MHHS PROGRAMME

Industry-led, Elexon facilitated

Testing and Migration Advisory Group (TMAG) #18
17 May 2023

Version 1.1

MHHS-DEL1208
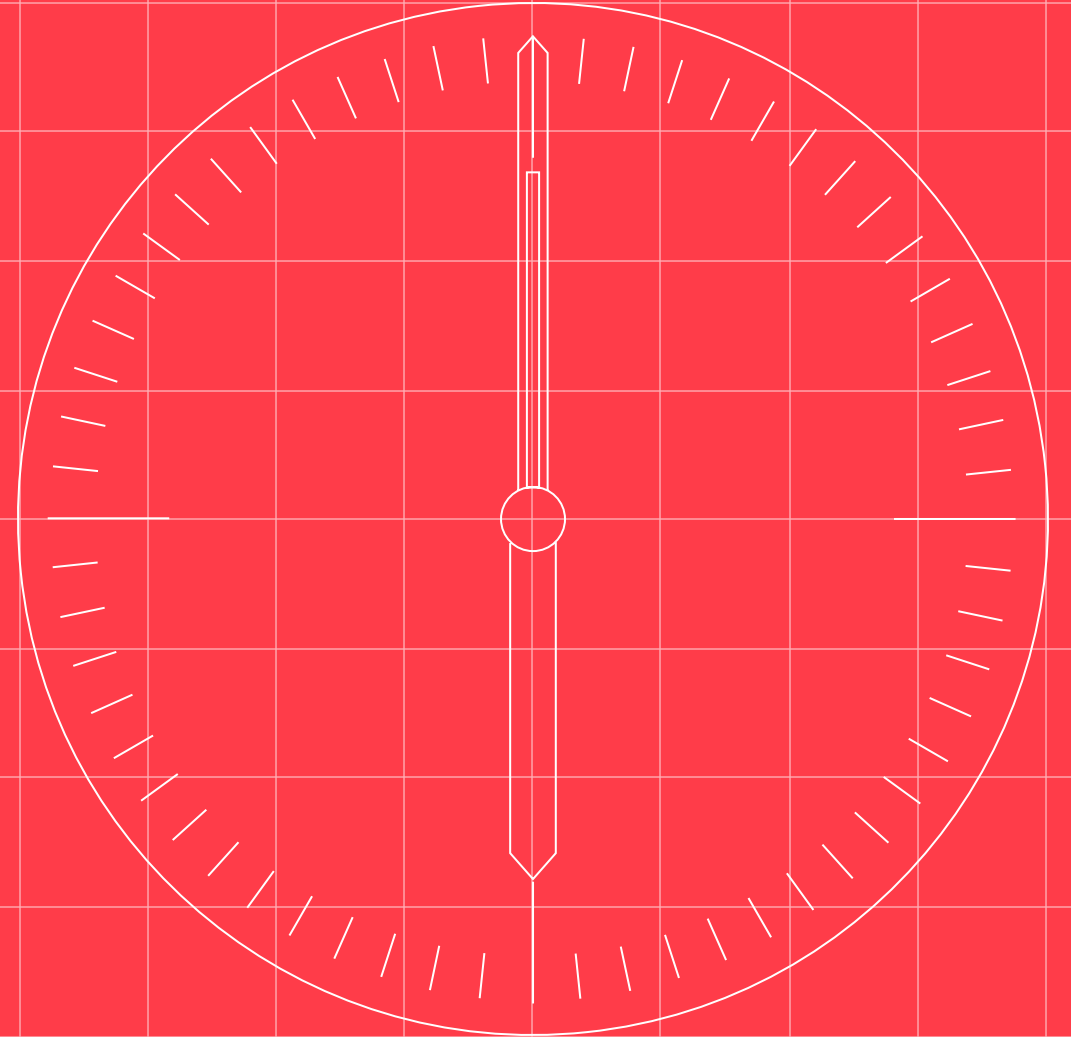
Agenda

#	Item		Objective	Type	Lead	Time	Page
1	**Welcome**				Chair	10:00-10:05 *5 mins*	
2	**Minutes and actions**		Approve minutes. Update on open actions, closing where appropriate	Decision	Chair and Secretariat	10:05-10:10 *5 mins*	3
3	**Programme updates**		Provide updates from L2/3 governance groups and wider Programme activity	Information	Programme PMO	10:10-10:10 *0 mins*	5
4	**Working group report**		Provide updates from discussion at the DWG, MWG, EWG, QWG, SITWG, NFTWG and MDSG	Information	Working group leads	10:10-10:10 *0 mins*	7
5	*Testing*	**SIT Approach proposal**	Update on options for the phasing of SIT approach	Information	Simon Berry	10:10-10:20 *10 mins*	9
6		**Test Data Approach and Plan**	Provide an update on Test Data Approach and Plan	Information	Cesar Lopes	10:20-10:25 *5 mins*	10
7		**CIT & Functional Test Approach and Plan**	Verbal update on CIT & Functional Test Approach and Plan	Information	Dom Mooney	10:25-10:35 *10 mins*	12
8		**Release Management and Configuration Approach**	Approve Release Management and Configuration Approach	Decision	Simon Berry	*10:50-11:05* *15 mins*	13
9		**Qualification Approach and Plan**	Approve Qualification Approach and Plan	Decision	Code Bodies	11:05-11:15 *10 mins*	15
10	**Testing Assurance for Period P1**		IPA overview of activities for the first testing assurance period	Information	IPA	11:15-11:25 *10 mins*	17
11	**Summary and next steps**		Summarise actions/decisions and look ahead to the next TMAG	Information	Chair and Secretariat	*11:25-11:30* *5 mins*	24
	Attachments		Attachment 1 – Release Management and Configuration Management Approach v0.4				

Minutes and actions

DECISION/INFORMATION: Approve minutes. Update on open actions, closing where appropriate

