, and assure SIT results
- Coordinate the availability of environments and ensure appropriate data is available
- Manage the SIT process using ADO and provide access and training to participants
- Provide defect and release management for centrally-raised issues
- Produce overarching Testing deliverables (plans and reports)

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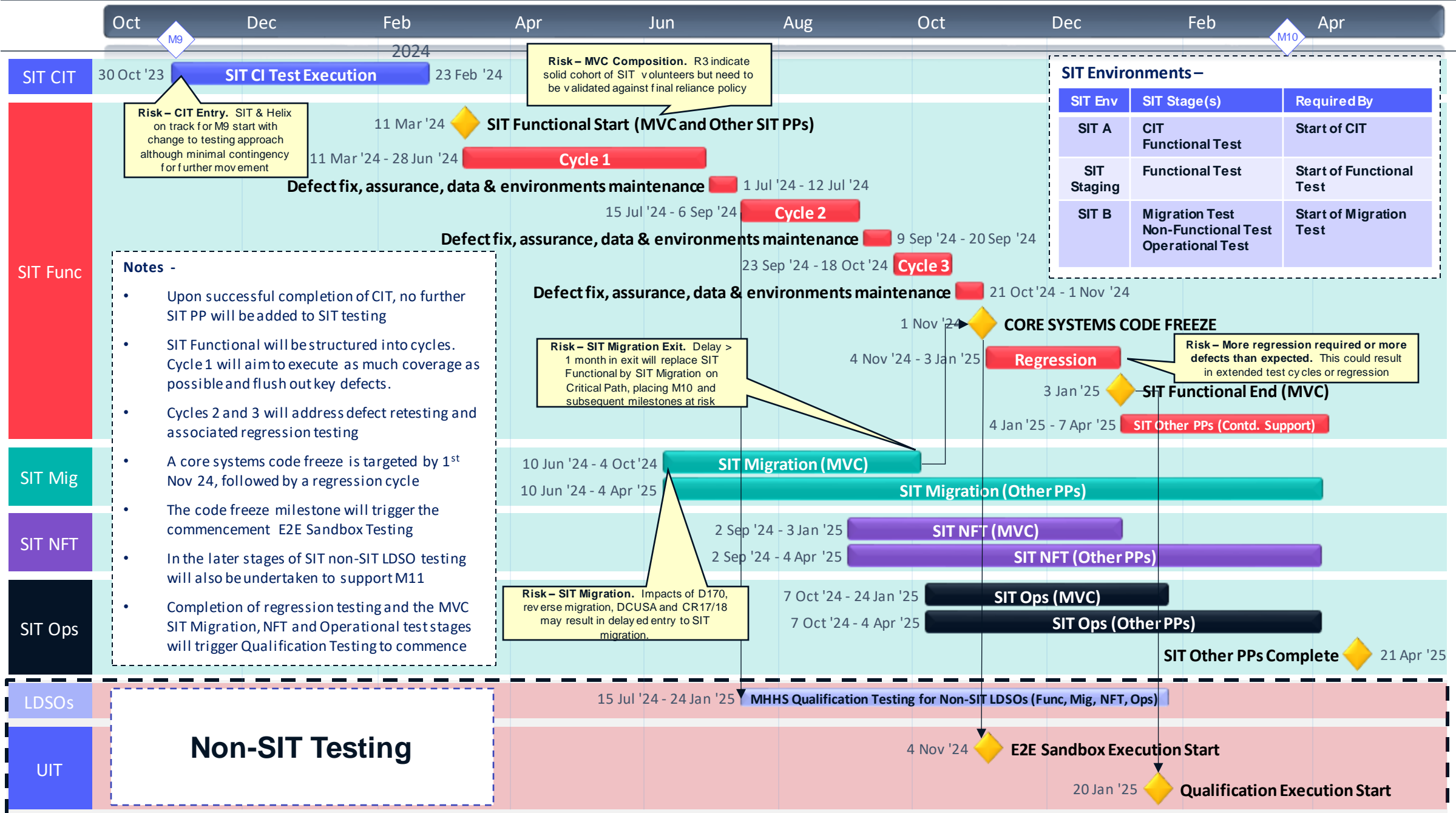Industry-led, Elexon facilitated

SIT - Objectives and Principles

	2023	2024	2025	2026

SIT

30 Oct '23 — **Sytems Integration Test (MVC)** — 24 Jan '25

Core Systems Code Freeze ◆ 1 Nov '24

SIT Other PPs (Contd. Support) ▬ 25 Jan '25 - 7 Apr '25

LDSOs

15 Jul '24 - 24 Jan '25 ▬ **MHHS Qualification Testing for Non-SIT LDSOs (Func, Mig, NFT, Ops)**

UIT

4 Nov '24 — **E2E Sandbox** — 19 Jan '26

20 Jan '25 — **Qualification Test (7 Tranches)** — 19 Jan '26

Migration

7 Apr '25 — **Migration** — 5 Oct '26
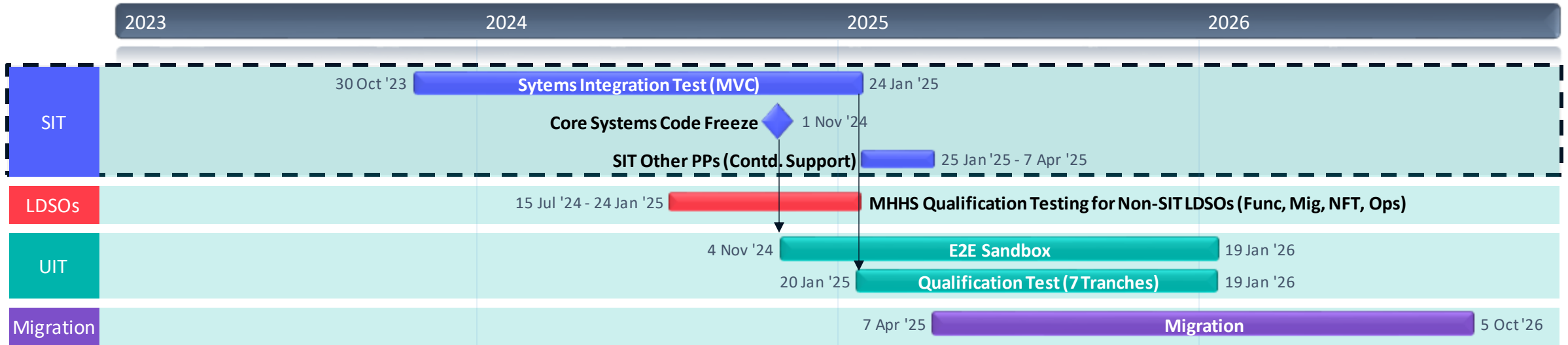
SIT Objectives:
- ✓ **Test the MHHS end-to-end (E2E) Design**, ensuring that the new MHHS arrangements function correctly and have been implemented in accordance with the MHHS E2E Design
- ✓ Execute test scenarios to verify the functional, non-functional and migration-related characteristics of the Market Interfaces and Services in an integrated environment

Key Principles:
- ✓ To form a **Minimum Viable Cohort** (MVC) of SIT participants needed to operate their systems in a coordinated manner, in order to complete SIT and reach Go-live at the earliest point
- ✓ The number and types of participants joining SIT must be sufficient to form the Minimum Viable Cohort (MVC)
- ✓ All SIT volunteers will be expected to **demonstrate PIT completion and SIT readiness** prior to their SIT commencement
- ✓ The MVC will be formed in the early stages of SIT Functional Test on the basis of the **fastest pace of test execution success**. Non-MVC SIT PPs will also be supported, still benefiting a faster route to Go-Live
- ✓ SIT participants are **not expected to undergo additional Qualification Testing** in the Qualification phase

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2025

2024

Timeline: Oct | Dec | Feb | Apr | Jun | Aug | Oct | Dec | Feb | Apr

M9 ... M10

SIT CIT
- 30 Oct '23 — **SIT CI Test Execution** — 23 Feb '24

Risk – CIT Entry. SIT & Helix on track for M9 start with change to testing approach although minimal contingency for further movement

Risk – MVC Composition. R3 indicate solid cohort of SIT volunteers but need to be validated against final reliance policy

SIT Func
- 11 Mar '24 ◆ **SIT Functional Start (MVC and Other SIT PPs)**
- 11 Mar '24 - 28 Jun '24 — **Cycle 1**
- **Defect fix, assurance, data & environments maintenance** 1 Jul '24 - 12 Jul '24
- 15 Jul '24 - 6 Sep '24 — **Cycle 2**
- **Defect fix, assurance, data & environments maintenance** 9 Sep '24 - 20 Sep '24
- 23 Sep '24 - 18 Oct '24 — **Cycle 3**
- **Defect fix, assurance, data & environments maintenance** 21 Oct '24 - 1 Nov '24
- 1 Nov '24 ◆ **CORE SYSTEMS CODE FREEZE**
- 4 Nov '24 - 3 Jan '25 — **Regression**
- 3 Jan '25 ◆ **SIT Functional End (MVC)**
- 4 Jan '25 - 7 Apr '25 — **SIT Other PPs (Contd. Support)**

Risk – More regression required or more defects than expected. This could result in extended test cycles or regression

Risk – SIT Migration Exit. Delay > 1 month in exit will replace SIT Functional by SIT Migration on Critical Path, placing M10 and subsequent milestones at risk

SIT Mig
- 10 Jun '24 - 4 Oct '24 — **SIT Migration (MVC)**
- 10 Jun '24 - 4 Apr '25 — **SIT Migration (Other PPs)**

Risk – SIT Migration. Impacts of D170, reverse migration, DCUSA and CR17/18 may result in delayed entry to SIT migration.

