



**MHHS
PROGRAMME**
Industry-led, Elexon facilitated

M10 Re-calibration Overview

MHHS-DEL3121

Document Classification: Public

Document Purpose

- Please use this document in support of CR055 as a detailed overview of the background, logic and proposed changes to M10 and corresponding milestones.
- To support development of your Impact Assessment response, this document should be used in conjunction with:
 - MHHS-DEL3100 CR055 Impact Assessment Supporting Document v1.0
 - MHHS Outline Plan v6.0 (MSP and Excel)
 - MHHS Milestone Register v6.0
 - Programme Planning Dialogue Session slides that are linked in the CR055 document
- If there are any questions on the details covered, please contact the PMO - PMO@mhhsprogramme.co.uk.

Document Contents



The approach to building the plan



Current Baseline

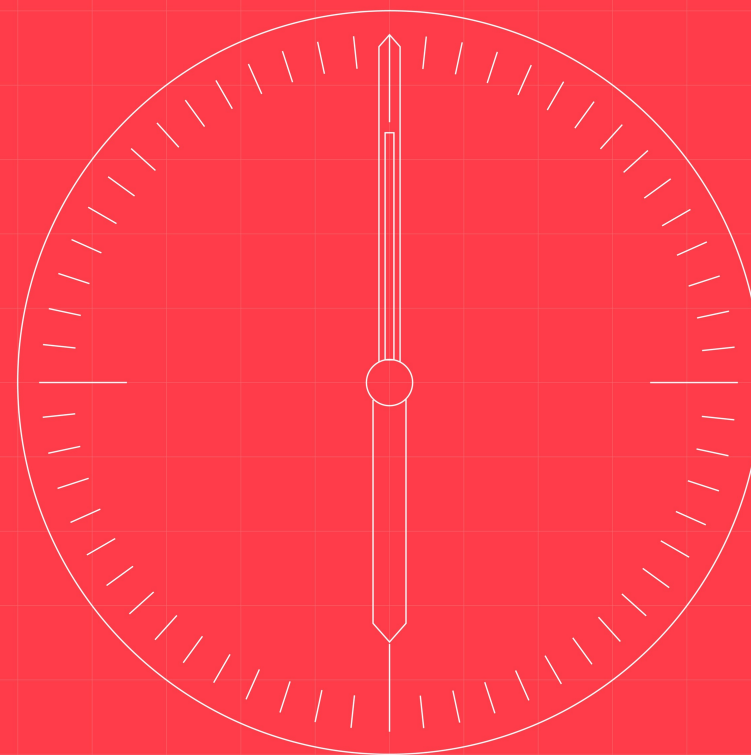


The proposed plan for CR055



Next steps and progressing the Change Request

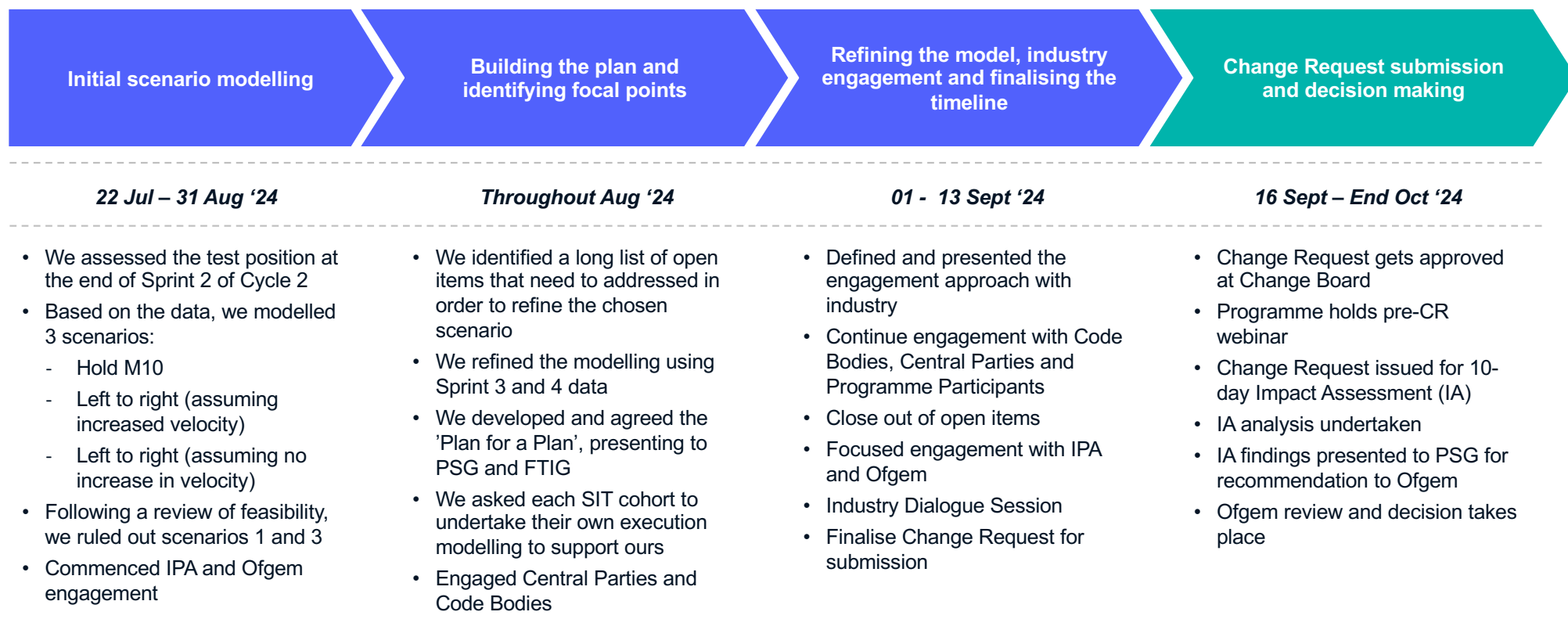
The approach to re-calibrating the plan



The need to do something different / look at the viability of M10

- As Cycle 1 of SIT closed it was clear that intervention was required for Cycle 2 in order to improve testing velocity and achieve Cycle 2 targets
- The changes implemented from the test retrospective were implemented with some success
- When progress through the first two sprints of Cycle 2 did not see a significant uplift in velocity it was clear the Programme needed to review the level of risk being carried forwards by the Programme
- This was the trigger for the LDP to initiate the M10 scenario planning after Sprint 2, with the Programme initially looking at 3 key scenarios:
 - **Scenario 1: “Hold M10”** – use all contingency in the existing plan and increase resourcing to enable delivery of the current M10 date (07-03-2025)
 - **Scenario 2: “Left to Right Modelling”** – using current throughput rates and assuming improvement in velocity we have modelled each cohorts’ SIT delivery timelines
 - **Scenario 3: “Left to Right Modelling with no uplift in throughput”** – using current throughput rates and assuming no improvement in velocity we have modelled each cohorts’ SIT delivery timeline