Chair and Secretariat

5 mins

Minutes and Actions review

1. **Approval of Minutes** from 19 April TMAG
2. **Open Actions and Actions from previous TMAG** (actions will be discussed by exception. Please review the action updates ahead of the meeting)
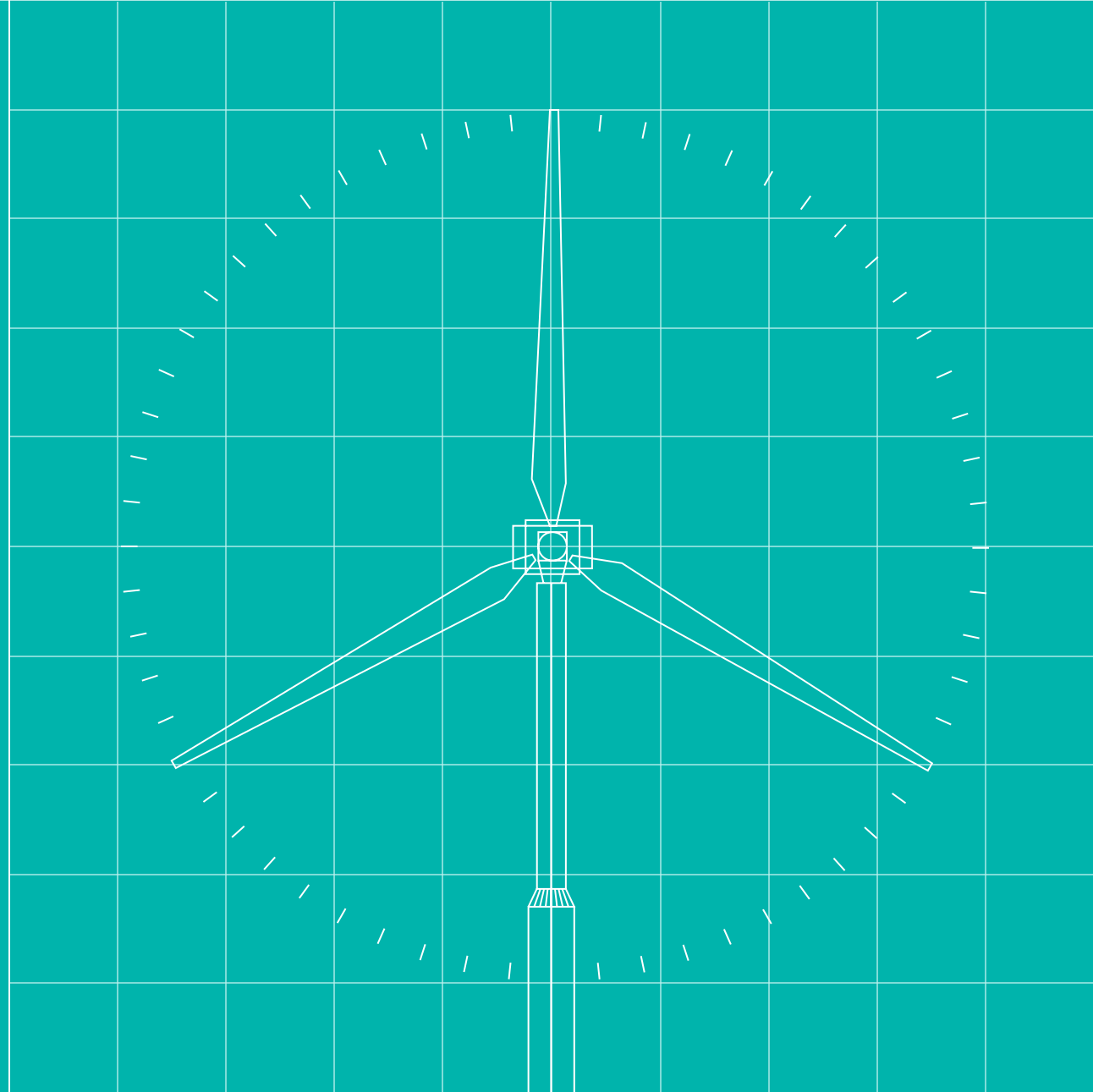
Ref	Date	Action	Owner	Due	Status	Latest Update
TMAG16-01	15/03/23	Provide a forward plan of when deliverables are being reviewed at the Working Groups	Programme PMO	19/04/23	Recommend Closed	The forward plan for consultations and change requests has been published on the MHHS website with communications sent out via The Clock MHHS Master Consultations Dashboard & MHHS Master Change Request Dashboard
TMAG17-01	19/04/23	To update the previous TMAGs Minutes with clarification on the Qualification and Testing alignment with SIT	Programme (PMO)	20/05/23	Recommend Closed	March TMAG minutes have been updated
TMAG17-02	19/04/23	To invite Matt Hall and/or Riccardo Lampini to the meeting to discuss the proposed options to phase the PIT / SIT approach.	Programme (Simon Berry)	17/05/23	Recommend Closed	Both participants have been added to the attendee list for the discussion

Programme updates

INFORMATION: Provide updates from L2/3 governance groups and wider Programme activity

Programme (PMO)

0 mins – taken as read, questions by exception

MHHS PROGRAMME

Industry led, Elexon facilitated

Governance group updates

Programme Steering Group (PSG)

Upcoming agenda items for PSG 03 May 2023

1. **Programme Replan Update:** A verbal update will be provided on replan progress, following closure of the CR022 Impact Assessment window on 26 April 2023. An extraordinary PSG will then be held on 12 May 2023 to decide whether CR022 should be approved.

2. **FTIG Update and SIT Outlook:** An update on activities at the first Fast Track Implementation Group (FTIG) meetings will be provided, including the FTIG's purposes and desired outcomes. An update will also be provided on the approach to and status of Systems Integration Testing (SIT). Component Integration Testing (CTI) will commence 30 October 2023 and consist of six intervals with participants joining at specific points. SIT Functional Testing will commence March 2024, followed by SIT migration testing, SIT non-functional testing, and SIT operational testing.

PSG papers available here.

Testing and Migration Advisory Group (TMAG)

Update from TMAG 19 April 2023

1. **Migration, Cutover & Data Strategy:** The Programme provided an update on progress to date

2. **Data Cleanse Plan:** The Programme provided an update on initial findings from the Data Cleanse technical sessions

3. **MPAN exclusion:** The Programme provided an update on MPAN exclusion for reverse migration

4. **DBT1 PIT:** The Programme provided an update on DBT1 PIT options

5. **Placing Reliance Policy update:** The Placing Reliance Policy was provisionally approved, subject to queries by Friday

6. **CIT & Functional Test Approach and Plan:** The Programme provided an update on the CIT & Functional Test Approach and Plan

7. **Test Data Approach and Plan:** The Programme provided an update on progress of the Test Data Approach and Plan

8. Working group updates – Updates were provided on activity at the Systems Integration Testing, Qualification and Non-Functional Testing Working Groups

TMAG papers available here

Design Advisory Group (DAG)

Updates from DAG 12 April 2023

1. **Change Requests:** the DAG looked to make decisions on three Change Requests. The DAG agreed to update and re-issue CR018 to Impact Assessment and to defer the decision on CR017 to be made alongside CR018. The DAG approved CR019.

2. **Design Change Management Updates:** The Programme presented the revised Change Management process and shared the forward plan for the first Interim Release of updated design artefacts. DAG members provided feedback.

DAG papers available here

Cross Code Advisory Group (CCAG)

Update from CCAG 26 April 2023

1. **BSC Issue 101:** BSC advised a consultation will be issued in due course and systems impacts are currently believed to be low. A BSC Modification Proposal is currently targeted to be raised in Q1 2024 and a timetable is available on the BSC website. The BSC will provide an update on timelines at the June CCAG.

2. **Horizon Scanning:** REC Change Proposal (CP) REC R0062 may impact MHHS Business Process 10 and will be monitored by the Programme. Potential impacts of REC CP R0102 on MHHS are under consideration.

3. **Code Drafting Process Map:** The Programme continue to consider how to optimise the management Programme Change Requests (CRs) which may need to operate in tandem with external code changes. Further updates will be provided at the June CCAG.

4. **CDWG Updates:** Code drafting relating to Data Services and Metering Services is to be submitted to the June CCAg for approval, following review by the CDWG on 09 May 2023. Code drafting would become 'approved drafts' and any further change (e.g. new CRs) will be consulted on.

CCAG papers available here

Wider Programme updates

Change Request CR022: MHHS Programme Replan:
On 5 April 2023, the Programme Steering Group (PSG) agreed to issue CR022: MHHS Programme Replan for Impact Assessment. Replan Playback sessions were held and these are available on the MHHS website.
The deadline for Impact Assessment responses closed Wednesday 26 April 2023. An extraordinary PSG will be held at **09:00am on 12 May 2023** where a decision will be made on whether to recommend approval to Ofgem.
The June PSG meeting has been moved to 08 June 2023 in anticipation of a decision from Ofgem ahead of this meeting.
For any queries on the content of the replan, please review the Replan Playback sessions and CR022, or contact PMO@mhhsprogramme.co.uk. For any comments on the approval of CR022, please contact your PSG constituency representative.

Design Assurance Update
Survey for Cohort One Core Central Providers is complete: The Programme issued the Design Assurance Survey to cohort two and all other participants. Deadline for responses is Tuesday 30 May 2023. The survey questions and information on the approach and timelines can be found on the Design Assurance page of the MHHS website.

MHHS Code Update
The next Code Drafting Working Group (CDWG) is on **09 May 2023**. The group will review any outstanding comments from the Tranche 1 code drafting consultation (Data Services and Metering Services) and make a recommendation on whether the drafting should be submitted to the CCAG for approval. Any drafting approved by the CCAG would then become an 'approved draft'.