SIT NFT
- 2 Sep '24 - 3 Jan '25 — **SIT NFT (MVC)**
- 2 Sep '24 - 4 Apr '25 — **SIT NFT (Other PPs)**

SIT Ops
- 7 Oct '24 - 24 Jan '25 — **SIT Ops (MVC)**
- 7 Oct '24 - 4 Apr '25 — **SIT Ops (Other PPs)**
- **SIT Other PPs Complete** ◆ 21 Apr '25

Notes -
- Upon successful completion of CIT, no further SIT PP will be added to SIT testing
- SIT Functional will be structured into cycles. Cycle 1 will aim to execute as much coverage as possible and flush out key defects.
- Cycles 2 and 3 will address defect retesting and associated regression testing
- A core systems code freeze is targeted by 1st Nov 24, followed by a regression cycle
- The code freeze milestone will trigger the commencement E2E Sandbox Testing
- In the later stages of SIT non-SIT LDSO testing will also be undertaken to support M11
- Completion of regression testing and the MVC SIT Migration, NFT and Operational test stages will trigger Qualification Testing to commence

SIT Environments –

SIT Env	SIT Stage(s)	Required By
SIT A	CIT Functional Test	Start of CIT
SIT Staging	Functional Test	Start of Functional Test
SIT B	Migration Test Non-Functional Test Operational Test	Start of Migration Test

Non-SIT Testing

LDSOs
- 15 Jul '24 - 24 Jan '25 — **MHHS Qualification Testing for Non-SIT LDSOs (Func, Mig, NFT, Ops)**

UIT
- 4 Nov '24 ◆ **E2E Sandbox Execution Start**
- 20 Jan '25 ◆ **Qualification Execution Start**

Qualification

including non-SIT LDSO Testing

Qualification - Overview

Qualification will include the following four core elements:

1. **Procedural & Governance –** participants are expected to adhere to the processes and procedures of the code bodies governing qualification (all PPs).

2. **Evidenced DBT1 Pre-Integration Testing to enter Qualification** which will prove specific functional, non-functional and migration-related characteristics of systems and processes:
   a) Suppliers' core systems and DIP Interfaces
   b) Metering Services
   c) Data Services
   d) Registration, Network Operations and UMSO Services
   (executed within a participant's own environment) – this will be a pre-requisite to enter Qualification Testing.

3. **Evidence of DBT2 testing** in order to exit Qualification

4. **Qualification Testing of scenarios** specified by the Code Delivery Bodies, but is expected to be a sub-set of SIT coverage, demonstrating functional, non-functional and migration-related characteristics of the Market Interfaces and Services in an integrated environment (UIT).

Participants are…
- Responsible for ensuring their successful completion of Qualification
- Required to demonstrate successful PIT completion and network connectivity prior to commencement of Qualification Testing
- Responsible for defining the detailed test steps and recording the test execution results in the MHHS Test Management Tool (ADO)

MHHS SI will…
- Ensure the availability of relevant test harnesses, test environments and appropriate data to be allocated to each PP
- Provide access to the MHHS Test Management tool (ADO)
- Provide Test Services as agreed with the Code Delivery Bodies

BSC PAB and REC PAB will…
- Control entry and exit from Qualification through monthly meeting cycle

Code Delivery Bodies will…
- Specify the approach, plan. scenarios and data allocation for Qualification Testing, based on SIT materials from the MHHS Programme
- Manage and execute the Qualification testing process and schedule in a non-discriminatory manner in line with BSC / REC / SEC
- Assure PIT completion and test readiness of Non-SIT participants
- Assure completion of QAD (including participant Qualification Test results) and schedule PAB approvals

Associated planned Deliverables include…
- PIT Guidance (from MHHS Programme)
- Qualification Approach and Plan (Code Bodies). To be developed iteratively in line with the schedule for developing the Approach & Plan documents for the various SIT stages. There will not be a separate Qualification Test Data Approach & Plan - this will be wrapped up in the Qualification Approach & Plan
- Qualification Assessment Document (Code Bodies)

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Document Classification: Public

Regulatory
(Code Drafting)
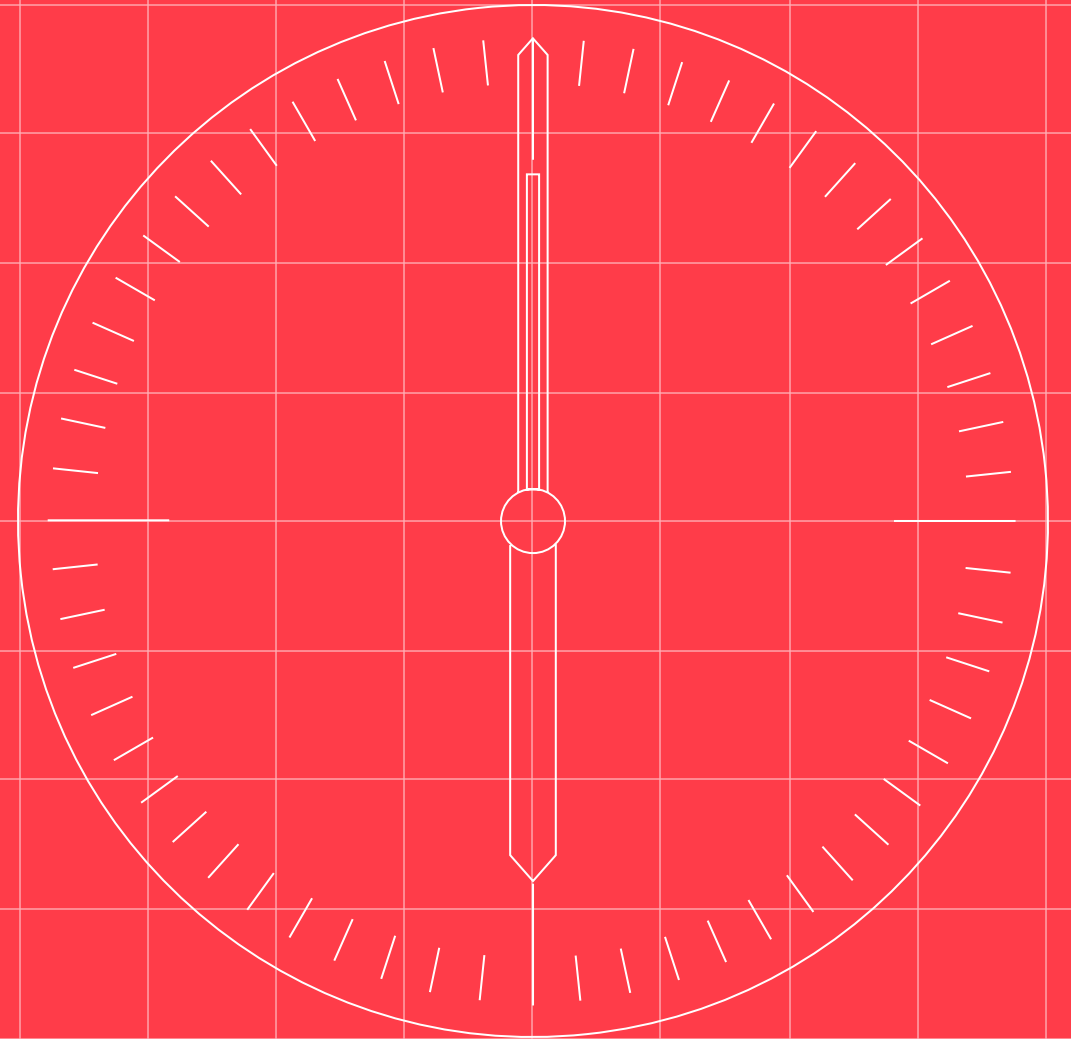
Code Drafting - Overview

The Code Drafting workstream will deliver:

- All of the drafting required in the BSC, REC, DCUSA and CUSC to deliver:

  - the design set out in the design baseline (i.e. in the M5 design artefacts, the output from the work-off plans and the migration design)

  - Code drafting for Consequential Change items from solutions defined and agreed by the responsible parties

- Ofgem powers, likely Significant Code Review powers with any necessary consultations, will be designated at M7 in advance of and to enable M8

- An Implementation Date for applicable Code changes (M8) to align with when Central Parties are ready for migration (M10)

- Support to the analysis of future change for Code impact through change management processes

Out of Scope:

- SEC drafting as this will be delivered through the SEC Mod MP162 changes

- Consideration and approval of solutions for Consequential Change

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MHHS Programme will …
- Manage the workstream to successful delivery
- Complete drafting for the BSC
- Provide secretariat services to support meetings
- Provide subject matter expertise to assure and navigate appropriate governance
- Manage RAID for Code drafting within the Programme
- Support any future change management activities relating to Codes
- Support communication of Code outputs to PPs
- Manage the consultation and approval process, learning lessons from design processes

Code Bodies will …
- Define and agree the design of solutions for consequential change within the Code Governance ready for CCAG to approve drafting
- Complete drafting for their Codes from MHHS design artefacts (other than BSCCo) and consequential change (all Code Bodies)
- Review other Code Body's drafting through the CDWG review process
- Contribute to the approval of Code drafting through participation at CCAG
- Set Implementation Dates for the relevant Code changes to align with M8 and M10

Ofgem will…
- Deliver Code designation powers such as (Significant Code Review Powers) and conclude any associated consultation successfully in advance of M8 and M10

Programme Participants will…
- Review Code drafting in consultation windows
- Attend CDWG to provide input and CCAG for approval

Associated Deliverables include…
- Code Drafting good practice and approach
- BSC, REC, DCUSA and CUSC drafting across the design
- Traceability matrix from design artefacts to Code Drafting and from Code drafting to design

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Code Drafting Plan

Key:

Industry Consultation	CCAG
CDWG	Consequential code change consultation

Activity		Dec 22	Jan 23	Feb 23	Mar 23	Apr 23	May 23	Jun 23	Jul 23	Aug 23	Sep 23	Oct 23	Nov 23	Dec 23	Jan 24	Feb 24	Mar 24	Apr 24	May 24	Jun 24	Jul 24	Aug 24
A	Planning																					
B	Data Services (BSC)		Drafting & review → Review cycle				9th / 24th															
C	Metering Services (REC)		Drafting & review → Review cycle				9th / 24th															
D	Registration (REC & BSC)				Drafting & review → Review cycle (31st)					8th / 23rd												
E	BSC Central Services (BSC)				Drafting & review → Review cycle (21st)					30th / 14th												
F	Interfaces / Data Spec (REC & BSC)						Drafting & review → Review cycle (18th)					27th / 13th										
G	Migration (REC & BSC)						Drafting & review → Review cycle (18th)					27th / 13th										
H	Qualification Governance (REC & BSC)						Drafting & review → Review cycle (18th)					27th / 13th										
J	Transition Text (REC & BSC)								Drafting & review → Review cycle (16th)					9th / 24th								
K	Topic area mop up (all codes)									Drafting & review → Review cycle (19th)								25th / 13th				
L	Consequential Code Change (all codes)								18th - drop 1	16th - drop 2							19th - drop 3					
M	Finalise and consistency check (all codes)																		Review cycle (14th)		8th / 23rd

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Migration and Transition

Migration and Transition - Overview

The Migration and Transition Workstream will produce all of the activities and deliverables required to prepare for; and execute MPAN migration from M11 to M15, followed by the cut over to the new settlement arrangements at M16.

This includes delivery of the:

- Forward and Reverse Migration Approach and Strategy, including the treatment of exceptional MPANs
- Migration Implementation Plan and Management of Migration Execution;
- Monitoring of Programme participants through migration preparation and execution
- Definition of migration processes and procedures, and taking migration through governance, including exit criteria
- Management of external dependencies responsible for executing migration activities (e.g. data cleansing, operational readiness); and
- Support of BSC & REC Performance Assurance teams on issues of mutual interest such as activities like data cleansing and delivery against agreed Participant migration plans

The Programme will continue to use the CCDG terminology for migration and transition as per below:

- **Migration**: Moving the servicing of MPANs from current Market Roles to servicing them under the TOM Services
- **Transition**: The end to end process of getting from the current state to the Target End State for the TOM;

Participants will …

- Complete their own preparation activities for migration to meet the entry criteria for migration, which are yet to be defined, but likely to include:
  1. Qualification complete with all contracted Service Providers to prepare for migration
  2. Production environments available
  3. Data 'cleaned' in line with entry criteria
- Execute migration in accordance with the strategies and plans delivered by the Programme, including any reporting or forecasting activities
- Complete migration in accordance with the defined migration timeline

MHHS SI will …

- Deliver the Migration Design
- Define the approach and plans to manage and execute the migration process, including applicable escalation processes
- Prepare for the execution of migration with the necessary tools, infrastructure and communication channels/industry groups established
- Execute and manage migration from M10 to M15, meeting the exit criteria for M15 (to be defined)
- Support Ofgem in their analysis in setting M14 date
- Track progress of parties through SIT and qualification to coordinate cohort composition to commence migration at M11

Associated planned Deliverables include…

- Migration Approach
- Migration Design
- Migration Cutover and Data Strategy
- Data Assessment Report / Data Cleanse Plan
- Migration Entry Criteria (in Cutover and Data Strategy)
- Migration Exit Criteria (in the Implementation Plan)
- Migration Implementation Plan
- Migration Processes & Procedures
- Migration Period Plan
- Service Management Approach and Plan
- Reverse Migration Approach and Exclusions

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Transition Design Approach

A number of industry Legacy and MHHS processes will need to 'co-exist' throughout the Migration Period, supporting designs need to be completed:

1. MHHSP Design Team will define the scope of the design and capture the requirements, utilising the Migration Design Sub-working Group

2. Participants will:

   - Review and feed into the capture of requirements via the Migration Design Working Group.

   - Respond to consultation and approve the design via the Programme governance structure (the MDWG is a subgroup of DAG), planned for DAG approval in May 2023.

3. Code Drafting will document the required Transition text

4. Transition considerations will be grouped into two tranches of work as follows…

Tranche 1 – Elements that impact PP near term DBT activity

Expectation is that resulting design collateral will be a single requirements document and a single interface specification covering:

- Parallel running and GSP Group Correction

- Transitional Interfaces

- Transition approach and requirements: LLFs and UMS Charge Code and Switch Regimes

Tranche 2 – Governance and Transition to new settlement timetable

- Transition Approach and Requirements: ISD and MDD

- Transition Approach and Requirements: SVAA, SAA Calendars and Master Settlement Timetable

- Transition Approach and Requirements: ISD Originators and Authorisation Routes

- Transition to the New Settlement Timetable

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Wrap-Up: Q&A
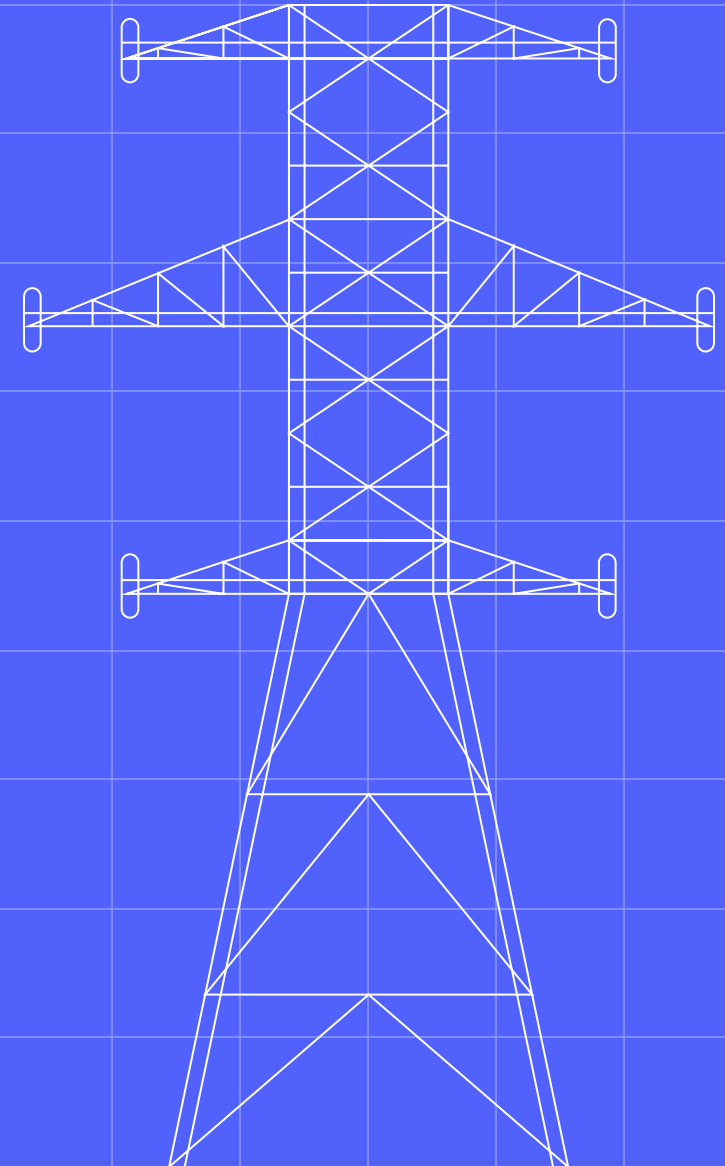
Thank you

