



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

Release Management – Practical implementation

MHHS-DEL2060

Major Releases, Minor Releases, Adhoc Releases and Emergency Releases

Background

- SIT A Test Environment will support SIT Functional Testing
- SIT B Test Environment will support SIT Migration, Non-Functional and Operational Testing
- SIT Functional Test Phase broken down into 3 cycles of Test plus a final Regression Test Cycle.
 - Between each cycle is 2-week Maintenance Window.
- From the point SIT Migration Test commences, and SIT A and SIT B are in use, Release Management will co-ordinate alignment of Builds across both Test Environments

Major Releases

- Forecast ahead of time
- Will be predominantly based on Design Baseline uplifts i.e. Resolved DINs + Change Requests
- The target Design Release Publish date will precede the deployment into SIT by circa 5 Months
 - Allowances need to be retained to enable future releases to remain in step with Design Changes being made within Test Programme, therefore between the IR Design Publish date and Deployment Date, alignment updates should be expected

	Defect found in test impacting Design		Defect found in test impacting Design		Defect found in test impacting Design		SIT Functional Cycle 1 concludes
IR5.1 in test	Uplift to IR5.2		Uplift to IR5.3		Uplift to IR5.4		In Test – IR5.4
IR7 published as next Major Release		Retrofit 5.2 change – Publish IR7.1		Retrofit 5.3 change – Publish IR7.2		Retrofit 5.4 change – Publish IR7.3	Due for Release - IR7.3

- Major Releases will be planned during at least the first 2 SIT Functional Maintenance Windows
 - At this point (Q4 2023) the Programme will not plan any Major Releases beyond this date, but withholds the right to add further Major Releases at a later date

Minor Releases

- Minor Releases planned on a weekly basis (current view is Monday AM for Central Systems)
- Content of Minor Releases can include:
 - Predominantly Defect Fixes (that have been successfully PIT Tested and documented within RFCs)
 - Uplift to IR Design e.g. IR5.1 uplift to IR5.2
 - Small Changes (as agreed via implementation plan for CR)

Patch Releases

- When fixes are required outside the weekly cadence of Minor Releases, through controlled Release Management, these can occur

Emergency Release

- Testing is severely impaired/blocked, and changes/workarounds required asap to restart

Jul 15 - Sep 6

Interim Design Releases

Background

- Fast-Track change progress was introduced to manage the large volume of updates to the design
- These updates addressed errors, ambiguities and added needed clarifications.
- These updates were issued via Interim Releases as published in the DIN Log
- The timetable for the release is a monthly cadence with a release plan running out to April 2024.
- The last Interim Release is IR6 published on 1-Nov-23

Proposed Interim Release Alignment with Testing

- We will be reducing the cadence of future releases to better align with testing cycles
- Interim Release 7 will now move to 31-Jan 24 and form the input into SIT functional test cycle 2 (June 24)
- Interim Release 8 will now move to 03-Apr-24 and form the input into SIT functional test cycle 3 (Aug 24)
- Programme Change Requests will continue with the updates to design documents now falling into the revised IR schedule

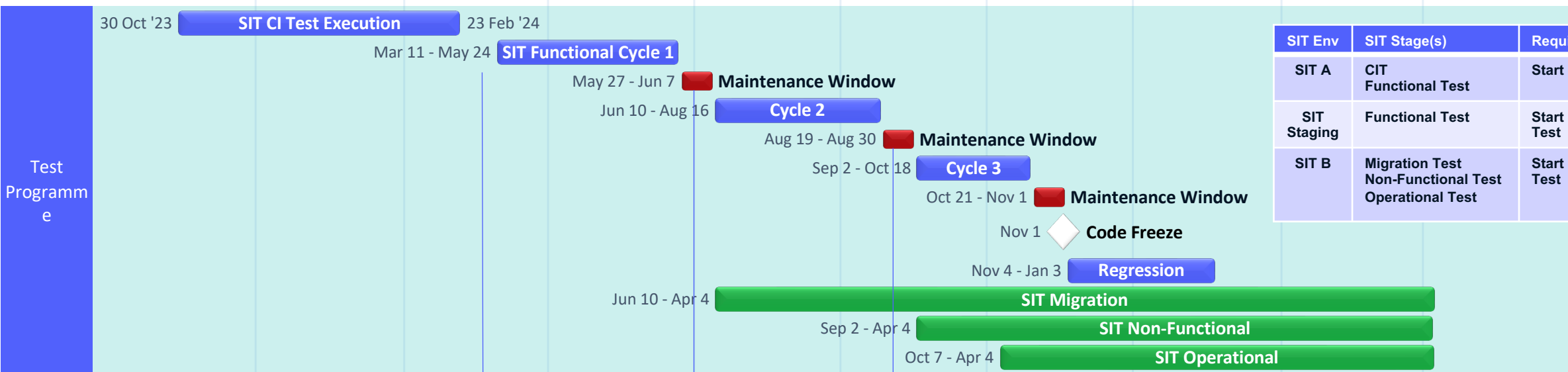
Acknowledgements

- There has been and will be a need to continue to issue minor increments to Interim Releases as a consequence of testing defects. Recent examples being IR2.1 and IR5.1 The Programme is aware of the challenges of maintaining a clear and consistent view of which version of the design participants are building to and executing
- The Programme will endeavour to provide as much time as possible with clear guidance to updates but recognise this will become increasingly challenging as we approach a new testing cycle