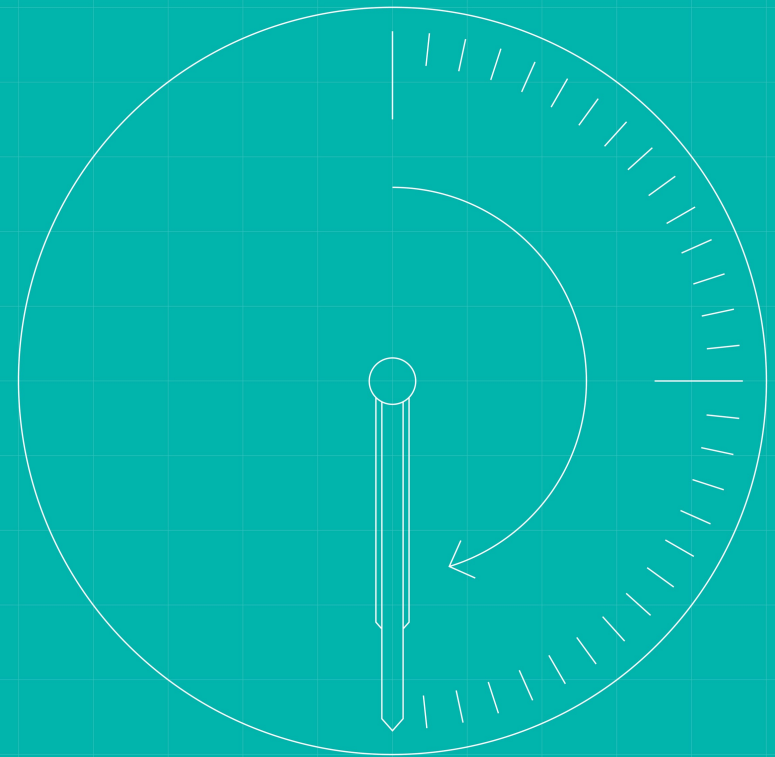
Scenario Planning development - High Level Process



Gathering the evidence to underpin a realistic test execution model

- Throughout cycle 2, we continued to review and refine the modelling using the latest data from Sprints 3 and 4 to model future test velocity rates.
- It was clear that the modelling used for 'Scenario 2' was too optimistic, as the velocity targets were missed in these sprints.
- We were conscious of the need to avoid optimism bias in our modelling approach and test data to date had showed that the targets in the agreed test execution schedule were unachievable.
- This was further corroborated at the end of Sprint 4 when the points per sprint target were missed again.
- To develop a realistic test execution model, that could be endorsed by industry and used to underpin the wider programme timelines, it was key to engage all SIT participants in this exercise.
- This was one of the key reasons behind asking SIT cohorts to provide their own view of execution modelling timelines.
- This exercise provided us with more data points needed for the modelling, protected against any optimism bias in the modelling and ensured increased industry input to any outputs shared later down the line.

Building and optimising the plan



Focal points to close out programme planning (19-Sep-24)

#	Planning item	Description	Direction of travel (06-Sep-24)	Status
1	Settlement Testing timelines	The revision of the Settlement testing (SIT-B) Exit Criteria needs to be completed, to determine the accuracy tests that need to be executed in SIT-B and those which could be picked up later in SIT-A via Functional testing.	Settlement testing will run through until the end of 2024 (20/12/2024). The CoS Settlement tests are currently scheduled to take place, in SIT-A, over a 4-week window after the Regression Test Data Load window. Starting on 07/04/2025.	Closed
2	SIT Operational start	As per later update, timescales proposed for Elexon Helix Service Management deliverables have a consequential impact on SIT Operational test material, preparation and therefore the start of SIT Operational testing.	SIT Operational scheduled to commence with Theme 3 – Batch 1 on 03/02/2025 and conclude by 16/05/2025.	Closed
3	SIT Non-Functional start	If SIT Settlement testing needs to be extended beyond the IR8.x maintenance window, then SIT Non-Functional testing start will be delayed.	SIT Non-Functional scheduled to commence on 13/01/2025 (Theme 1). Themes 2 and 3 will run from 17/03/2025 – 09/05/2025.	Closed
4	Non-SIT LDSO testing start	The start date for Non-SIT LDSO testing needs to be confirmed.	Non-SIT LDSO Test Start will commence on 06/01/2025 – 16/05/2025.	Closed
5	Supplier & Agent Qualification Test	Supplier and Agent Qualification test timelines in the plan are dependent on SIT Functional completing.	SIT Functional is going to extend beyond the current date of 03-Jan-25 and the start of Supplier and Agent Qualification test will move with it.	Closed
6	Initial QAD timelines	Timelines for the initial QAD submission for SIT, LDSO and Wave 1 Qualification participants need to be reviewed in line with plan changes.	The initial QAD window for SIT and Non-SIT LDSOs will open on 06/01/2025. For Wave 1 S&A Qualification participants this is 21/03/2025.	Closed
7	Gap Analysis outputs	The RTTM gap analysis identified additional SIT test cases that need to be incorporated into the Programme Plan timelines.	The number of additional test cases has stabilised at 25. It is still expected that this additional scope can be incorporated into 1 additional sprint.	Closed
8	M10 / M11 Window	The window between M10 and M11 is currently 1 month in the plan but this could be reduced, with minimal impact, to help mitigate an M10 delay.	The 4-week window between M10 and M11 will remain in place.	Closed
9	Beyond M10 – planning logic	Assessing activities and key milestones beyond M10 to understand impacts of an M10 delay.	The underlying logic within the plan (beyond M10) remains sound and there is no new evidence to change CR022 assumptions. There is no intention to constrain future activities or timelines to compensate for an M10 move.	Closed
10	Environment provision	The duration of time the SIT environments need to be stood up for after the MVC complete testing needs to be agreed.	The current plan has 11 weeks' additional SIT environment provision and this will remain the same in the CR055 proposed plan.	Closed
11	Regression testing	The duration of regression testing required at the end of SIT Cycle 3 needs to be agreed.	The 7-week timelines for regression testing is proposed to remain the same. The data load window has been extended to 15 days.	Closed