Backing Slides
(if needed)
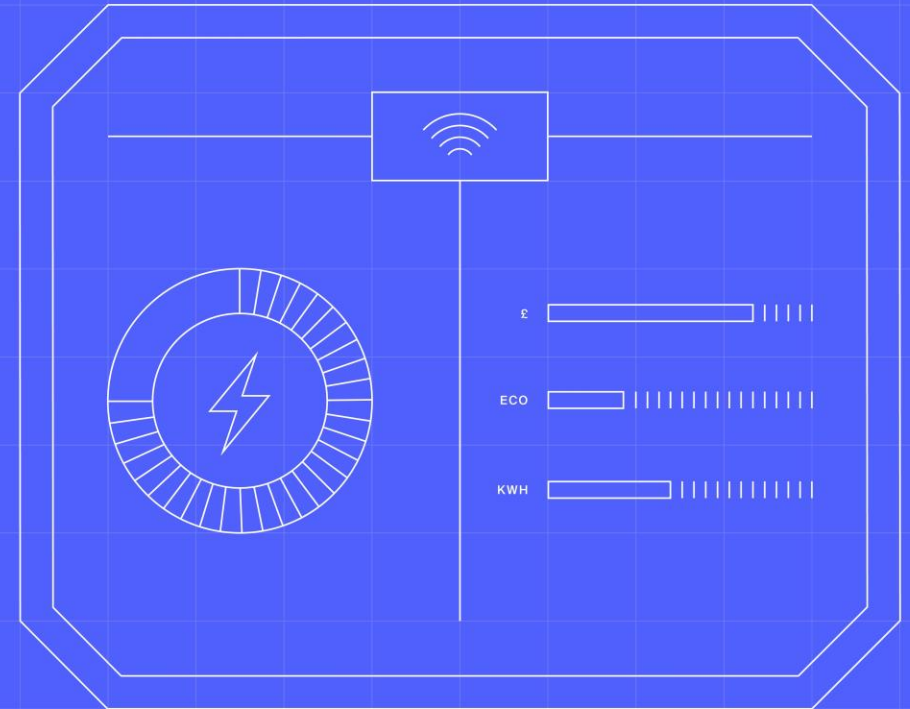
Systems Integration Testing (SIT)
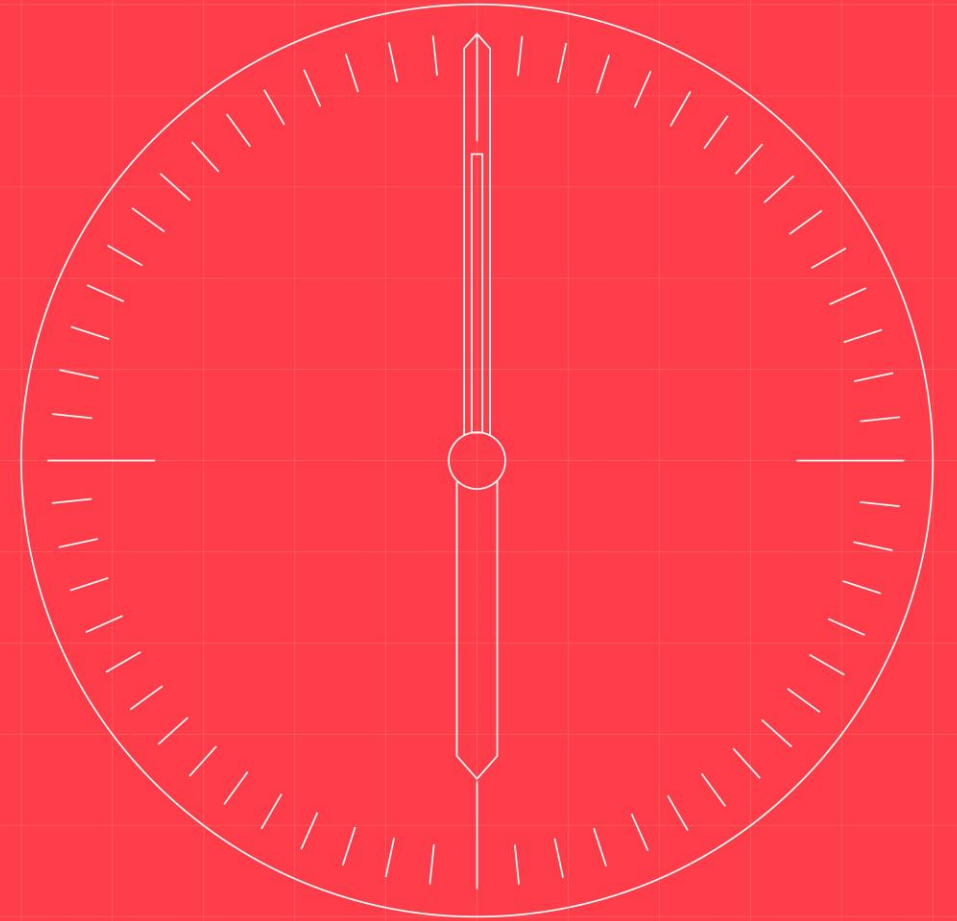
Pre-Integration Testing (PIT)

- PIT will be performed by all users of the new settlement arrangements to validate every system or service that is included in the MHHS E2E Design for compliance with its functional and technical requirements. This includes back-office systems if affected. The system/service may have several components and PIT refers to the testing conducted when those components have all been internally integrated.

- The PIT phase is focused on the Programme participants' own testing, proving that they have designed, developed and tested their systems and that their systems align to the requirements within the MHHS E2E Design, which introduces the new settlement arrangements.

- Participants will be required to demonstrate completion of their own internal PIT by providing test evidence to validate testing has taken place on each system or service included in the MHHS E2E Design (including the successful messaging in and out of all Interfaces and Publications).

- The Programme participants' system/services may have several components and DBT1 PIT refers to the testing conducted when those components are all integrated in a participants' own test environment and is prior to the E2E testing that will be conducted when participants connect to the MHHS integrated environments in System Integration Testing (SIT) and Qualification Testing (UIT).

- Progression through DBT will be closely monitored in order to ensure Programme participants stay on track for subsequent Test Phases (either SIT or Qualification Testing).

The PIT test phase will comprise the following different types of testing:

- o Functional
- o Migration
- o Non-functional:
    - Performance
    - Load
    - Resilience
    - Security
- o Operational
- o Regression

PIT is the responsibility of each individual participant using their own:

- o Systems
- o Test Environments
- o Test Data
- o Test Scenarios
- o Test Cases
- o Test Processes
- o Test Tools
- o Test Management Tool
- o Defect Management Process

Each Programme participant undertaking PIT will be expected to provide the following test deliverables to the MHHS SI Test Team and Code Delivery Bodies:

- o PIT Approach and Plan
- o Requirements to Test Traceability Matrix (RTTM)
- o PIT Test Scenarios
- o PIT Test Readiness Reports
- o PIT Test Execution Progress Reports (including Test issues & defects)
- o PIT Test Completion Report (draft & approved)

PIT Completion / SIT Readiness supporting SIT CIT Start
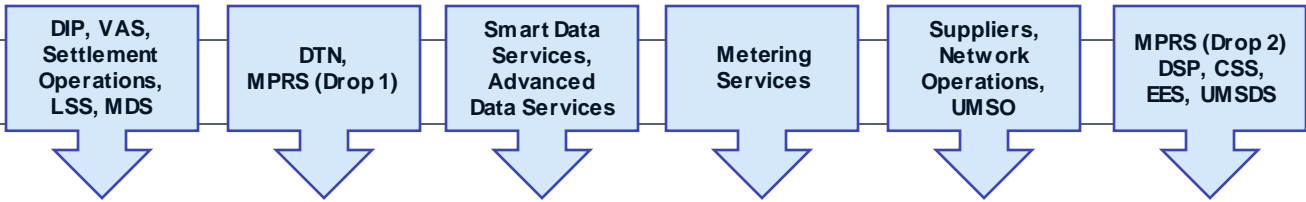
New guidance on readiness milestones based on the 'Interval' a PP is expected to enter SIT CIT:

Activity / Milestone	Notes	CIT Interval 1 DIP, VAS, Settlement Operations, LSS, MDS	CIT Interval 2 DTN, MPRS (Drop 1)	CIT Interval 3 Smart Data Services, Advanced Data Services	CIT Interval 4 Metering Services	CIT Interval 5 Suppliers, Network Operations, UMSO	CIT Interval 6 MPRS (Drop 2) DSP, CSS, EES, UMSDS
SIT CIT Start	**CIT Interval 1 Start = PSG Milestone (M9)**	**30th Oct 23**	**13th Nov 23**	**27th Nov 23**	**11th Dec 23**	**15th Jan 24***	**29th Jan 24**
SIT CIT Ready to Start (TMAG Milestone)	TMAG Milestone - 1 week prior to CIT Start for each CIT Interval	23rd Oct 23	6th Nov 23	20th Nov 23	4th Dec 23	8th Jan 24	22nd Jan 24
SI Overarching CIT Test Readiness Report reviewed by SITWG/IPA	• 5 working days for review	13th Oct 23	3rd Nov 23	17th Nov 23	1st Dec	5th Jan 24	19th Jan 24
SI Issues Overarching CIT Test Readiness Report	• SI releases report 2 weeks prior to 'SIT CIT Ready to Start' milestone for CIT Interval 1, allowing for review and mop up ahead of PSG (M9) • SI releases iterated report 1 week prior to 'SIT CIT Ready to Start' milestone for CIT Intervals 2-6	6th Oct 23	27th Oct 23	10th Nov 23	27th Nov 23	18th Dec 23	15th Jan 24
PP CIT Test Readiness Reports Assured by SI	5 working days for review	6th Oct 23	27th Oct 23	10th Nov 23	24th Nov 23	15th Dec 23	12th Jan 24
PPs Issue CIT Test Readiness Reports		29th Sep 23	20th Oct 23	3rd Nov 23	17th Nov 23	8th Dec 23	5th Jan 24
Test Data Load and Verification Complete	Period of 4 weeks prior to PP CIT Test Readiness Report	29th Sep 23	20th Oct 23	3rd Nov 23	17th Nov 23	8th Dec 23	5th Jan 24
MHHS code deployed to SIT PPs' envs	Period of 2 weeks prior to PP CIT Test Readiness Report	29th Sep 23	20th Oct 23	3rd Nov 23	17th Nov 23	8th Dec 23	5th Jan 24
Environment Connectivity Proving Complete	**Reduced from 8 weeks to 4 weeks**	29th Sep 23	20th Oct 23	3rd Nov 23	17th Nov 23	8th Dec 23	5th Jan 24
SIT PPs' envs ready to start connectivity proving (incl certs)		1st Sep 23	22nd Sep 23	6th Oct 23	20th Oct 23	10th Nov 23	24th Nov 23
PP Final PIT Completion Reports assured by SI	5 working days for review	6th Oct 23	27th Oct 23	10th Nov 23	24th Nov 23	15th Dec 23	12th Jan 24
PPs Issue Final PIT Completion Report	Final report allowing for any test completion delta	29th Sep 23 (No later than**)	20th Oct 23 (No later than**)	3rd Nov 23 (No later than**)	17th Nov 23 (No later than**)	8th Dec 23 (No later than**)	5th Jan 24 (No later than**)
Draft PIT Completion Reports assured by SI		29th Sep 23	20th Oct 23	3rd Nov 23	17th Nov 23	8th Dec 23	5th Jan 24
PPs Issue Draft PIT ** **Completion Report**	A draft of the PIT test completion report to be submitted no later than 15 working days before the planned end of test execution	8th Sep 23 (No later than**)	29th Sep 23 (No later than**)	13th Oct 23 (No later than**)	27th Oct 23 (No later than**)	17th Nov 23 (No later than**)	1st Dec 23 (No later than**)

SIT CIT Readiness

Note 1* – There is an extended period between CIT Intervals 4 and 5 allowing for the Xmas and New Year period. Some readiness dates have also been adjusted accordingly for CIT Intervals 5 and 6.

Note 2** – SI Test Team will agree timelines for prior PIT deliverables with individual SIT PPs in line with their delivery plans, allowing for test assurance activities in the lead up to SIT

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Equivalence

- Where an organisation has successfully exited SIT, the SIT exit evidence is considered "equivalent" to that required for Qualification Testing. The SIT exit evidence will form part of that required for BSC / REC market Qualification.

- The Programme is currently assuming that these organisations will not be required to undertake any further industry-wide Qualification Testing, however this will be dependent on whether the SIT coverage is sufficient to align with the Code requirements and risk areas. Note there may be additional PIT evidence that will be required to achieve Qualification (for DBT2 / 'Consequential Change' functionality). Full Qualification requirements will be defined by the BSC and REC Code Delivery Bodies - for details please see '**MHHS-DEL1064 - Placing Reliance Policy**'.

- Where a Participant has successfully completed market role testing with one MPID, other MPIDs belonging to the same organisation will by default be deemed to have passed for the same role and requirements, providing it is demonstrated to the Programme, and Code Delivery Bodies, that the other MPIDs for that role are served by the same technology stack/operational processes and controls and there are no deviations from role/requirements previously tested for the other MPID.

- For any MPID/roles served by different technology stack/operational processes and controls, then separate testing will be required to successfully exit Qualification for that MPID/role. Note the Placing Reliance Policy allows for parties to place reliance on the testing of other organisations operating in the same role under the conditions set out in the policy - for details please see '**MHHS-DEL1064 - Placing Reliance Policy**'.

Testing on behalf of

- Where an MHHS participant organisation elects to delegate some or all of its Industry-wide testing to a 3rd-party software provider or IT service provider, or other 3rd-party testing provider with which they are contractually aligned, for execution "on their behalf". This might be an option some participants chose to adopt during SIT (or Qualification Testing) in order to meet their test coverage requirements.

- Where a participant organisation, which has acceded to the code, chooses to opt for this, they also accept the associated risks and remain accountable for meeting code requirements - for details please see '**MHHS-DEL1064 - Placing Reliance Policy**'.

Placing Reliance

- This option can be adopted within SIT where 2 (or more) active SIT participant role organisations, that can demonstrate are operating in the same system/service/features arrangements, propose to meet the full SIT coverage requirement by forming a SIT test exit group, and then place reliance on the SIT role/feature testing, and/or SIT stage-based testing being undertaken by another SIT participant member in the same group.

- Where a participant organisation which is governed by BSC and/or REC, and choses to opt for this, they also accept the associated risks and remain accountable for meeting Code requirements - for details please see '**MHHS-DEL1064 - Placing Reliance Policy**'.

Environments – Usage and Pre-CIT Connectivity Proving

Environment [1]	Phase	Testing Stage	Comments
SIT Staging	All phases	All stages	Initially for SIT readiness such as regression for changes, defect re-testing, etc. This will ensure that the main SIT environments are not broken when new code is deployed, this will also be used for later code releases to UIT. It is anticipated that Central Parties will provide SIT Staging Environments. It is not anticipated that non-Central Parties will provide SIT Staging Environments. Non-Central Test participants can decide if they wish to do so.
SIT A	SIT	SIT Component Integration SIT Functional	Component integration tests will be conducted as individual components are integrated. Then full end-to-end testing can start.
SIT B	SIT	SIT Migration SIT Non-Functional* SIT Operational	It is assumed these three stages can be executed on one environment, but not in parallel to avoid conflicts. TP's can decide to have their own environment for each stage or re-purpose their environments for each stage. *Note new systems, such as the DIP, may be required to run tests on Pre-Prod and Prod.
UIT	UIT	Qualification E2E Sandbox	Central systems and some (i)DNOs' environments will be provided as a testing service to allow TPs to conduct Qualification Testing and E2ESandbox Testing. Each TP will need to complete either SIT or Qualification Testing before starting E2E Sandbox Testing.

Connectivity Proving

A dedicated Environment Connectivity Proving stage will enable connectivity activities to be more closely monitored and supported, acting as a Quality Gate for subsequent test activities.