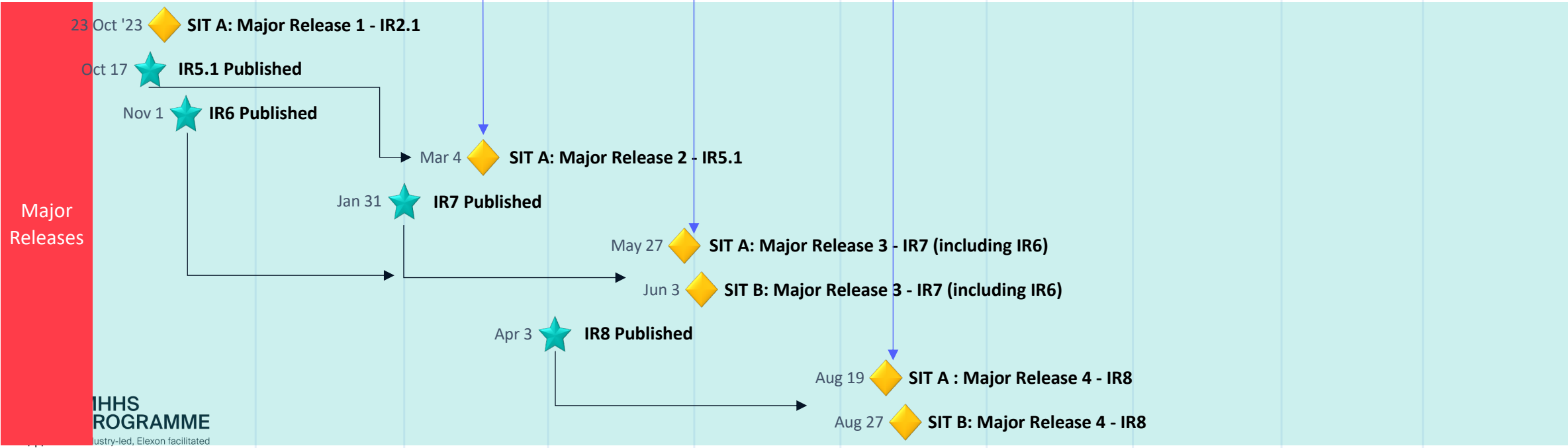
Next Steps

- The DIN log will be updated to reflect the new timeline and will continue to be published at regular intervals
- Additional information will be added to the DIN log to capture where a DIN relates to a defect from testing
- Objection windows will remain and be updated to reflect the new schedule with the exception of testing defects as they are needed to allow testing to progress.
- The Programme will focus on those DINs that impact on our ability to proceed to future milestones or go-live. Other non-urgent DINs will be logged but scheduled for post go-live
- The Programme is proposing a Change Freeze that will be presented to the next PSG 6-Dec-23

Today



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



Today

Test Programme

Mar 11 - Jun 28

SIT Functional Cycle 1

Jul 15 - Sep 6

Cycle 2

Jun 10 - Sep 6

SIT Migration

Oct 17 IR5.1 Published

Mar 4 SIT A: Deploy Major Release 2 - IR5.1

Mar 25 Defect Found requiring Design Uplift - Need IR5.2

Apr 12 Publish IR5.2

Apr 22 SIT A: Deploy Weekly Minor Release - to include IR5.2

May 7 Defect Found requiring Design Uplift - Need IR5.3. Defect is High Severity and Hot Fix/Patch required asap

May 9 SIT A: Deploy Hot Fix/Patch via Patch Release

May 15 Publish IR5.3

May 27 SIT A: Deploy Weekly Minor Release - to include IR5.3

Jun 3 SIT B: Preparation for SIT Migration - Deploy IR5.3

Jan 31 IR7 Published

IR7 uplifted to IR7.1 (IR5.2 alignment) & Published Apr 26

IR7.1 uplifted to IR7.2 (IR5.3 alignment) & Published Jun 17

Jul 1 SIT A & B: Deploy Major Release 3 - IR7.2 (including IR6)