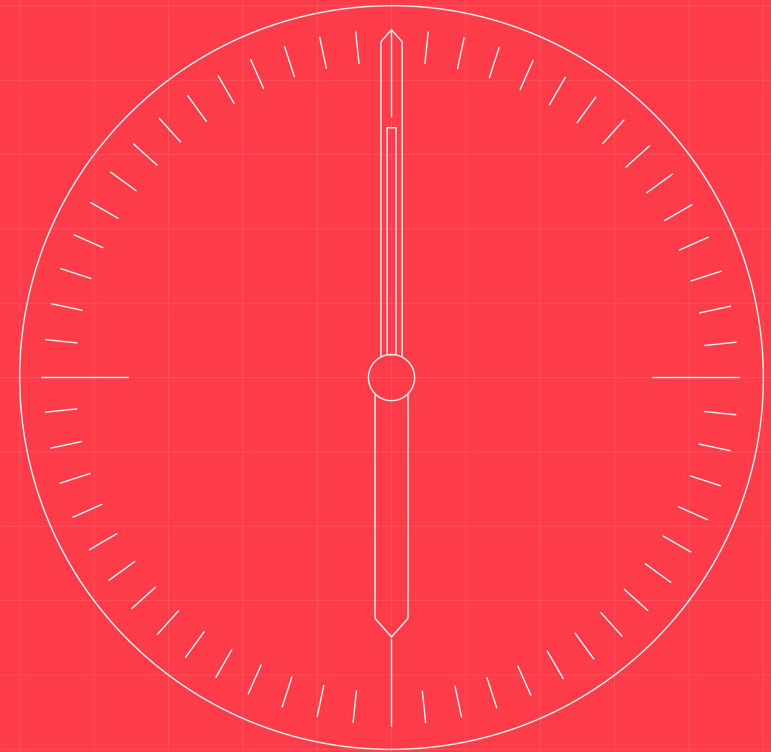
Additional Plan Improvements Alongside Execution Model Timings

Improvement Made	Benefits
Delay SIT NFT beyond Christmas	<ul style="list-style-type: none"> Allows focus for SIT PPs on SIT F SIT M critical path activities and gives time for SIT Settlement to conclude to target outcomes without needing to reallocate tests into SIT-A
Retain Settlement Testing in SIT-B to minimise disruption	<ul style="list-style-type: none"> Moving Settlement tests into SIT-A would cause additional data preparation and a split in attention and loss of focus now that Settlement Testing is now making progress in SIT-B Closing out SIT Settlement in SIT-B will allow those resources to be planned to be deployed onto SIT F & SIT M
Delay start of Non-SIT LDSO Qualification Testing to beyond Christmas	<ul style="list-style-type: none"> Provides increased stability into DIP and the design before Non-SIT LDSO QT, reducing risk of central defects More stable MPRS system for deployment into LDSO test environments More opportunity for preparation (e.g. NFT PIT) before testing In discussion with LDSOs to see whether beneficial for those that might be ready earlier
Extend data preparation window from 10 days between Cycle 3 & SIT Regression	<ul style="list-style-type: none"> Reflecting lessons learned from data retrospectives and reducing risk of unplanned delays