Environment Connectivity Proving is a pre-requisite for CIT, essentially establishing Environment Readiness and will include Programme Parties. This is a key lesson learnt from similar large industry programmes, and often present a risk to timely test entry. Connectivity proving includes:

- Installing PKI (TLS & JWS) certificates. Programme participants will be required to have requested and received PKI certificates prior to the commencement of Connectivity Proving.
- Registering Webhooks
- Demonstrating the use of the APIs, and
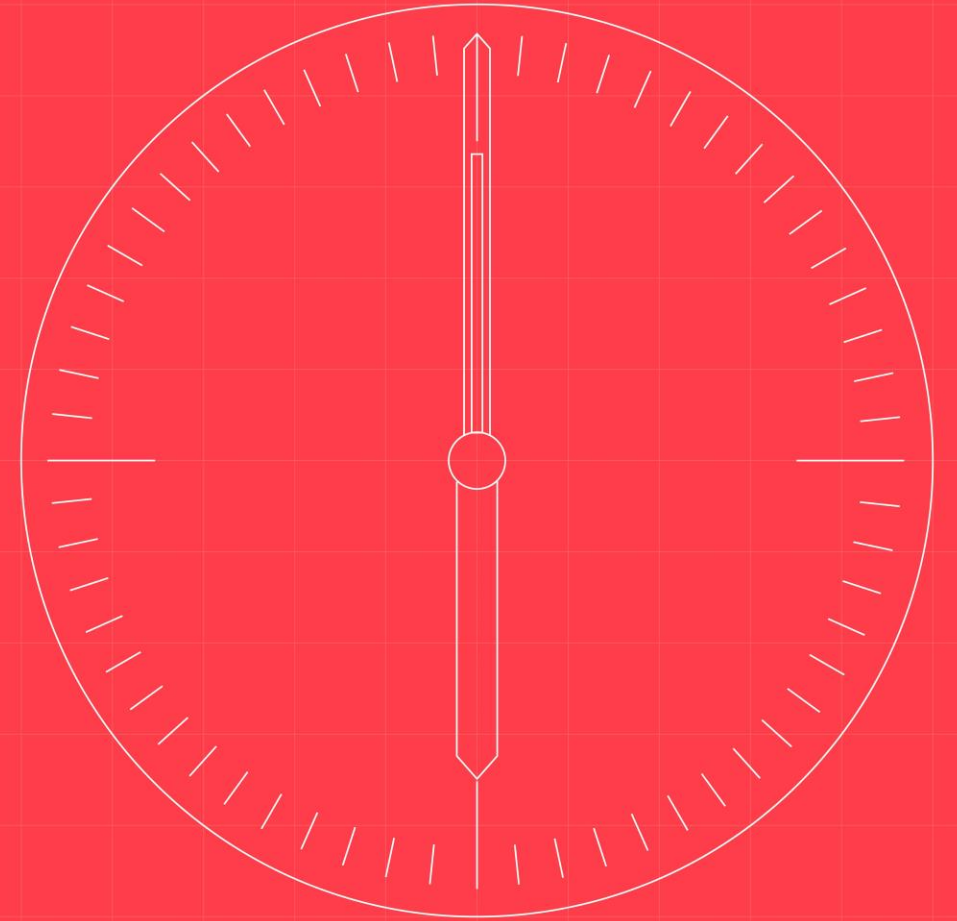- Connecting to each end point for each organisation by Market Role

Note 1 – the Environment usage for non-SIT LDSO Qualification Testing is yet to be determined – please refer to Environments Working Group and SIT Working Group
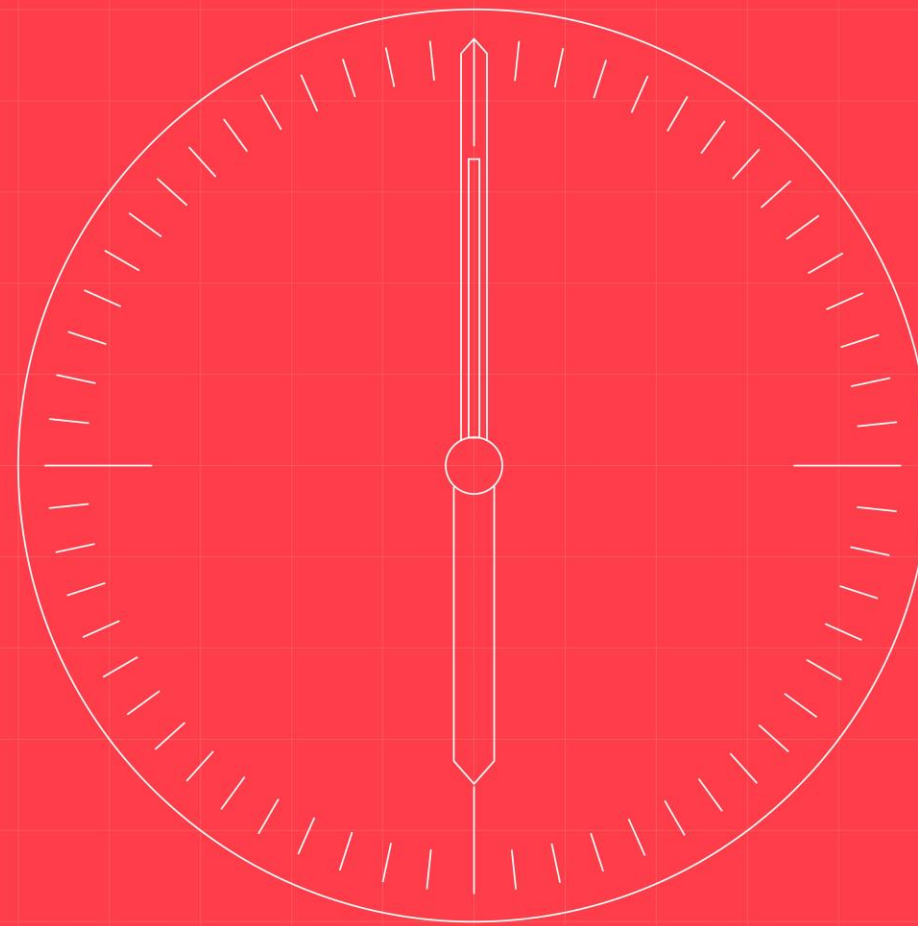
Qualification

including non-SIT LDSO Testing
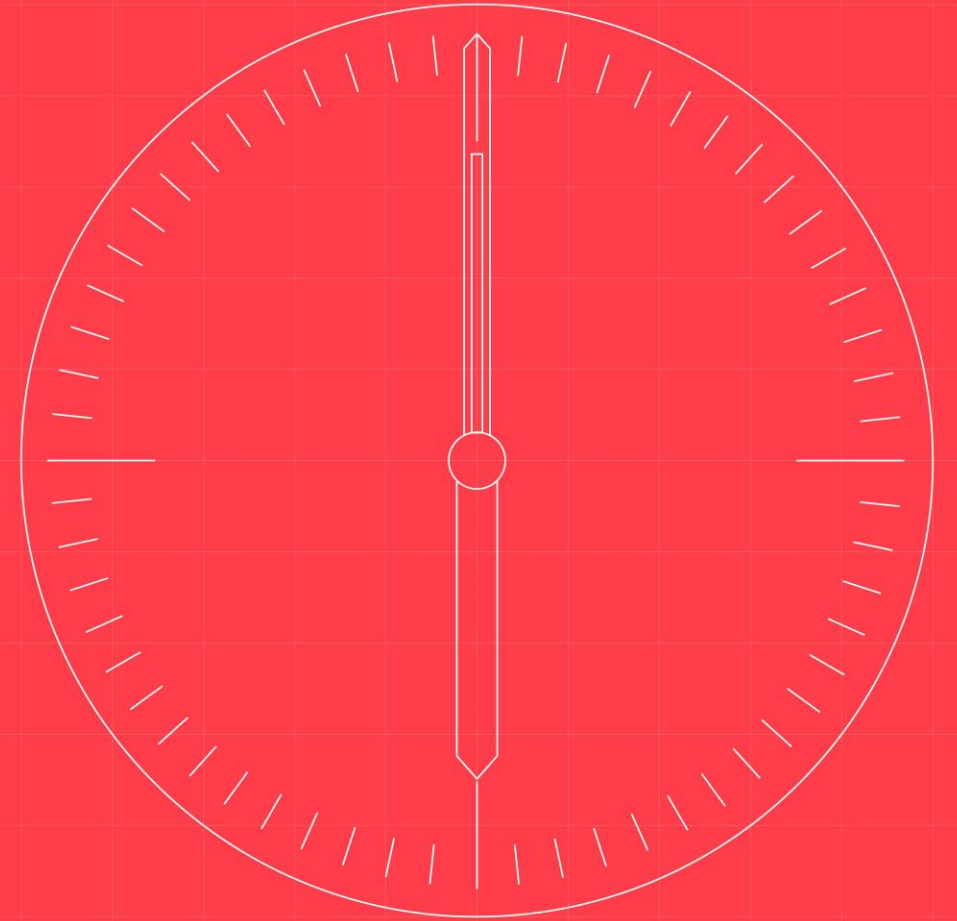
Regulatory
(Code Drafting)

Migration and Transition

Migration Operational Considerations

Migration Design Principles *

1. **Supplier lead.** Supplier initiates the migration of each MPAN.