Recently Closed Consultations
- **'Placing Reliance' Policy Consultation Closed:** The consultation closed on Tuesday 11 April. The Programme will publish a consolidated log of comments submitted during this consultation in due course. This will be available on the **Testing Overview page of the MHHS website**, and on the Collaboration Base.
- **Qualification Approach and Plan Consultation Closed:** The Programme will publish a consolidated log of comments submitted during this consultation in due course. This will be available on the Qualification page of the MHHS website. The Code Bodies expect that there will be further iterations of the plan throughout the year, and these updates will be facilitated through QWG.
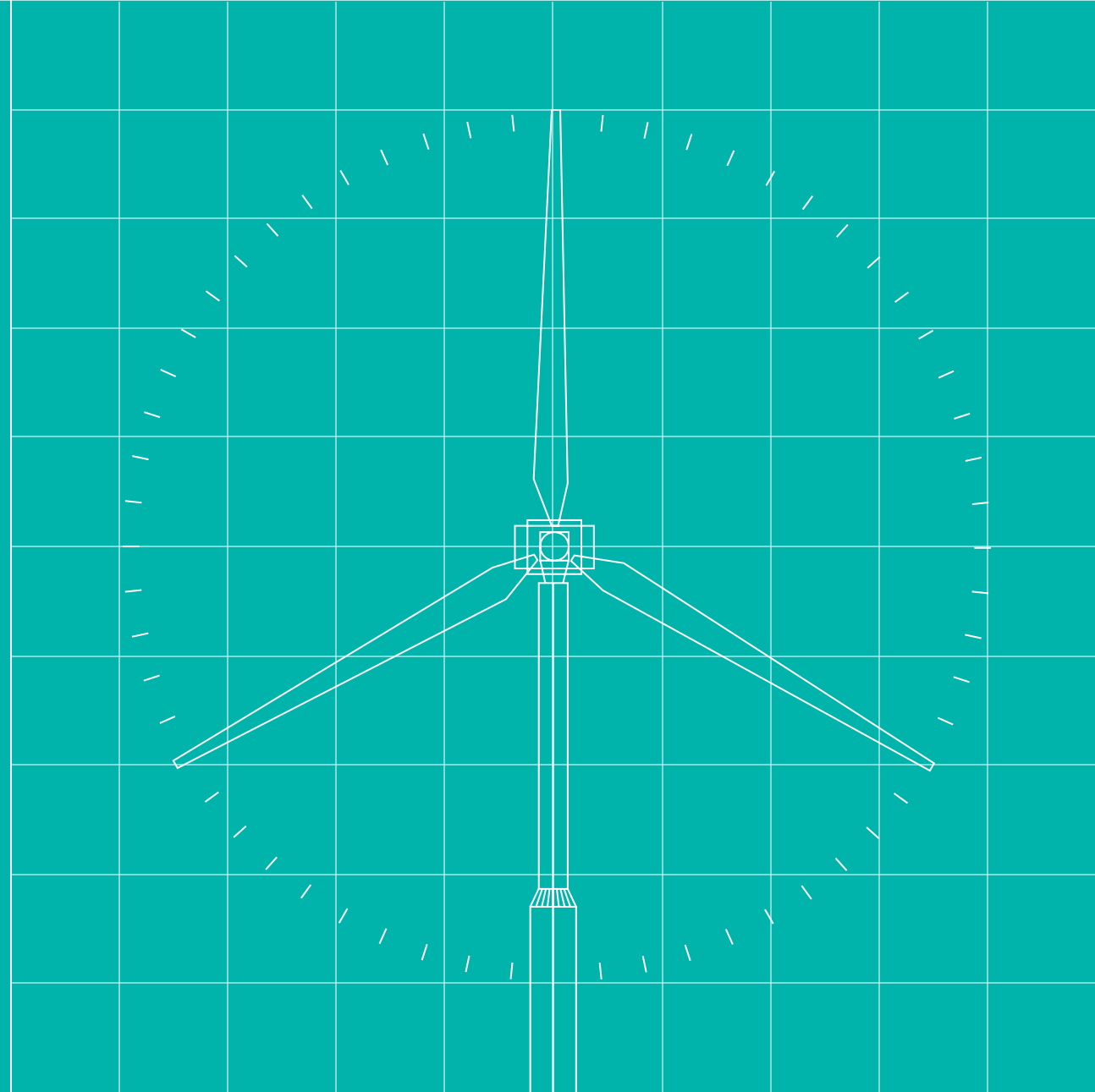
DIP simulator
We launched Release 1 of the Data Integration Platform (DIP) Simulator on 29 March 2023, which is available to all participants. Please email **Sims.Ems@mhhsprogramme.co.uk** to request access to the DIP Simulator.

MHHS PROGRAMME
Industry-led, Elexon facilitated

Document Classification: Public

Working group report

INFORMATION: Provide updates from discussion at the DWG, MWG, EWG, QWG, SITWG, NFTWG and MDSG

Programme (working group leads as required)

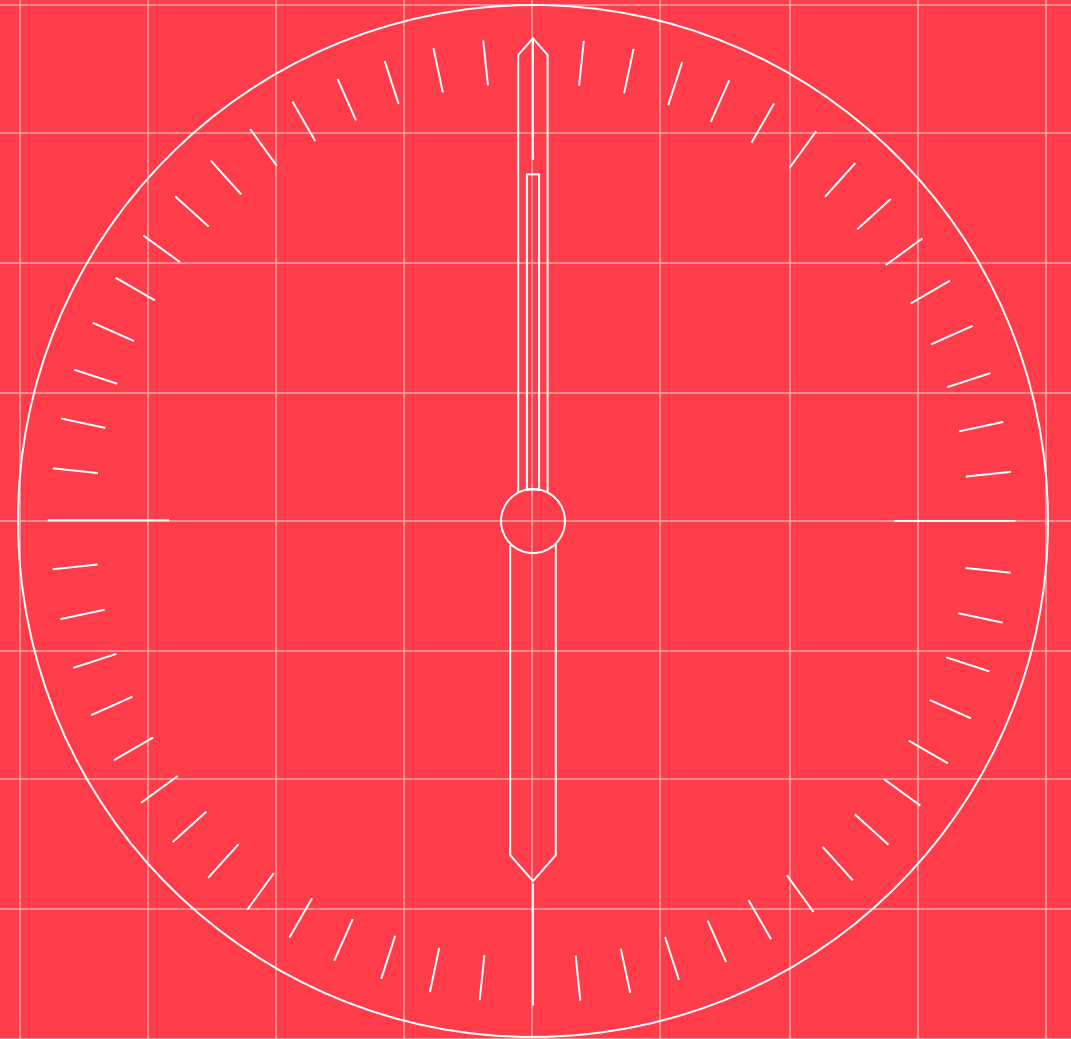*0 mins – taken as read, questions by exception*

