
Testing and Migration Advisory Group #12

21 December 2022

Agenda

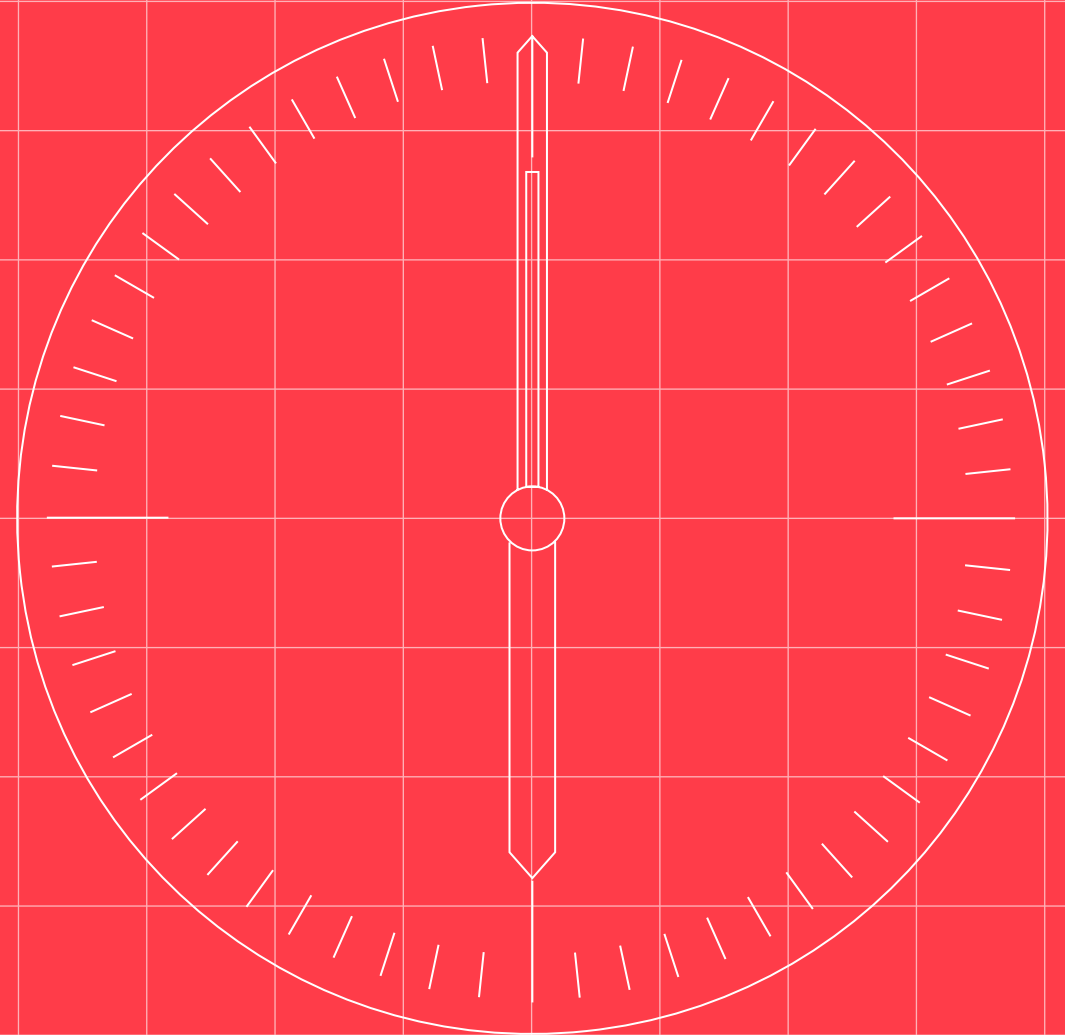
#	Item	Objective	Type	Lead	Time	Page
1	Welcome			Chair	10:00-10:05 <i>5 mins</i>	
2	Minutes and actions	Approve November TMAG minutes. Update on open actions, closing where appropriate	Decision	Chair and Secretariat	10:05-10:10 <i>5 mins</i>	3
3	Programme updates	Provide updates from L2/3 governance groups and wider Programme activity	Information	Programme (PMO)	10:10-10:10 <i>0 mins</i>	5
4	Migration update	<ul style="list-style-type: none"> Update on the chosen Migration Option and next steps from the PSG Update on status of the Migration, Cutover and Data Strategy Update on activity of the Migration Design Subgroup 	Information	Programme (Jason Brogden)	10:10-10:25 <i>15 mins</i>	7
5	Programme replan	Provide an overview of the content of Round 3 of consultation on the Programme replan, focusing on the areas most relevant for TMAG	Information	Programme (Jason Brogden)	10:25-10:40 <i>15 mins</i>	14
6	Qualification/pre-qualification	Update on discussions with code bodies on qualification and progress at the QWG	Information	Programme (Dom Mooney)	10:40-10:50 <i>10 mins</i>	15
7	Data Working Group update	<ul style="list-style-type: none"> Update on Test Data Generators Update on progress of the Test Data Approach and Plan 	Information	Programme (Kate Goodman)	10:50-11:05 <i>15 mins</i>	17
8	SITWG update	Update from the first Systems Integration Test Working Group (SITWG). Approve the the SITWG Terms of Reference	Information, Decision	Programme (Dom Mooney)	11:05-11:10 <i>5 mins</i>	20
9	Working group report	Provide updates from the DWG, MWG, QWG and EWG	Information	Programme (working group leads)	11:10-11:10 <i>0 mins</i>	22
10	Summary and next steps	Summarise actions/decisions and look ahead to January TMAG	Information	Chair and Secretariat	11:10-11:15 <i>5 mins</i>	24
	Appendix	<ul style="list-style-type: none"> List of Testing and Migration deliverables/artefacts (action TMAG11-03) 				26
	Attachments	<ul style="list-style-type: none"> Systems Integration Test Working Group (SITWG) Terms of Reference v0.1 				