2. **Minimal Change.** Covers both Legacy and MHHS processes to support migration of each MPAN.

3. **Leverage legacy and MHHS processes.** Both support the transactional migration of meter and reading data.

* Design approved at DAG on 31 March

Forward Migration occurs from M11 to M15 milestones …

- Until all MPANs are successfully migrated from Legacy to MHHS arrangements

- Design supports a natural 'obsolescence' of migration functionality (an additional release is not required at M15)

- Qualified Suppliers may choose to migrate MPANs co-incident with a Switch, but they do not have to if they prefer to continue to Switch Legacy MPANs using Legacy processes prior to M15.

Reverse Migration occurs from M11 to M14 milestones …

- Reverse Migration ends when all Suppliers are Qualified at M14 milestone

- Design supports a natural 'obsolescence' of reverse migration functionality (an additional release is not required at M14)

- A Switch, initiated by an Unqualified Supplier for a MHHS MPAN will always result in a Reverse Migration between M11 and M14,

Key supporting activities :

- All Legacy Parties must implement process and system changes on M11 to support forward and reverse migration

- Data Cleanse and population of data must complete by M11 to support forward migration

- Post M14 it is expected Ofgem will prevent unqualified Suppliers submitting Switch Requests to the CSS.

Current Status

- The migration design was approved at the end of March 2023

- High level deployment model produced and shared with MWG.

- M10 to include service management and hypercare readines

- Migration approach modelled on three stages (see next slide :

  1. **Ramp up.** 1-4 months - successful SIT parties commence migration of their MPANs (M11). Assuming 5m+ MPANs available from SIT. All LDSOs have qualified so no geographic restriction.

  2. **Full scale.** 5-15 months – SIT and non SIT (qualification) parties migrate at scale. Full scale migration completes when 95% migrated.

  3. **Ramp down.** Final 5% of MPANs migrated (M15)

Modelled MPAN Migration Profile through Migration (M11-M15)

Document Classification: Public
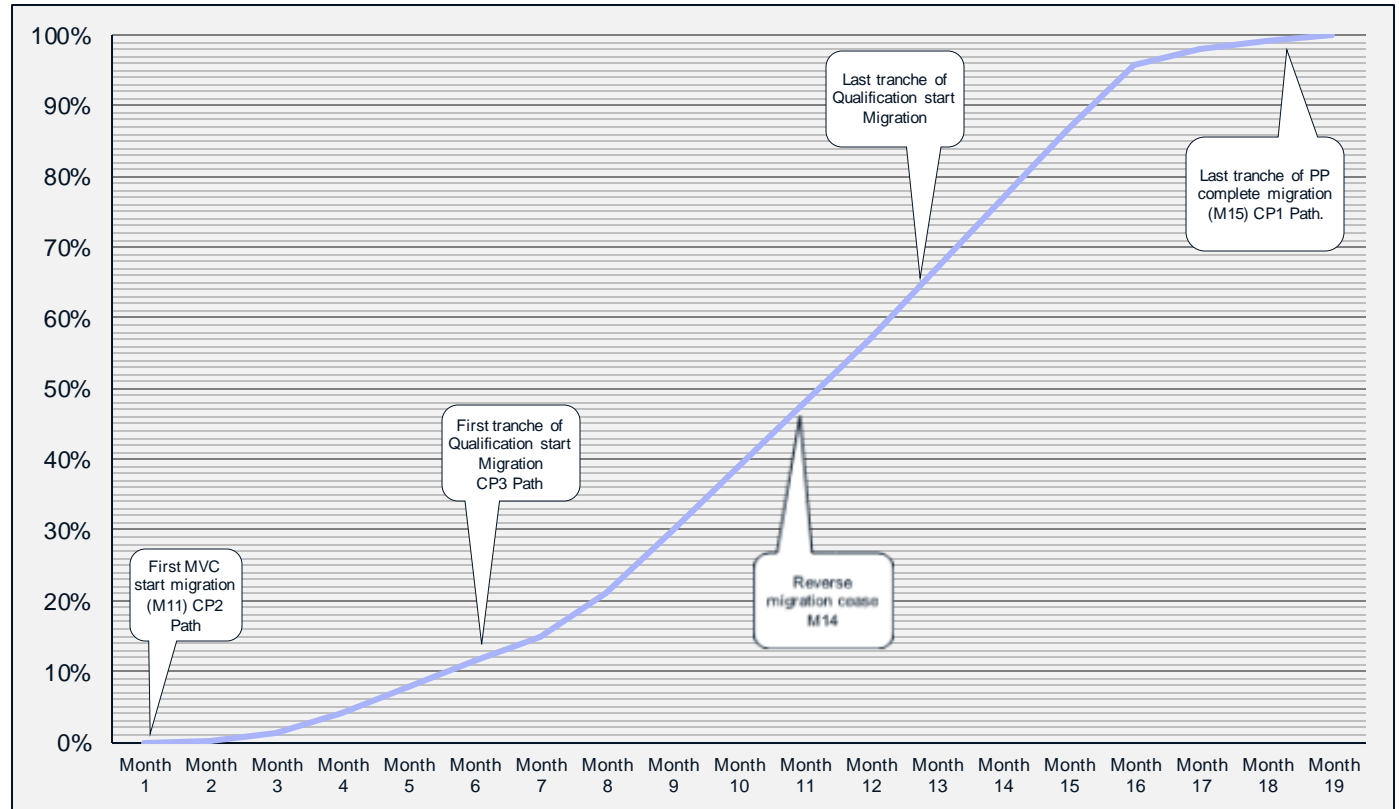
# Migration (2/2) – Modelling Assumptions and MPAN Volumes

Key Assumptions

- Total of 33m MPANs to migrate
- Potential volume of MPANs available through SIT will be verified once SIT participants agreed May 23 – assumed 5-10m (inc 1-2 large suppliers)
- Qualification will be the test path for the majority of MPANs
- Further modelling to be performed in Apr-May 23 and shared with MWG
- First supplier will pass SIT at end Jan 25, start migration on 7 Apr 25 and has 18 months to complete – supported by several R3 responses
- First supplier will qualify on 29 Sep 25 so can start migration and has 12 months to complete – deemed sufficient time for a large supplier provided they are in the first tranche
- Last supplier will qualify on 16 Mar 26 so can start migration and has 6.5 months to complete. Note - Risk that a large supplier qualifies in the last tranches and has max 6 months to migrate their MPANs

Migration Stage	Assumptions	From SIT	From Qualification Tranches 1-7
M11 – M15	MPAN volume 33m	5-10m	23-28m
First Cohort / First Qualification Tranche	Starting date (As per R3 / CR022)	7 Apr 25	30 Sep 25
Ramp Up 1-4 months	First 7.5% No geographic restriction as all DSOs qualified Peak 40k MPANS per day	2.5m	-
Full scale 5-15 months	87.5% Remaining SIT at volume All of qualification Peak 165k MPANS per day (aligns with FSP peak)	2.5-7.5m	21.35-26.35m
Ramp Down 16-18 months	Final 5% Peak 40k MPANS per day	-	1.65m
End date	End date	5 Oct 26	5 Oct 26

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Business & Operational Readiness