MHHS PROGRAMME

Industry led, Elexon facilitated

	Data Working Group (DWG)	Migration Working Group (MWG)	Environments and Configuration Management Working Group (EWG)	Qualification and E2E Sandbox Working Group (QWG)	Systems Integration Test Working Group (SITWG)	Non-Functional Testing Working Group (NFTWG)
Upcoming deliverables	• Overall Test Data Approach and Plan (planned to come to May TMAG)	• Data Cleanse Plan (May 2023) • Migration Cutover and Data Strategy (planned to come to May TMAG)	• Environments Approach and Plan (final version planned to come to June TMAG) • Release Management Document (May TMAG)	• Qualification Test Approach and Plan (planned to come to June 2023 TMAG)	• CIT & Functional Test Approach & Plans (June 2023) • CIT & Functional Test Scenarios (Jun 2023) • CIT & Functional Test Cases (Sep 2023)	
Next meeting's agenda items	12 May 2023 • Overall Test Data Approach & Plan discussion for progress recommendation to TMAG	11 May 2023 • Migration Strategy • Data Cleanse Plan	06 June 2023 • Test Environments Architecture • Updates on Release Management • Update on Programme Plan (TBC) • Code of Connection (TBC) • PKI Onboarding Update	09 May 2023 • Qualification Approach and Plan • Placing Reliance Policy	04 May 2023 • CIT and Functional Test Scenarios • Overarching Test Data Approach & Plan • CIT and Functional Test Approach and Plan Deliverables	01 June 2023 • TBC
Agenda items from last meeting	20 April 2023 • Overall Test Data Approach & Plan discussion for progress recommendation to TMAG • Data Management Principles • Data Protection and Security Update	13 April 2023 • Data Cleanse Plan • Migration Strategy	02 May 2023 • Release and Configuration Management Plan Update • View of Environments / SIT dates • Connectivity Proving • Non-SIT LDSO Qualification Testing	19 April 2023 • SITWG attendance • Qualification Approach and Plan • Replan: Qualification Timeline	06 April 2023 • PSG SIT Related Replan Update • SIT Scoping Document • PIT Guidance • Placing Reliance • CIT & Functional Test Approach & Plan • CIT & Functional Scenarios • CIT & Functional Test Approach and Plan deliverables	02 May 2023 • DIP Non-Functional Requirements • Verification of E2E Non-Functional Requirements
TMAG escalations	None	None	None	None	None	None

SIT Approach Proposal

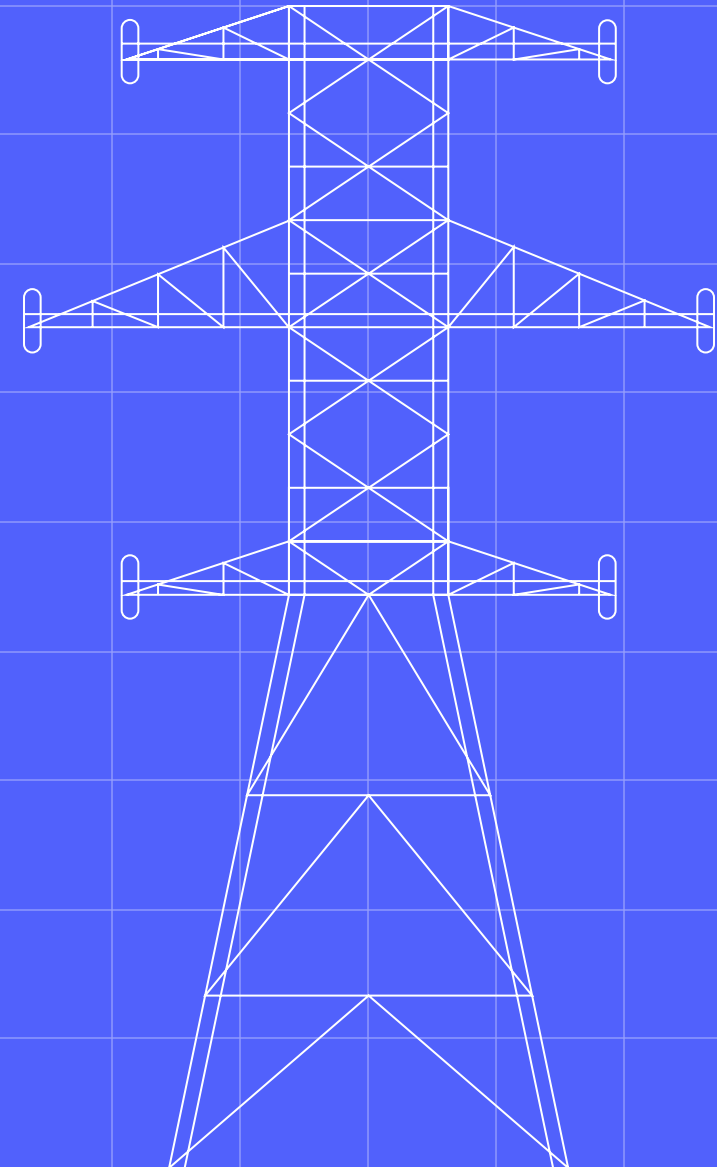**INFORMATION:** Update on options for the phasing of SIT approach

Simon Berry

10 mins

MHHS PROGRAMME

Industry led, Elexon facilitated

Test Data Approach and Plan

INFORMATION: Provide an update on Test Data Approach and Plan

Cesar Lopes

5 mins

April DWG — 20 Apr
May DWG — 12 May
Extraordinary TMAG — 31 May

2023   Mar   Apr   May   Jun   **2023**

Today

Task	Dates
Draft Document	23 Mar - 14 Apr
LDP review	17 Apr - 27 Apr
Discuss main principles at DWG	20 Apr
SRO/Code Body review	27 Apr - 4 May
Document revision	2 May - 5 May
DWG off-line / Industry review	9 May - 22 May
DWG - Present main principles - take major review comments	12 May
Document revision	22 May - 26 May
Publication of responses to comments	26 May
DWG in principle recommendation	30 May
TMAG in principle approval	31 May
Document publication revised draft	31 May
Cooling-off period (exceptional comments)	1 Jun - 7 Jun
Document publication final version	8 Jun