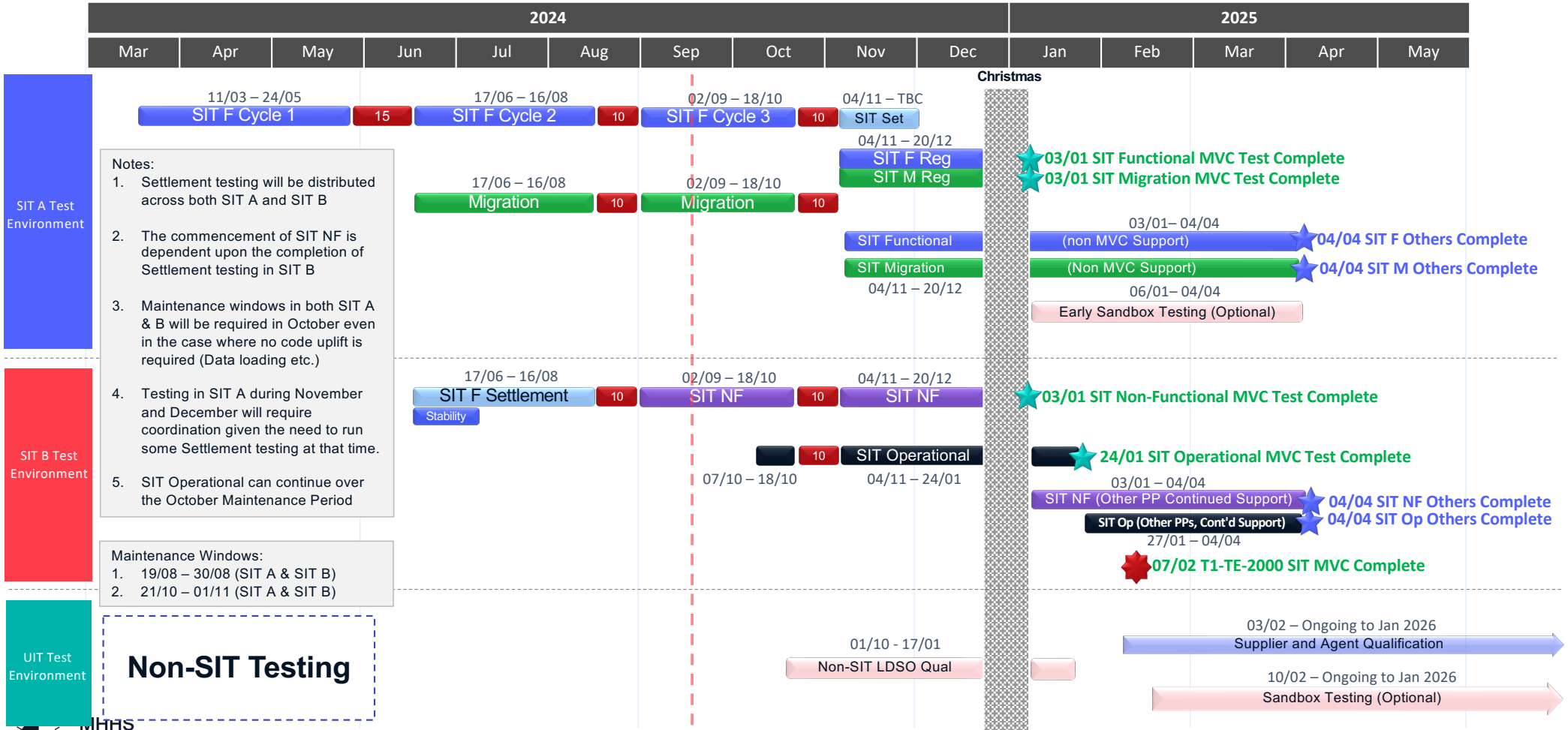
Plan improvements to de-risk delivery

Improvement	Approach	Likely Effect on Timeline
Define Data Load window at 15 WDs	Considered a reasonable period of time by the MHHS Programme team on the basis that there is no Maintenance window required for a mass software upgrade, on the basis that fixes are deployed as we go in patch releases.	<ul style="list-style-type: none"> Reduces critical path by a week
Delay Start of SIT Operational Testing	Requested by Helix in response to focal points with a proposed approach that will need discussion with the MHHS Programme team	<ul style="list-style-type: none"> De-risks SIT Operational testing Prevents any overlap with SIT F, SIT M and SIT Settlement testing for SIT PPs before Christmas, increasing focus and de-risking that period of testing Still need to agree timing and approach so there may be further activities (e.g. regression testing)
Remove SIT NF and SIT Operational Non-MVC testing from plan	Test team plan to execute all SIT PPs at the same time for SIT NFT and SIT Operational with no distinction for MVC required	<ul style="list-style-type: none"> Significantly earlier close of SIT B environment, reducing costs for PPs. Some contingency may be prudent, but not factored in at this point. Retains float in SIT NFT and SIT Operational before hits critical path Facilitates early M10 & M11 if SIT MVC PPs complete testing early
Split out the Themes for SIT Operational and SIT NFT	True dependencies and more accurate execution windows reflected in the plan	<ul style="list-style-type: none"> Facilitates better planning and clearer focus for SIT PPs on their requirements

Current baseline



CR022 Baseline – path to M10



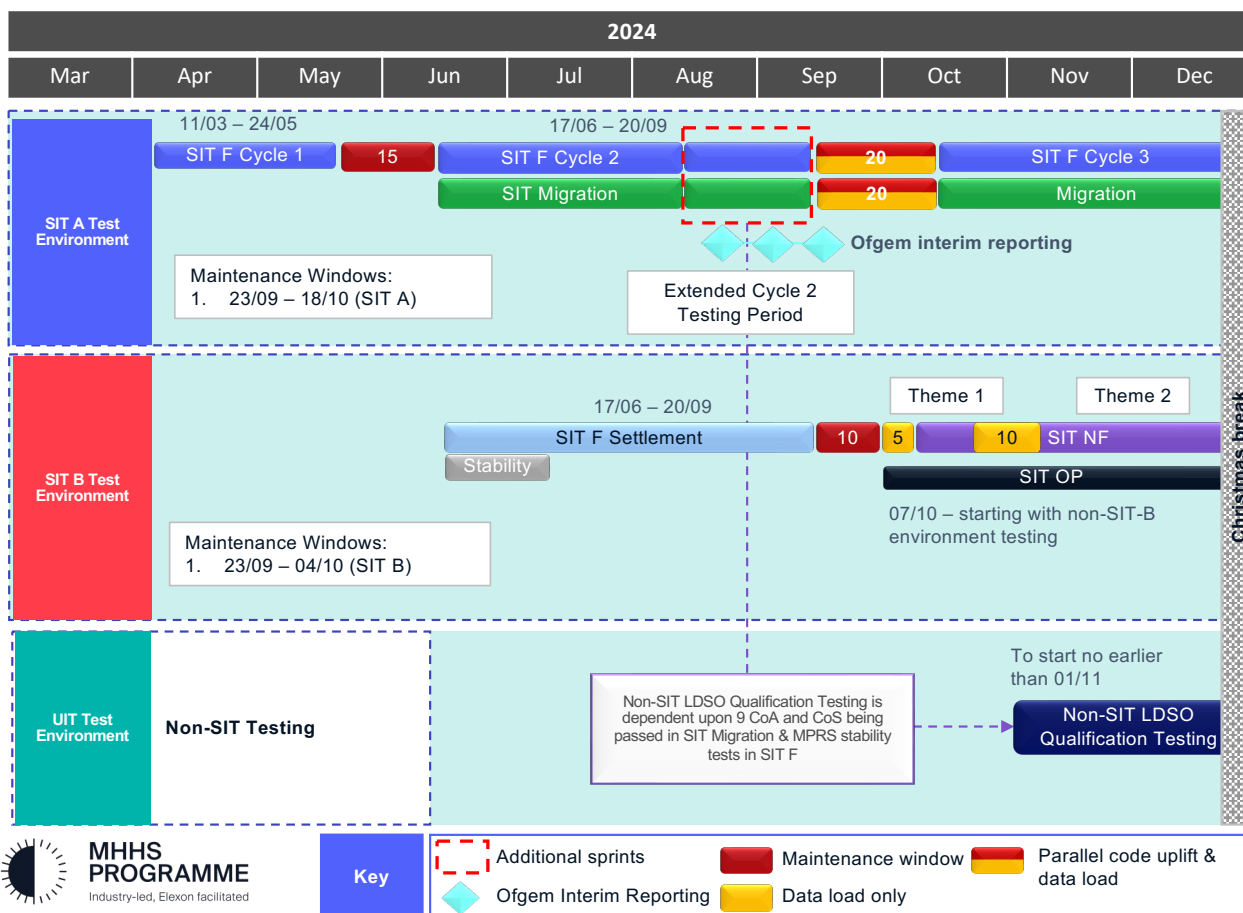
- Notes:**
- Settlement testing will be distributed across both SIT A and SIT B
 - The commencement of SIT NF is dependent upon the completion of Settlement testing in SIT B
 - Maintenance windows in both SIT A & B will be required in October even in the case where no code uplift is required (Data loading etc.)
 - Testing in SIT A during November and December will require coordination given the need to run some Settlement testing at that time.
 - SIT Operational can continue over the October Maintenance Period

- Maintenance Windows:**
- 19/08 – 30/08 (SIT A & SIT B)
 - 21/10 – 01/11 (SIT A & SIT B)