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

Major Releases

Mar 11 - Sep 6

Weekly Minor Releases throughout Test Programme

DESIGN vs BUILD Release Model and associated Nomenclature

- Interim Design Releases will influence the Major Release Roadmap.
- An Interim Design Release is published circa 5 Months ahead of its deployment into the SIT Test Programme
- Once Deployed into the SIT environment, the nomenclature of the IR Design Release will influence the Programme Build numbering.
- Using SIT Functional as an example:
 - Testing will commence based on Interim 'Design' Releases 5.1
 - At point of deployment of Releases across the programme test infrastructure, all Participants will commence SIT Functional on a 'Build' 5.1
 - Week 1 - Test execution finds defects, defects requiring fixes (no Design Changes identified yet), Participant deploys Fixes via controlled Minor/Patch Release. Participants receiving changes for Defect Fixes, increment their Build Version to 5.1.1
 - Week 2 - more defects, more fixes (no Design Changes identified yet), another Release - Build Version to 5.1.2
 - Week 3 - more defects, more fixes (a potential Design impacting defect uncovered), another Release - Build Version to 5.1.3
 - Week 4 – Design uplifted and Published as IR 5.2, whilst more defects, more fixes, another Release - Build Version to 5.1.4
 - Week 5 - more defects, more fixes, another Release - Build Version to 5.1.5
 - Week 6 – Planned implementation Uplift to Design IR5.2 + more defects, more fixes, another Release - Build Version to 5.2
 - Week 7- more defects, more fixes, another Release - Build Version to 5.2.1

Alignment of Builds will deviate as individual Participants deploy fixes for their own systems, however, on deployment of a Release aligned to an incremental Design Interim Release then all Participants will re-align their Build Versions

	Design IR5.1	Weekly Fix Release	Weekly Fix Release	Weekly Fix Release	Weekly Fix Release	Design IR5.2	Weekly Fix Release	Weekly Fix Release	Design IR5.3	Weekly Fix Release	Weekly Fix Release	Weekly Fix Release
Supplier 1	Build 5.1		Build 5.1.1			Build 5.2	Build 5.2.1	Build 5.2.2	Build 5.3	Build 5.3.1		Build 5.3.2
Supplier 2	Build 5.1	Build 5.1.1	Build 5.1.2	Build 5.1.3	Build 5.1.4	Build 5.2		Build 5.2.1	Build 5.3	Build 5.3.1	Build 5.3.2	Build 5.3.3
Supplier 3	Build 5.1	Build 5.1.1	Build 5.1.2			Build 5.2	Build 5.2.1		Build 5.3		Build 5.3.1	

Alignment of SIT A and SIT B

- Once SIT Migration commences, the Programme will have SIT Functional Test Execution running in SITA, in parallel with SIT Migration Test Execution running in SITB
- Design Release/Build equivalence needs to be maintained across SITA and SITB noting synchronisation cannot be achieved 100% of the time.
- A single Code branch approach will be maintained in support of SIT Test Execution across both Test Environments:
 - Participants are expected to have a single Staging Environment to PIT test and deploy fixes from, for either SITA Functional Test Defects and/or SIT B Migration based Defects
 - Weekly Releases to both SITA and SITB need to be scheduled
 - An indicative Weekly Minor Release Schedule would be:
 - Mon AM – Deploy to SITA
 - Mon PM – Deploy to SITBSame code base deployed to both Environments
 - Defect Retesting will reside solely in the SIT Test Environment that uncovered the Defect e.g:
 - Weekly/Minor Release 5.2.16 contains
 - Defect 123, Defect 456, Defect 789 for SITA
 - Defect 246, Defect 468 for SITB
 - All 5 Defect fixes are deployed into SITA and SITB within the same working day
 - SITA SIT Functional Test responsible for - Retesting Defect 123, Defect 456, Defect 789 + appropriate regression based on all changes
 - SITB SIT Migration Test responsible for - Retesting Defect 246, Defect 468 + appropriate regression based on all changes

Jul 15 - Sep 6

- MHHS will continue to provide DIP Simulators to support PIT Testing against 2 concurrent releases:
 - DIP Simulator **#1** – IR2.1 compatible, available from 11/08/23 – 01/03/24
 - DIP Simulator **#2** – IR5.1 compatible, available from 03/11/23 – 24/05/24
 - DIP Simulator **#1** – IR7 compatible, available from 25/03/24 – 16/08/24
 - DIP Simulator **#2** – IR8 compatible, available from 24/06/24 – 01/11/24
 - DIP Simulator **#1** – IR(TBC) compatible, available from 16/09/24 – TBC

Note – The 2 DIP Instances will be available in support of PIT activities throughout the SIT Test Phase, and will at least one instance will be available throughout the Qualification Test Phase

Jul 15 - Sep 6

DIP Simulator Availability