MHHS PROGRAMME
Industry-led, Elexon facilitated

Document Classification: Public
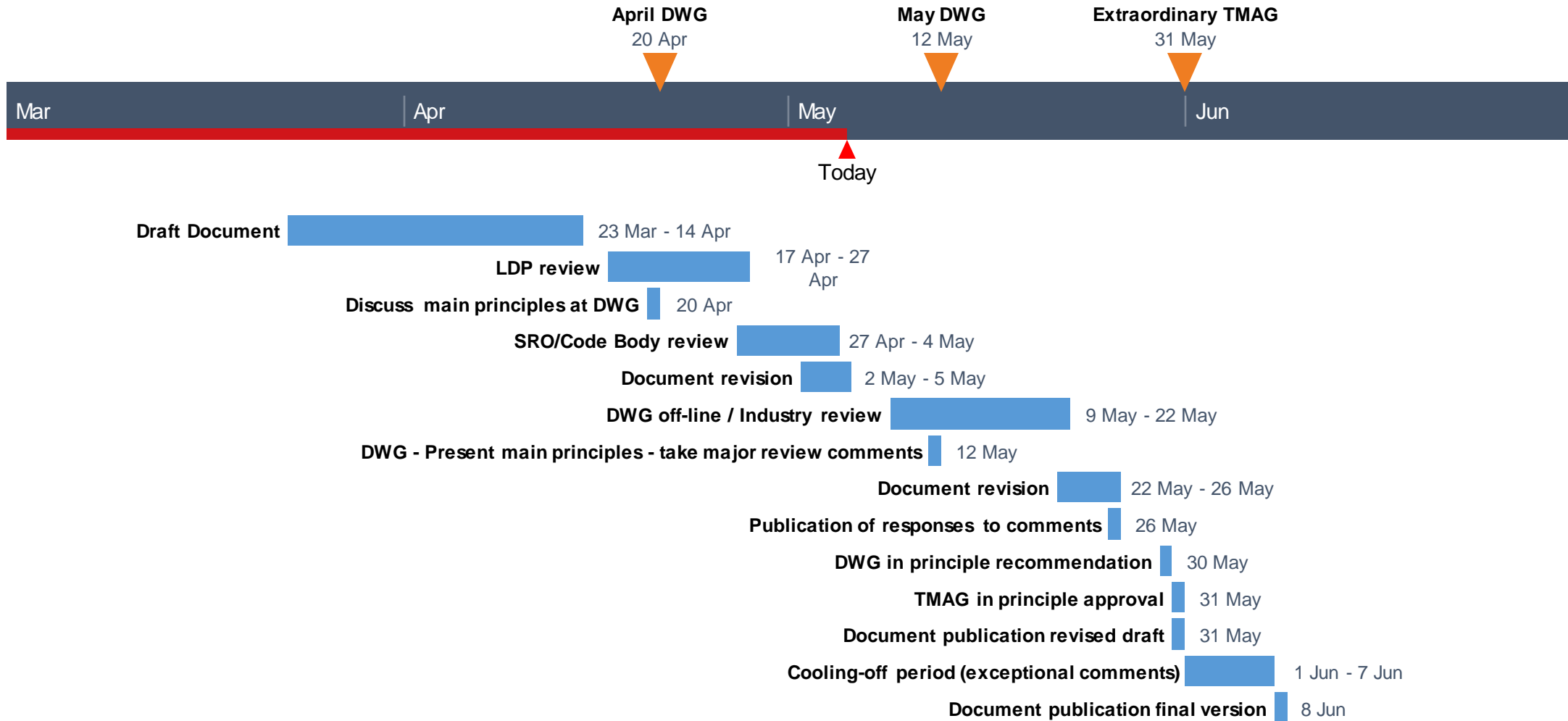
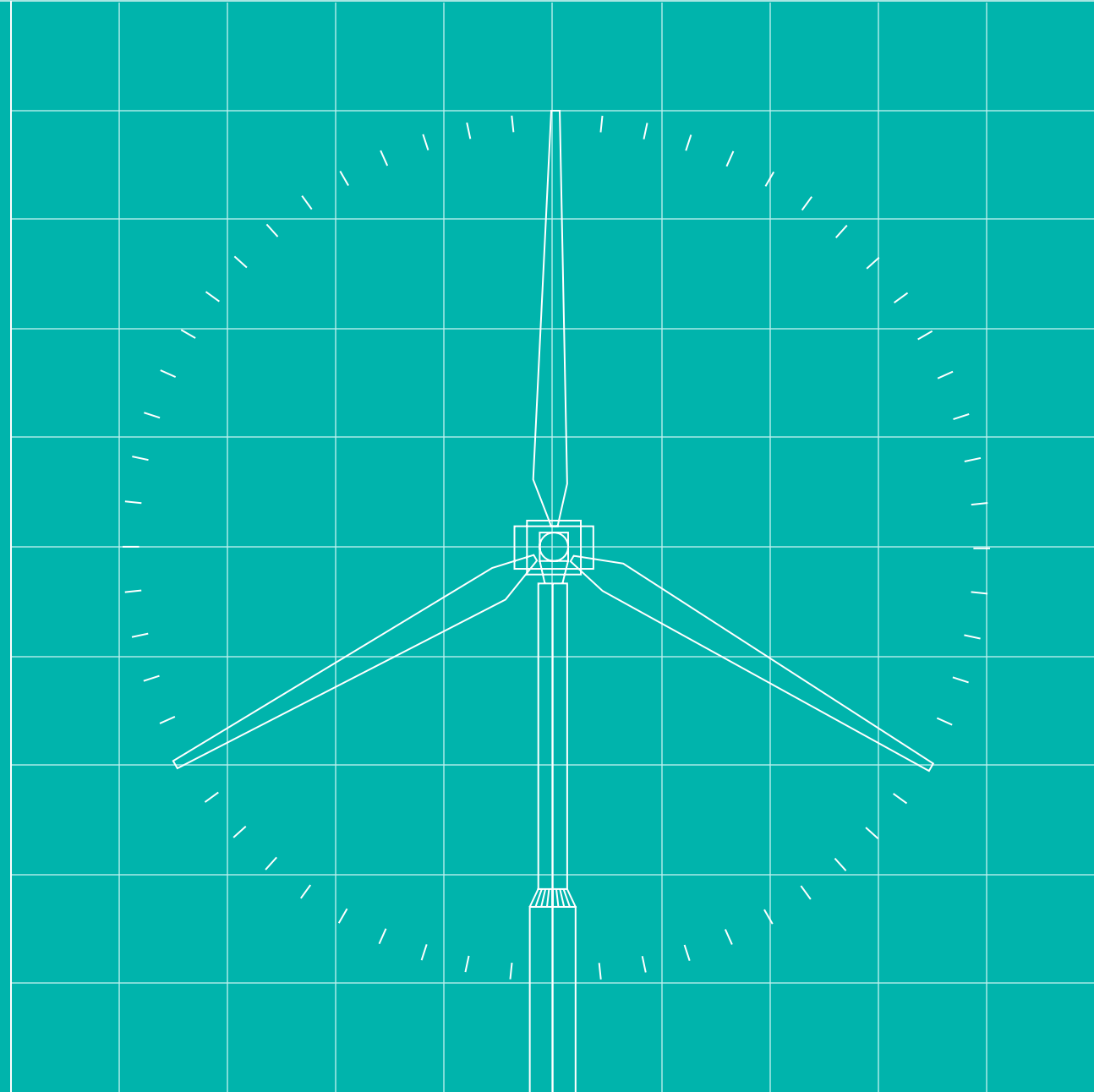# CIT & Functional Test Approach and Plan