Non-SIT Testing

MHHS short-term plan – To end of 2024

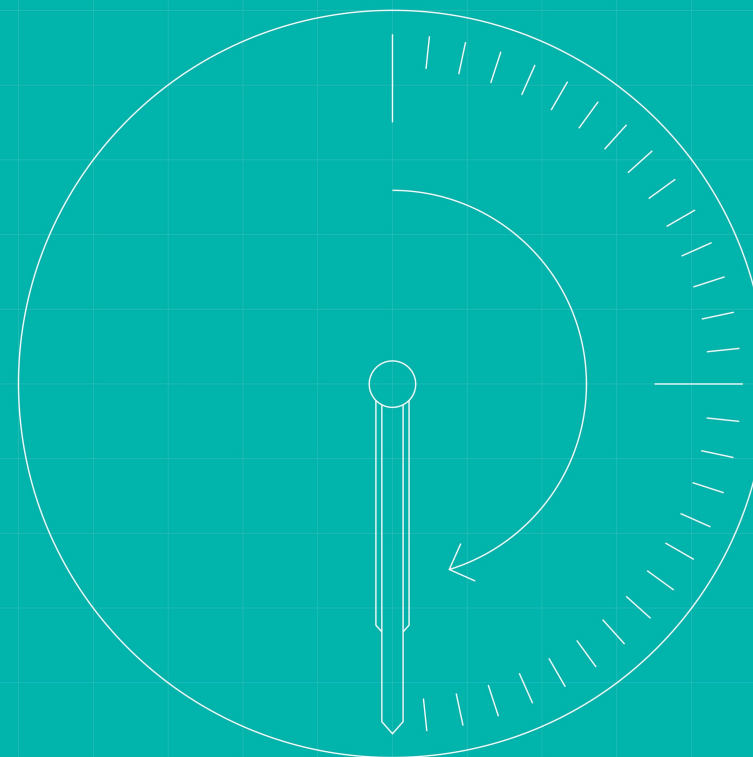
The Programme will extend SIT Cycle 2 by an additional 5 weeks, deferring the IR8.x maintenance window. This has knock-on implications for short term testing activities, which have been outlined in the plan below.



What has changed & why

- The IR8.x maintenance window will be deferred by 5 weeks to allow for 2 additional sprints in Cycle 2. This is to enable:
 - More time to achieve the Cycle 2 firm targets set out at the beginning of the testing cycle.
 - More time, before the maintenance window, to focus on the priority tests needed to enable Non-SIT LDSO testing to commence.
 - More uninterrupted time to complete Settlement testing, which is behind current forecast targets.
 - More time to plan ahead and learn lessons from previous maintenance windows, optimising the activities to be completed.
- The IR8.x maintenance window in SIT-A environment will also be extended to 4 weeks. This is to enable more time for data preparation and loading activities and is in direct response to lessons learned feedback captured in the Cycle 1 data retrospective.
- To protect the timeline between the IR8.x maintenance window and Non-SIT LDSO Qualification testing, Non-SIT LDSO Qualification testing has been pushed back to start no earlier than 01-Nov-24.
- The Settlement testing window has been extended by 5 weeks. This means SIT Non-Functional has been delayed by the same amount of time as both test phases use the SIT-B environment. Any further delay to Settlement testing would incur a delay to SIT Non-Functional.
- The SIT Operational start date remains unchanged at 07-Oct-24.

Proposed CR055 plan

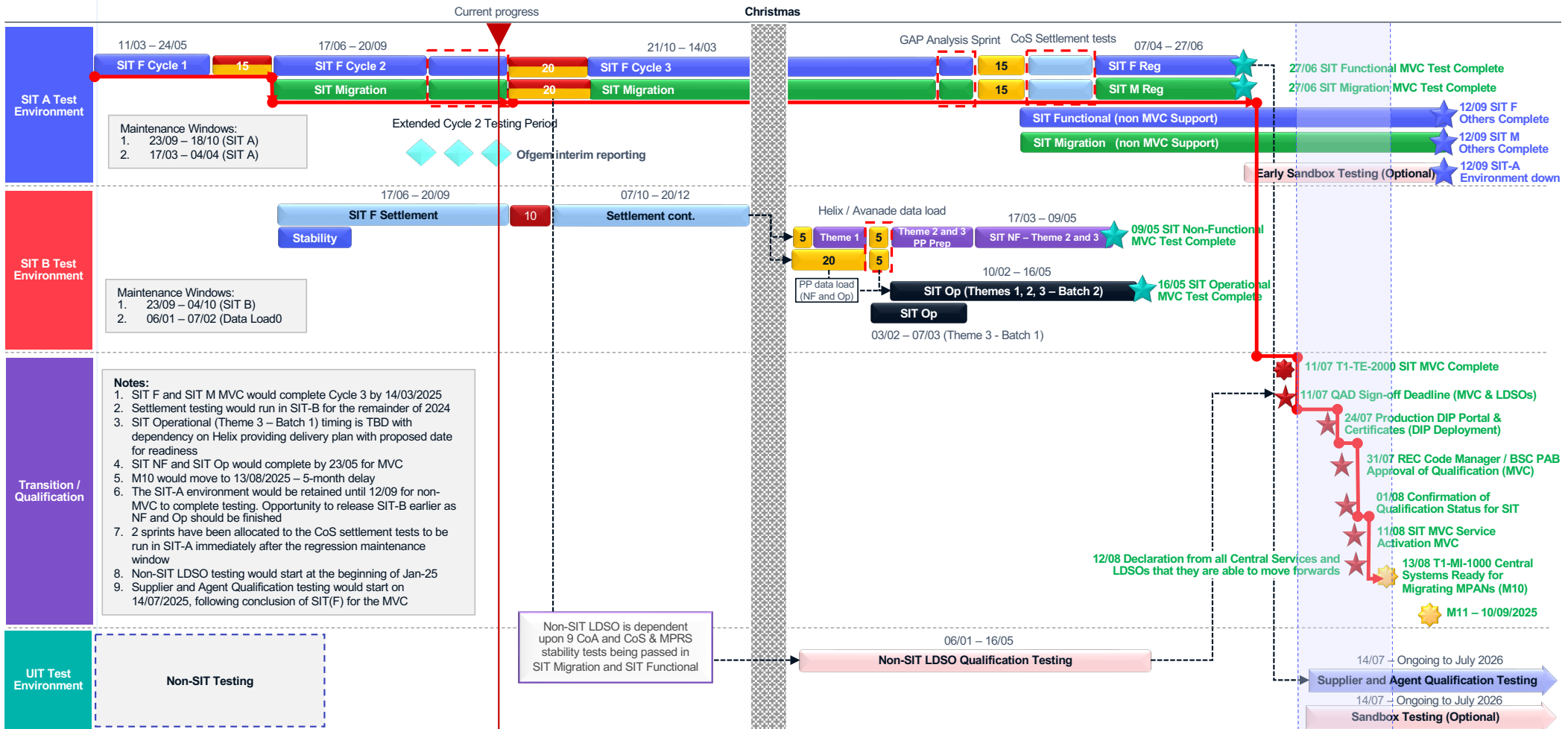


Proposed M10 timeline + critical path

2024

2025

Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
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Maintenance Windows:
 1. 23/09 – 18/10 (SIT A)
 2. 17/03 – 04/04 (SIT A)