including early live running
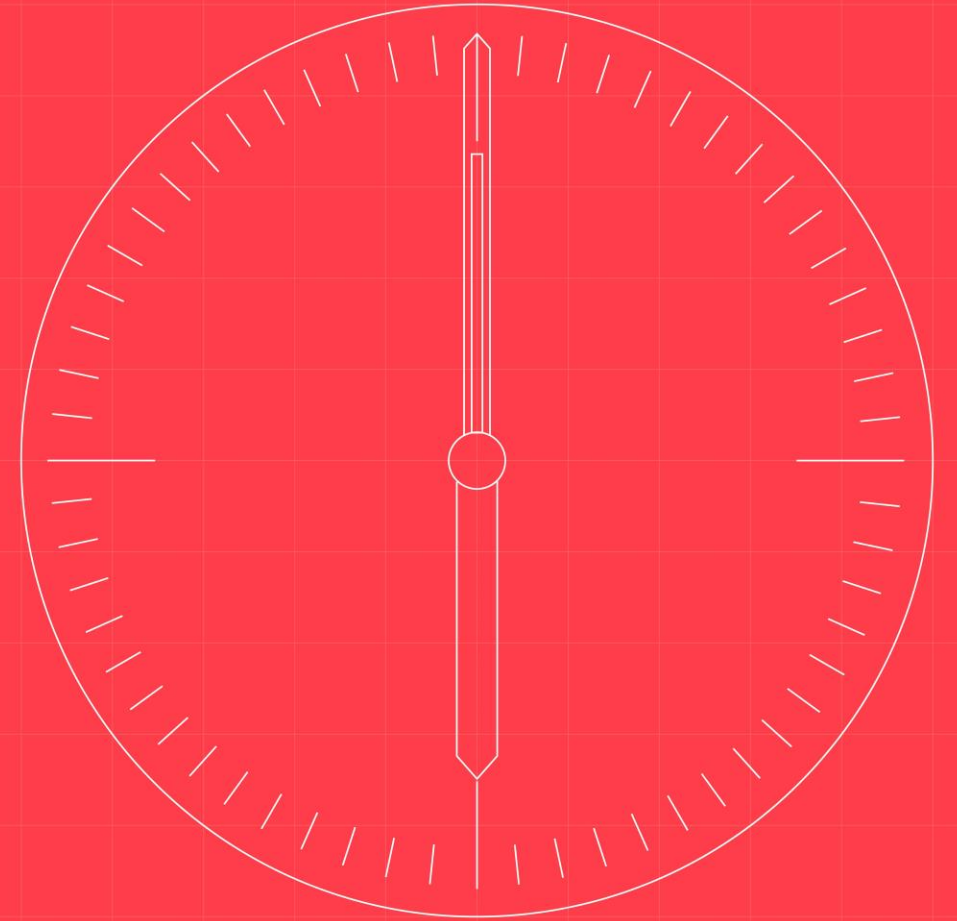
Business and Operational Readiness - Overview

Business and Operational Readiness covers several core areas not directly in scope of SIT testing and/or qualification at point of entry to Go-Live and beyond:

1. **Service Management –** participants are expected to standup a service management model to support their system as well as operate effectively at a pan-industry level to support the new BCS code and associated ToM.

2. **Transitional Service Management Arrangement**s **–** covering on-going incident and problem management during migration when defects will need to be carefully managed between Central Parties, migrating PPs and MHHSP when we are operating in the new MHHS arrangements and the old arrangements in parallel

3. **Migration Planning and Execution –** Support early life activities with MVC participants, ramping up volumes once e2e services proven, then supporting migration at scale.

4. **Live Data –** Ensuring live / operational data is in satisfactory state prior to migration in line with agreed PAB metrics and evidenced through PAB reporting

Participants will …
- Be responsible for ensuring respective data cleansing are progressed prior to Go-Live in line with PAB directives
- Stand up a Service Management model which is fit for purpose and aligned with new DIP operational support needs
- Exchanging relevant contact information to support any modified, transitional or transformative service management model to support MHHSP
- MVC participants will agree deployment plans then increase volume as e2e services proven.

MHHS SI will …
- Provide assurance that data cleansing activities across PP's meet PAB performance criteria prior to Go-live as an entry criteria for M11
- Set up a working group to review whether the current as-is service management model will be fit for purpose when new BSC, REC, SEC, DCUSA and CUSC code comes into effect.
- Track development of Service Management blueprints to cover migration, new BSC go live and post MHHSP (BAU) enduring design support and provide assurance that they are fit for purpose as per the above.
- Provide support to incident management during all stages of transition – level of support to be determined by the arrangements above

Elexon (DIP Provider) will …
- Define the service management model needed for effective support during migration and new settlement roll-out
- Ensure Service Management arrangements are compliant against Code obligations
- Define service transition arrangements as old systems are decommissioned post M16 to mitigate potential outages

Associated Planned Deliverables include…
- Service Management Model – Interim blueprints required for migration, new settlement code and enduring design
- Cutover processes for Go Live/Migration and new settlement code as basis for cutover rehearsals
- Data Assessment Report and on-going PAB reporting in line with metrics to mitigate data migration risks during migration window (M11 – M15)

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Service Management - Overview

A Service Management Approach and Strategy is being developed for the end of May 2023, which will include:

1. **Scope of Elexon's role within the e2e Service Management of the new arrangements:** the most efficient model needs to be determined to support the new arrangements, e.g. a federated model (each Service Provider operates their own service management tool and practices) vs a centralised model (Elexon provide a service management tool utilised by all participants and a single service management model); or a hybrid model (which would encompass elements of both approaches).

2. **Service Management SLAs and responsibilities:** The creation of defined SLAs for Incidents, Problems, Service Requests etc.

3. **Responsibilities of operational change management:** Processes and governance of operational change, such as planned outages.

4. **Hypercare:** roles, responsibilities and targets for the initial period of Hypercare which will cover early operational life and the exit from Hypercare.

Participants will …

- Require certainty as to how incidents within specific services within the e2e arrangements will be managed and resolved.
- Operate to specific SLAs related to service management activities.
- Operate specific processes and interactions between different service management functions (operating to different SLAs / Code requirements).

MHHS SI will …

- Engage the appropriate participants to develop an approach and strategy covering the e2e service management framework.
- Engage participants via the working groups and seek approval of the approach and strategy within the Programme governance framework.
- Develop service level requirements and identify other code drafting requirements.
- Develop an approach to Hypercare, setting out the programmes assurance responsibilities and the role of individual services, including when Hypercare will commence and the exit criteria.
- Define the roles and responsibilities of the Programme and Code bodies related to service management between M10 and M16.

Elexon will …

- Define the service management model needed for effective support during migration and new settlement roll-out
- Ensure Service Management arrangements are compliant against Code obligations
- Define service transition arrangements as old systems are decommissioned post M16 to mitigate potential outages

Readiness Assessments, Control Points and Date Range Checkpoints

Readiness Assessments, Control Points, Range Checkpoints

Description and Purpose.

1. **Readiness Assessments.** Readiness assessments are an essential tool in ensuring all Parties are meeting their obligations to allow the Programme to deliver on time and identifying risks and issues where readiness has not been met. Readiness assessments form part of the data-driven approach to targeting PPC support where most needed. .

2. **Control Points.** Control Points represent significant points in the plan, where there should be an explicit decision about whether to proceed into the next major programme phase (or not). These decisions are based primarily on progress so far, extent of uncertainty (volume of change and level of risk)and suitability of the forward plan and assumptions.

3. **Date Range Checkpoints.** CR022 sets out the introduction of data ranges across milestones M11 – M16. Three months month prior to each Tier 1 milestone falling due, MHHSP reaffirm whether the planned Tier 1 date remains on schedule and whether the planned date for the milestone will change The checkpoints are Tier 2 milestones.

Task Name	Start	Finish	Duration
READINESS ASSESSMENTS	Mon 11/09/23	Fri 04/12/26	845 days
Readiness Assessment 3 - Design and Build Progress Check and CP2 Check	Mon 11/09/23	Fri 17/11/23	50 days
Readiness Assessment 4 - Design & Build Progress Check	Mon 08/04/24	Thu 13/06/24	49 days
Readiness Assessment 5 - Start of Qualification	Tue 12/11/24	Fri 17/01/25	49 days
Readiness Assessment 6 - Start of Migration & CP3/CP4 check	Tue 28/01/25	Fri 04/04/25	49 days
Readiness Assessment 7 - Migration Checkpoint	Mon 04/08/25	Thu 09/10/25	49 days
Readiness Assessment 8 - Ready to Accept New MPANs	Tue 06/01/26	Fri 13/03/26	49 days
Readiness Assessment 9 - Ready for New Settlement Timetable and CP5 Check	Tue 29/09/26	Fri 04/12/26	49 days
Readiness Assessments - Tier 1 Milestones	Fri 17/11/23	Fri 04/12/26	795 days
CONTROL POINTS	Thu 10/11/22	Mon 07/12/26	1063 days
Control Point 1 - Start of System Design, Build & Test	Thu 10/11/22	Wed 07/12/22	20 days
Control Point 2 - Start of Integration & Test	Mon 02/10/23	Mon 30/10/23	20 days
Control Point 3/4 - Readiness for Migration	Mon 03/03/25	Fri 28/03/25	20 days
Control Point 5 - Cut Over to New Settlement Timetable	Tue 10/11/26	Mon 07/12/26	20 days
Control Points - Tier 1 Milestones	Wed 07/12/22	Mon 07/12/26	1043 days
MILESTONE RANGE CHECKPOINTS	Mon 16/12/24	Tue 15/09/26	456 days
M10, M11, M12, M13 milestone checkpoint	Mon 16/12/24	Mon 16/12/24	0 days
M14 milestone checkpoint	Tue 23/12/25	Tue 23/12/25	0 days
M15 milestone checkpoint	Tue 14/07/26	Tue 14/07/26	0 days
M16 milestone checkpoint	Tue 15/09/26	Tue 15/09/26	0 days

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