INFORMATION: Verbal update on CIT & Functional Test Approach and Plan

Dom Mooney

10 mins

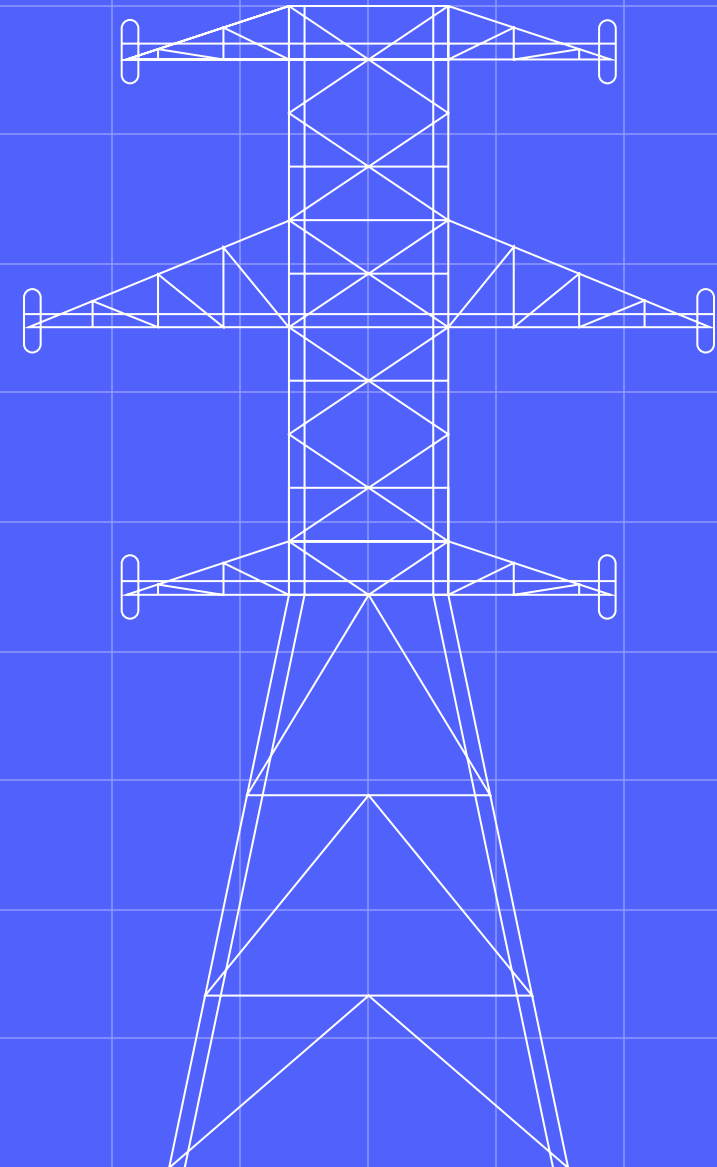**MHHS PROGRAMME**

Industry led, Elexon facilitated

Release Management and Configuration Approach document

DECISION: Approve Release Management and Configuration Approach

Simon Berry

15 mins

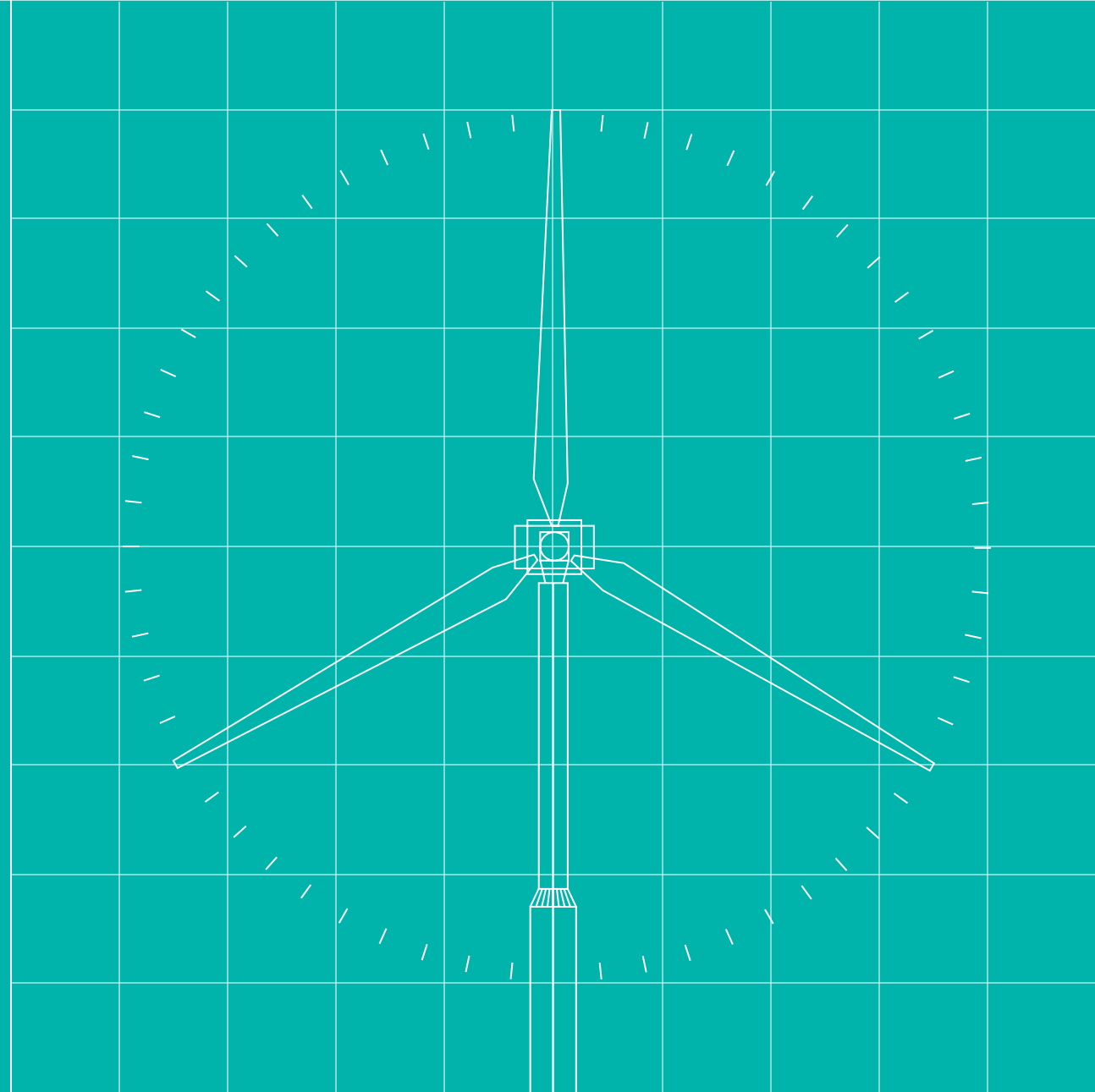**MHHS PROGRAMME**

Industry led, Elexon facilitated

- The MHHS Programme has defined a Release Management & Configuration Management Approach.

- This document has been reviewed by the LDP and SRO and issued to the Central Parties for review & comment.

- DCC, Elexon and Recco provided comments, Avanade have not responded with review comments.

- Responses to the comments have been made and an updated version of the document provided to the Central Parties.

- Discussion with DCC will continue, recognising the unique nature of their Release. i.e. the MHHS deliverable is contained within a DCC Release that is subject to additional governance. These ongoing discussions should not prevent the sign-off of the Release Management & Configuration Management Approach document.

Qualification Approach and Plan – For approval

INFORMATION: TMAG recommended to approve the Qualification Approach and Plan

Presented by Code Bodies

10 mins

- Most significant comments received from version 0.1:

  - Request to prioritise Suppliers with larger volume of Metering Systems when allocating tranches to enable them to be able to meet migration milestones- BSC legal advice has confirmed that this would not be in line with current BSC requirements for MHHS Qualification

  - Request to bring forward tranche allocation activity- Code Bodies then consulted with participants and this was not a majority view based on responses

- Future Iterations:

  - Further versions of the plan will be developed in line with SIT dependencies for Qualification