Maintenance Windows:
 1. 23/09 – 04/10 (SIT B)
 2. 06/01 – 07/02 (Data Load)

- Notes:**
- SIT F and SIT M MVC would complete Cycle 3 by 14/03/2025
 - Settlement testing would run in SIT-B for the remainder of 2024
 - SIT Operational (Theme 3 – Batch 1) timing is TBD with dependency on Helix providing delivery plan with proposed date for readiness
 - SIT NF and SIT Op would complete by 23/05 for MVC
 - M10 would move to 13/08/2025 – 5-month delay
 - The SIT-A environment would be retained until 12/09 for non-MVC to complete testing. Opportunity to release SIT-B earlier as NF and Op should be finished
 - 2 sprints have been allocated to the CoS settlement tests to be run in SIT-A immediately after the regression maintenance window
 - Non-SIT LDSO testing would start at the beginning of Jan-25
 - Supplier and Agent Qualification testing would start on 14/07/2025, following conclusion of SIT(F) for the MVC

Non-SIT LDSO is dependent upon 9 CoA and CoS & MPRS stability tests being passed in SIT Migration and SIT Functional

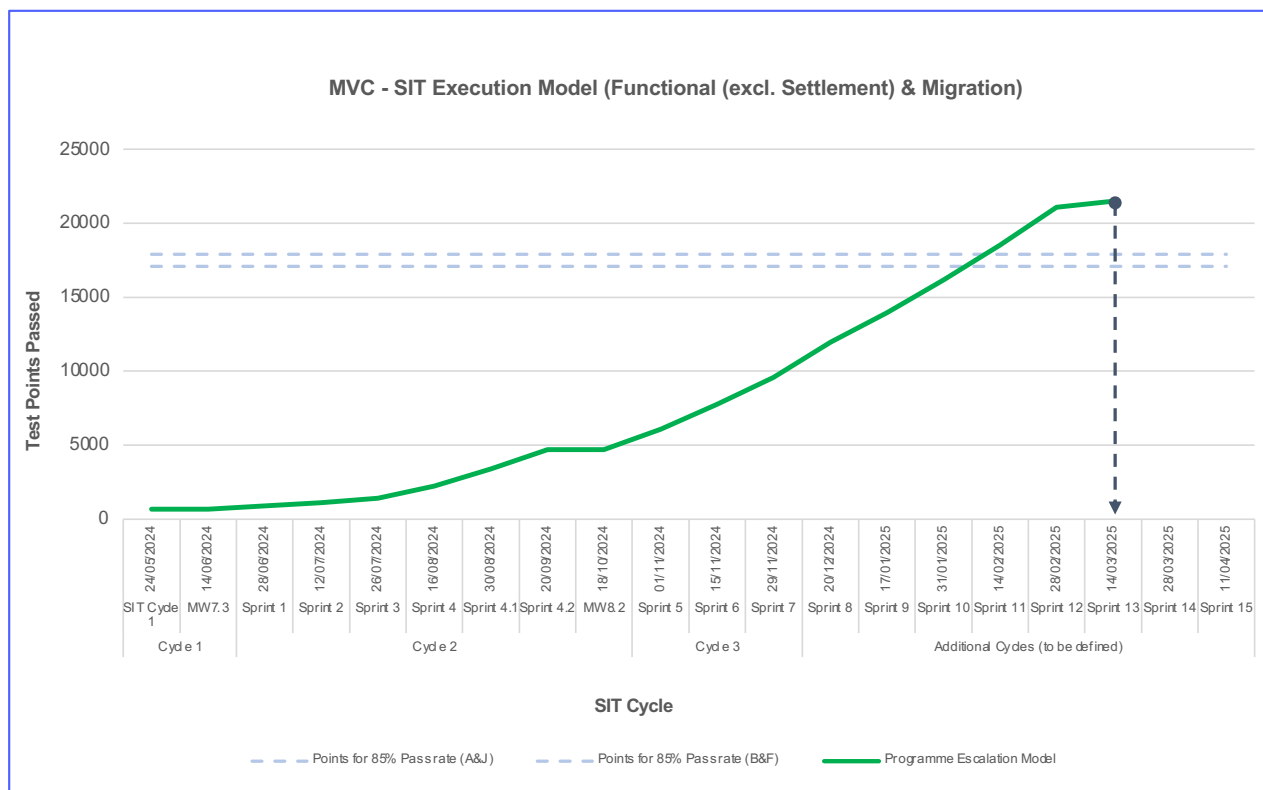


Key

- Maintenance window
- Data load only
- Parallel code uplift & data load
- Additional sprints
- Critical path
- Key dependency
- Ofgem Interim Reports

Assumed test execution Model in our proposed plan – covering rate so far and future assumed rate

We have plotted our own MVC execution model using data from previous sprints and the individual submissions provided by each SIT cohort



w/e	Sprint #	Points Required	Comments
20/09/2024	Sprint 4.2	1300	3-week sprint
01/11/2024	Sprint 5	1370	
15/11/2024	Sprint 6	1700	
29/11/2024	Sprint 7	1800	
20/12/2024	Sprint 8	2400	3-week sprint - assumes Xmas slow-down in 3 rd week
17/01/2025	Sprint 9	2000	Assumes level of Xmas slow down
31/01/2025	Sprint 10	2200	Assumes ramp up post Xmas
14/02/2025	Sprint 11	2370	Assumes ramp up post Xmas
28/02/2025	Sprint 12	2520	Assumes ramp up post Xmas
14/03/2025	Sprint 13	430	Gap analysis scope

Summary of T1 milestone changes which will be submitted as part of CR55

ID	Milestone	Milestone Title	Baseline Date	Proposed Date	Choreography	Reason for change
T1-TE-2000	SIT MVC Complete	SIT Minimum Viable Cohort Complete (SIT Minimum Viable Cohort Test Exit Report Approved)	07/02/2025	11/07/2025		Extension of SIT timeline
T1-TE-1000	M10	Central systems ready for migrating MPANs (M10)	07/03/2025	13/08/2025	SIT MVC	Driven by SIT Completion
T1-MI-3000	M11	Start of 18-month migration for UMS / Advanced (M11)	04/04/2025	10/09/2025	Assuming existing 4 weeks from M10	Driven by SIT Completion
T1-MI-4000	M12	Start of 18-month migration for Smart / Non-smart (M12)	04/04/2025	10/09/2025	Assuming existing 4 weeks from M10	Driven by SIT Completion
T1-MI-2000	M13	Load Shaping Service switched on (M13)	07/03/2025	13/08/2025		Driven by SIT Completion
-	-	Start of Migration for Qualification Wave 1 PPs	01/10/2025	27/03/2026		Driven by 6-month Wave execution and maintains SIT- Qualification PP firebreak
T1-MI-5000	M14	All suppliers must be able to access MPANs under the new TOM (M14)	16/03/2026	07/09/2026	14 months from S&A Qualification start (12 months testing + 2 months approvals keeping logic)	
T1-MI-6000	M15	Full transition complete (M15)	05/10/2026	15/03/2027	18 months from M11	18 Month Migration from M11
T1-EL-1000	M16	Cut over to new settlement timetable (M16)	07/12/2026	14/05/2027	2 months from M15	2 Months from M15

Planning Assumptions (1 of 2)

#	Assumption	RAG	Action / comment
1	SIT participants have the resource capacity, or can increase capacity (within reason), to meet velocity targets in the test execution model that will underpin the updated Programme Plan.	Green	
2	Test velocity can increase sprint on sprint, showing compound growth through each sprint.	Amber	Test velocity is increasing but needs to increase further still.
3	During December and January velocity will plateau, or even reduce, due to annual leave of critical resources.	Green	
4	There will be no, or minimal, testing taking place over the Christmas period (23/12/2024 – 03/01/2024).	Green	Cohorts can continue test execution during this period but the Programme has assumed that no testing will take place.
5	Completion of settlement testing will enable re-direction of resources and effort into SIT(F) and SIT Migration, which will support an increase in testing velocity in the final sprints.	Amber	
6	The maximum time possible in the plan will be dedicated to enabling settlement testing to complete.	Green	The Programme will define this duration in the proposed plan ahead of the CR being issued.
7	SIT Non-Functional testing is dependent on Settlement testing completing in SIT-B.	Green	
8	SIT Operational (Themes 1, 2, 3 – Batch 2) testing is dependent on Settlement testing completing in SIT-B.	Green	Theme 3 – batch 1 does not require SIT-B.
9	The maintenance window before regression testing will be between 10 - 15 days in duration.	Green	The Programme will confirm this in the proposed plan issued alongside the CR.
10	The existing timeline and scheduled activities from SIT MVC complete (T1-TE-2000) through to M10 remain unchanged in any scenario planning.	Green	
11	It is assumed that SIT participants only need to meet the 85% test success rate and 100% execution rate to complete testing as per SIT(F) Approach and Plan exit criteria.	Green	
12	Only 2 Cohorts (and all associated market roles) are needed to comprise the MVC.	Green	
13	The requirements for evidence capturing will be revised, and where possible reduced, ahead of SIT Cycle 3.	Amber	The Programme will offer a proposal ahead of the CR being issued and put in place during the maintenance window.
14	Central Parties can support testing across all SIT cohorts without delays.	Amber	

Key	Assumption is stable and well tested	Assumption has some level of risk	Assumption has significant risk of being incorrect
			

Planning Assumptions (2 of 2)

#	Assumption	RAG	Action / comment
15	The Programme can support the extra demands that increased throughput creates (ie. additional tests in flight, more queries, provision of more test cases upfront).	Amber	
16	Pass success rates will continue to remain as high as they have been to date.	Amber	
17	Test defects will reduce in volume as testing progresses and systems become more stable	Green	
18	IR8.x will not bring in significant defects or cause significant impediments to testing velocity.	Amber	
19	There will be no further maintenance windows between IR8.x and the end of Cycle 3.	Green	
20	The opportunity to reduce test restarts will be reviewed in IR8.x	Amber	The Programme will review the options of reducing the test restarts, without compromising testing integrity as part of the IR8.x maintenance window.
21	The Programme will ensure all test pre-requisites (ie. data, pre-requisite test cases) will be in place before test cases are commenced.	Amber	
22	All Service Management design documents are approved by industry, Helix and SIT PPs are ready with their Service Management facilities to enable SIT Operational preparation to complete	Amber	
23	M8 and M10 remain linked – any delay to M10 will automatically delay M8.	Green	
24	M7 (SCR powers enabled) can commence as planned, despite delay to M10.	Green	
25	Execution and completion of paired cohort tests will be prioritised in cycle 3.	Green	
26	Testing across individual cohorts will be prioritised to ensure all market roles are filled when MVC has completed testing.	Green	
27	Future Readiness Assessments and Control Points will be replanned to align to the milestones they are currently linked to.	Green	
28	The existing Programme change freeze will be extended through to the new M10 date. Any current CRs for implementation after M10 will still be scheduled for delivery after M10.	Green	
29	If CR056 is approved to be implemented by the Programme, it is assumed that the development and test effort can be incorporated into the CR055 timeline.	Amber	