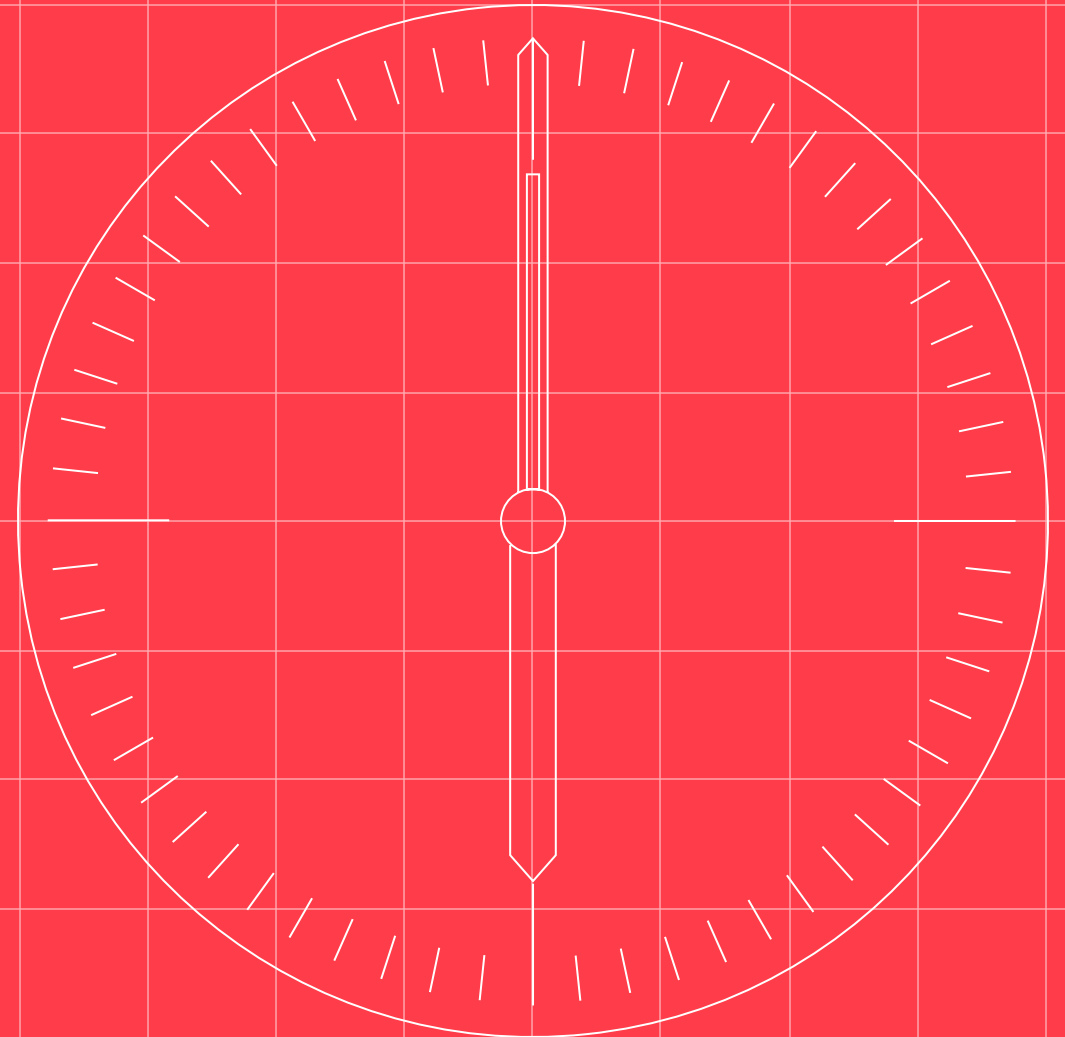| Iteration	Dependency on following SIT Approach and Plans	Expected SIT Artefact Issue Date	Expected QA&P Issue Date
Initial version	N/A	N/A	31/05/2023
Second version	SIT Component Integration Testing and Functional Testing	30/06/2023 and 21/07/2023	29/09/2023
Third version	SIT Migration	20/09/2023	30/11/2023
Fourth version	SIT Non-Functional	03/11/2023	22/12/2023
Final version	SIT Operational	06/12/2023	29/02/2024

- We recommend that this version v0.2 of the policy be approved by TMAG

- **Policy Approval Schedule –** TMAG (17-May-23), BSC PAB (25-May-23) and REC PAB (30-May-23),

MHHS PROGRAMME
Industry-led, Elexon facilitated

Testing Assurance for Period P1

INFORMATION: IPA overview of activities for the first testing assurance period

IPA

10 mins

MHHS PROGRAMME

Industry led, Elexon facilitated

MHHS IPA

WP9-11: IPA Test Assurance for period P1

May 2023

Privileged & Confidential

1. Role of IPA

The MHHS Programme has applied a '3 Lines of Defence' assurance model (First line - Assurance by individual party, Second line - Assurance by Central Programme Team, PMO & PPC and Third line - Independent Assurance). This is a widely used assurance model that creates independence between programme delivery and operation of programme controls; and the review of effective delivery and operation of those controls to build transparency and confidence in overall delivery. The IPA will operate as the 'Third Line of Defence' to provide confidence to key stakeholders including Ofgem, the Elexon SRO, and wider industry. IPA reports to SRO and Ofgem and the PSG.

1. Assurance Activities To-date

To-date we have been involved with assurance activities relating to the following theme based (providing ongoing theme-based assurance and input to the programme) and stages based (Providing an early view of readiness and supporting corrective action prior to key milestone decisions) activities;

- Programme Mobilisation
- Plan Re-Baseline, which were reported to PSG on 12 May 2023
- Design
- Programme Governance

We are commencing Test Assurance

Subsequent Phases will cover Assurance over Qualification, Migration, Cut-over going forward

1. IPA Test Assurance

Our Test Assurance has been broadly categorised into 3 categories:

- Continuous Assurance
- Deep Dive Sample Assurance
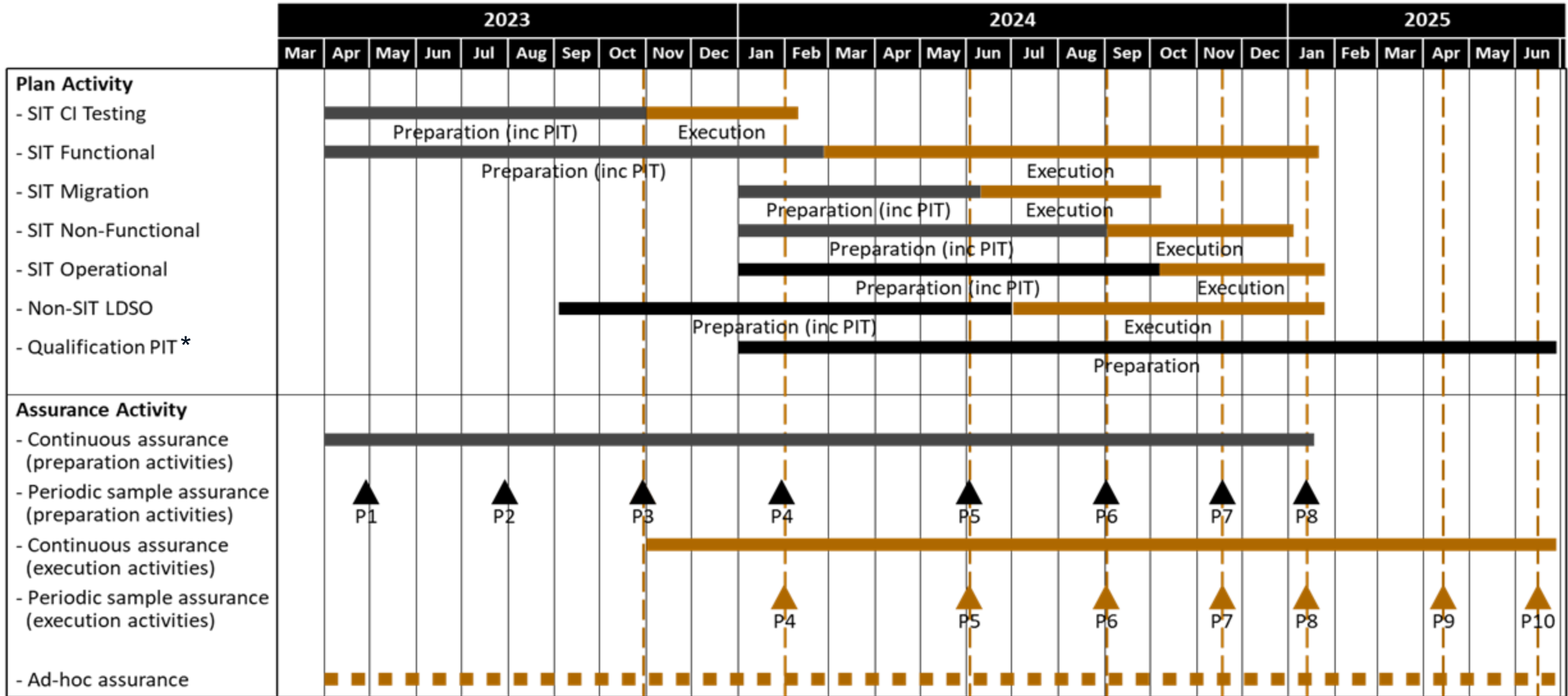- Ad-hoc Assurance

Overall Purpose

- Non-duplicative to what SI are doing
- Provide advice to the SRO Function and the Programme Steering Group (PSG)
- Provide confidence that the MHHS Programme is set up for success to deliver against the MHHSP objectives and in doing so, build confidence across the Programme Participants.
- Provide transparent reporting to Programme Participants.
- Deliver independent assurance reporting to support programme decision making at key programme milestones and quality gates

High-level Test Assurance Approach

- Familiarise our work with Programme and participants
- Attend various meetings like TMAG, FTIG, various working group meetings, etc.
- Identify and agree a sample of participants for assurance with SI and SRO
- Schedule Bilateral Calls with sampled participants to understand the progress, challenges and risks and share with the programme
- Draft, finalise and share reports with SRO, Ofgem and SI

Test Assurance: Approach & Reporting

MHHS IPA

*Qualification PIT above covers the readiness to Qualification for all tranches. Qualification Execution will be covered in a separate work package.

MHHS IPA

For P1, the IPA Assurance is targeted at two key exam questions:

● **Is the programme on track to complete PIT Functional?**

● **Is the programme on track to start SIT-CIT?**

Supporting evidence - Participant Sample:

A. Do the sampled participants have sufficient detail on what they need to do to execute and complete PIT? E.g. are the timelines clear, are the reporting requirements clear, is the scope clear, etc.

B. Do the sampled participants have sufficient detail on what they need to do to be ready for CIT? E.g. are the timelines clear, are the environment requirements clear, are the data requirements clear, etc.

C. Are the sampled participants plans for PIT and CIT aligned with the timelines and the milestones shared by SI?

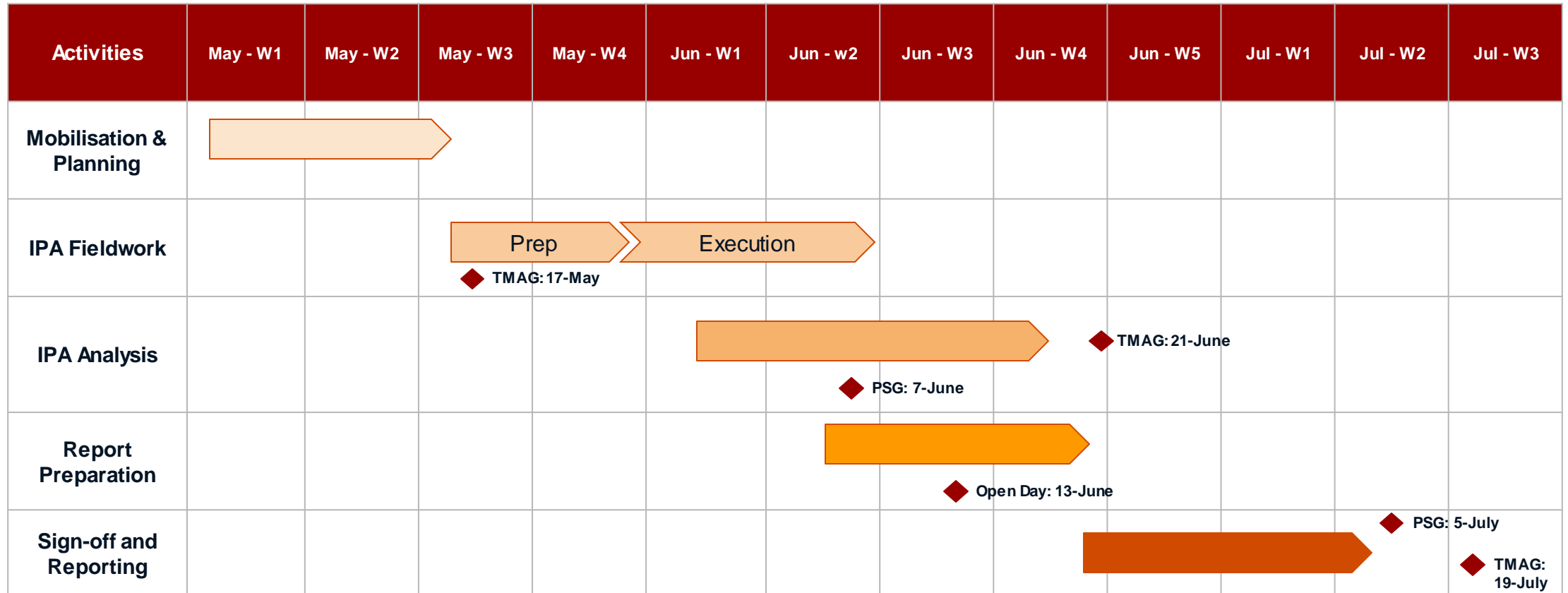D. Are the sampled participants on track for PIT and CIT? Are there any 'blocking issues'?

Supporting evidence - Programme:

E. Are the programme's plans for PIT execution and completion and CIT preparation reasonable? Do they include the areas expected e.g. data, environments, test cases, test governance etc.

F. Does the SI/LDP have a good internal plan covering their activities in relation to PIT exit and CIT preparation?

G. Does the SI/LDP have sufficient and appropriate resources in place?

H. Has the programme appropriately considered the risks to PIT and CIT and made appropriate accommodations to minimise their impact/likelihood?

I. Is it clear how the Programme's Placing Reliance Policy will be applied during PIT and CIT?

P1 Test Assurance Report

The P1 Report will be delivered to the SRO. A summary presented to the PSG on 05 July 23 and at the TMAG on 19 July 2023.

MHHS IPA

WP9-11: P1 Assurance PoaP

Activities	May - W1	May - W2	May - W3	May - W4	Jun - W1	Jun - w2	Jun - W3	Jun - W4	Jun - W5	Jul - W1	Jul - W2	Jul - W3
Mobilisation & Planning												
IPA Fieldwork			Prep	Execution								
IPA Analysis								TMAG: 21-June				
Report Preparation												
Sign-off and Reporting											PSG: 5-July	TMAG: 19-July

IPA Fieldwork: TMAG: 17-May

IPA Analysis: PSG: 7-June

Report Preparation: Open Day: 13-June

P1 Report Key Events and Dates

- **17-May 2023:** TMAG - Socialise the scope of work and ToR with Industry Participants
- **7-June 2023:** PSG - Socialise Assurance Activities by IPA at PSG
- **13-June 2023:** Open Day - Provide updates on IPA Assurance Activities and discuss on the overall approach and plan
- **21-June 2023:** TMAG - Interim update on IPA Activities at the TMAG
- **5-July 2023:** PSG - Share the summary of P1 Report at the PSG
- **19-July 2023:** TMAG - Share the summary of P1 Report at the TMAG

Summary and next steps

INFORMATION: Summarise actions/decisions and look ahead to the next TMAG

Chair and Secretariat

5 mins

MHHS PROGRAMME

Industry led, Elexon facilitated

Summary and next steps

Next steps:

1. Confirm actions and decisions from meeting
2. Date of next TMAG: 21 June 2023
3. Date of next extraordinary TMAG: 31 May 2023

[MHHS Master Consultations Dashboard](#)

[MHHS Master Change Request Dashboard](#)

TMAG Agenda Roadmap – a rolling view of upcoming TMAG agenda items:

Meeting dates	17-May	31-May – extraordinary	21-Jun	19-Jul
Relevant milestones or activities	• SIT Approach proposal • Release Management and Configuration Approach • Qualification Approach and Plan	• Migration, Cutover & Data Strategy • Test Data Approach and Plan	• Data Cleanse Plan • CIT and Functional Test Approach and Plan • SIT Functional Test Scenarios • Updated E2E Testing & Integration Strategy	
Agenda items	• SIT Approach proposal • Test Data Approach and Plan • CIT and Functional Test Approach and Plan • CIT Test Scenarios • Release Management and Configuration Approach • Qualification Approach and Plan	• Migration, Cutover & Data Strategy • Test Data Approach and Plan	• Data Cleanse Plan (TBC) • CIT and Functional Test Approach and Plan • SIT Functional Test Scenarios • Qualification Approach and Plan • Updated E2E Testing & Integration Strategy	• Environments Approach and Plan (TBC)
Standing items	• Minutes and actions review • Programme updates • Working group report • Next steps and agenda roadmap		• Minutes and actions review • Programme updates • Working group report • Next steps and agenda roadmap	• Minutes and actions review • Programme updates • Working group report • Next steps and agenda roadmap

MHHS PROGRAMME
Industry-led, Elexon facilitated

Document Classification: Public