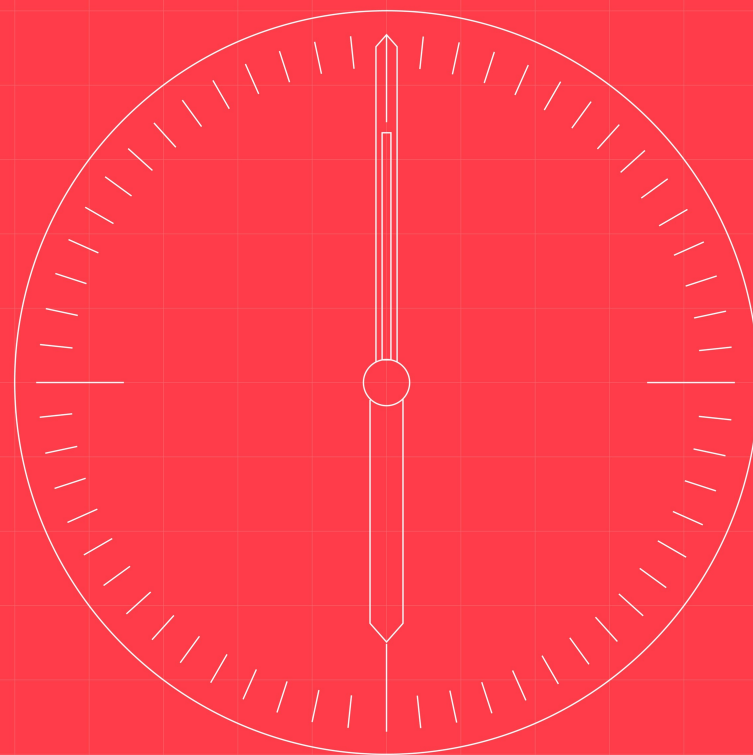
Risks associated with the proposed plan

#	Risk	Impact	Due date	Owner	RAG	Mitigation
1	There is a risk that the duration in the plan allocated to settlement testing is not sufficient	This would delay the ability to commence SIT NF and Operational. A delay of more than 2 months after Christmas would impact the critical path.	20/12/2024	SI Test	Amber	Test cases are being reviewed and where possible rationalised to reduce complexity and effort, which maintaining design coverage.
2	There is a risk that service management design is not approved by industry or Helix and SIT PPs are not ready with their service management facilities for SIT Operational to start on time	SIT Operational will be delayed beyond the current planned dates and would create greater risk of impacting the critical path.	05/11/2024	Elexon (Helix)	Amber	Elexon (Helix) provide a clear plan detailing their route to obtaining approval of service management documents, or alternative plan for SIT operational readiness.
3	SIT (Functional and Migration) timelines conclude closer to the deadline for QAD submissions, which could mean more work to qualify the MVC in less time.	There could be a delay to MVC participants qualification approval at PAB due to the volume of submissions to be processed.	11/07/2025	Code Bodies, Programme	Amber	Programme to engage early and frequently with PAB and Code Bodies throughout testing to iteratively feed review content through to approvers.
4	There is a risk that running M10 and M11 concurrently creates more risk of disruption at the start of the migration window	Programme participants are not ready to migrate and operate MPANs as needed after M11	13/09/2024	Programme	Green	Programme to review the implications of running M10/M11 milestones concurrently.
5	There is a risk that running M10 and M11 concurrently reduces the amount of time available to qualification participants to migrate MPANs after qualifying.	Any later qualifying parties with a large volume of MPANs may not be able to migrate their full portfolios in time for M15 to complete.	Aug-26	Programme	Amber	Monitor migration portfolio and qualification progress to frontload participants with larger MPAN volumes.
6	There is a risk that SIT participants cannot keep up with velocity targets	The re-calibrated M10/M11 date would need to be moved further.	14/03/2025	SI Test	Amber	Review progress against model after each Sprint and explore opportunities for contingency in plan. Explore opportunities to rationalise testing scope by removing edge case test cases.
7	There is a risk of data issues as a result of the IR8.x maintenance window which could not be addressed until the regression window.	The SIT regression window would need to be extended which would have implications on the M10 date.	21/10/2024	SI Data	Amber	Explore feasibility of testing data during the IR8.x maintenance window and fix errors before the start of Cycle 3.
8	There is a risk that the time allocated to regression testing is not sufficient in the plan.	If additional time is required beyond the 7-weeks allocated this would delay completion of SIT and M10.	20/12/2024	SI Test	Amber	Define the scope for regression testing early to ensure no additional time is required within the plan.

Key planning dependencies

#	Dependency	Give	Get	RAG
1	There is a dependency on MPRS stability and CoS / CoA tests being completed in SIT Migration to enable Non-SIT LDSO to start on time	SI Test	Non-SIT LDSO	Green
2	There is a dependency that service management design must be approved by industry and Helix and SIT PPs must be ready with their service management facilities for SIT Operational to start on time	Helix	SI Test	Amber
3	There is a dependency on settlement testing concluding in order to release the SIT-B environment for Non-Functional and Operational testing	SI Test	SI Test	Amber
4	There is a dependency on SIT Functional concluding before Supplier and Agent Qualification Testing can commence	SI Test	Code Bodies	Amber
5	There is a dependency on SIT MVC completing SIT before the QAD process can conclude	SI Test	Code Bodies	Amber
6	There is a dependency on the SIT-A environment being available and cleared down to enable the CSS settlement tests to take place	Environments	SI Test	Green
7	There is a dependency on the DCC's CSS environment in order to complete the CSS settlement tests	DCC	SI Test	Amber
8	There is a dependency between the start of Supplier and Agent Qualification testing starting and M14	Programme	Code Bodies	Green
9	There is a dependency between M11 (migration start) and M15 (full transition complete)	Programme	Programme	Amber
10	There is a dependency on non-SIT LDSO testing completing within the timelines to enable QAD submissions for M10	Non-SIT LDSO	SI Test	Amber
11	There is a dependency between M8 and M10	Code Drafting	Transition	Green
12	There is a dependency between Readiness Assessment 4 and M10	Programme	PPC	Green
13	There is a dependency between Control Point 3 / 4 and M10	Programme	PMO	Green
15	There is a dependency between Service Activation activities completing and ability to confirm M10	Helix	Transition	Amber
16	There is a dependency between MVC qualification activities completing and Service Activation starting	Code Bodies	Helix	Amber

Key Points and next steps



Key points and next steps

Key Point	Further information
We need your input	<ul style="list-style-type: none">• To approve the Change Request Ofgem want evidence that, collectively, we all endorse the proposed plan in CR055.• We want to get as much feedback up front as possible - the more feedback and evidence points we have on the proposed plan, the more we can refine it.• Please feel free to contact the Programme directly via the PMO if you have any questions or feedback.
This is not the final plan	<ul style="list-style-type: none">• This is a proposal at this stage – you have a chance to feedback during the IA stage.• All the feedback will be reviewed by the Programme and will be presented as a recommendation to PSG.• We would then look for PSG to recommend to Ofgem that the final plan is approved.
Ofgem decision making	<ul style="list-style-type: none">• This proposed plan is not endorsed by Ofgem.• Ofgem’s endorsement only comes when they confirm their decision at the end of the Change Request process.• Once again, your buy in and feedback is key as an evidence point in that decision.

If you have any questions please do contact the PMO in the first instance – PMO@mhhsprogramme.co.uk

PMO@mhhsprogramme.co.uk

END