Minutes and actions

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

Chair and Secretariat

5 mins



Minutes and Actions Review

1. **Approval of Minutes** from TMAG 17 November 2022 ([TMAG Meeting Minutes](#))
2. **Open Actions and Actions from TMAG 17 November 2022** (actions will be discussed by exception. Please review the action updates ahead of the meeting)

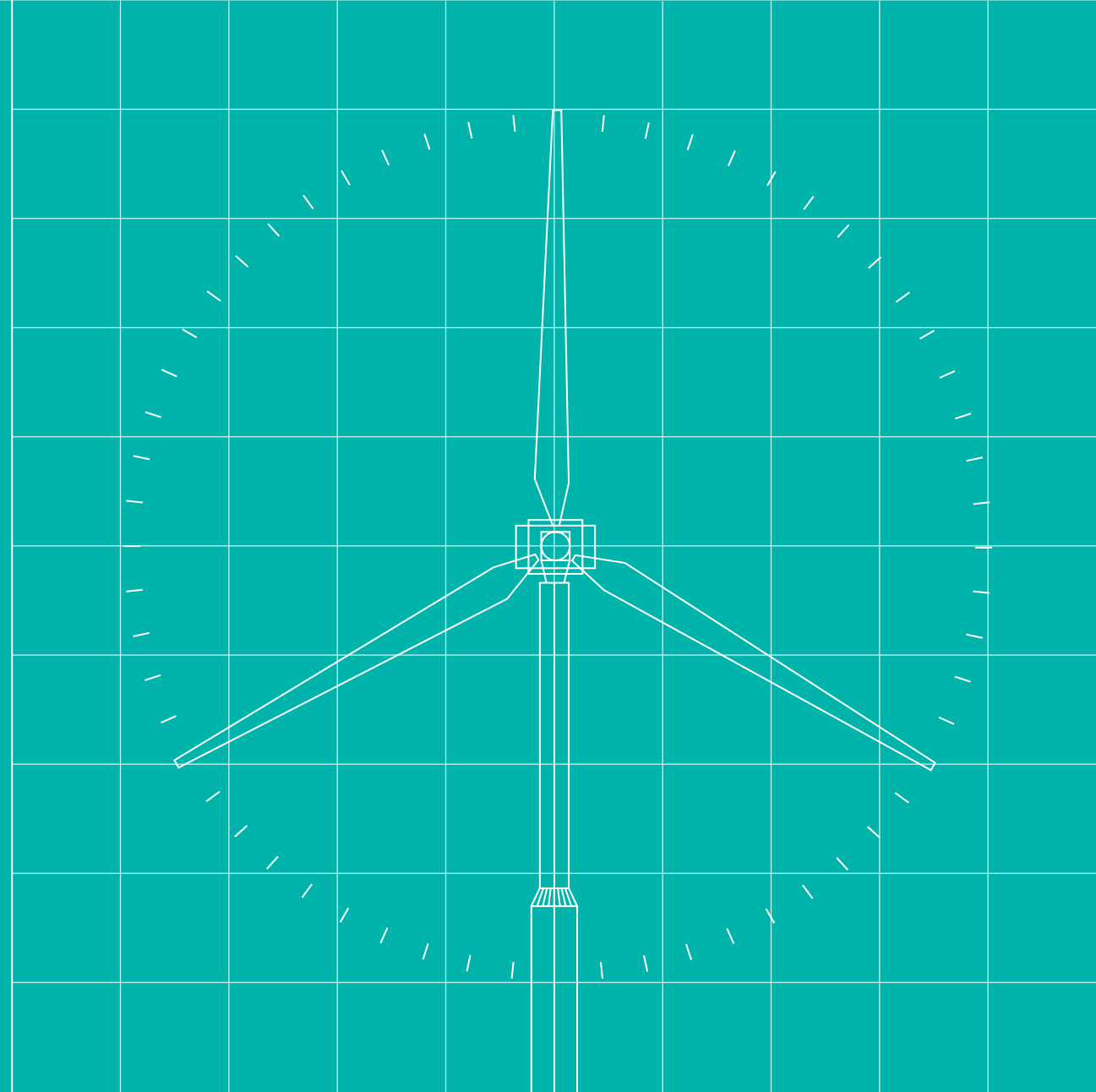
Ref	Date	Action	Owner	Due Date	Status	Latest Update
TMAG08-02	17/08/22	Respond to Programme replan consultation. Encourage constituents to respond to the consultation	TMAG members	26/08/22	Open - ongoing	Round 2 consultation closed at the end of September. TMAG members are encouraged to review the Round 3 consultation when released
TMAG11-01	17/11/22	Provide any items to the Programme PMO that they believe should be in the Environments Approach and Plan document or its work-off list. The Programme will bring a list of any new items back to the next TMAG	TMAG members	14/12/22	Recommend closed	No further comments received to PMO to Environments lead
TMAG11-02	17/11/22	Share the list of artefacts to be completed within the Testing and Migration workstream	Programme	21/12/22	Recommend closed	Artefact list added to meeting pack appendix.
TMAG11-03	17/11/22	Share detail on export MPANs issue to the Programme PMO	Small Supplier Rep (Shaun Brundett)	21/12/22	Recommend closed	Feedback received. MHHS Design team have confirmed this is addressed through the MHHS design.
TMAG11-04	17/11/22	Signpost to Programme Participants that the export MPANs issue will be addressed via the Migration Working Group (MWG)	Programme PMO	17/11/22	Recommend closed	Signposted with November TMAG Headline Report
TMAG11-05	17/11/22	Share the Data Working Group (DWG) headline report with TMAG meeting outputs	Programme PMO	17/11/22	Recommend closed	Shared with November TMAG Headline Report. Available here on the Collaboration Base

Programme updates

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

PMO

0 mins – taken as read, questions by exception



Programme Updates

Governance group updates

Programme Steering Group (PSG)

Update from PSG 07 December 2022

1. **Migration Options Decision** – The PSG decided to progress with Migration Option 3
2. **M3 Next Steps** – The PSG agreed updated M3 acceptance criteria and reviewed the engagement plan for parties who did not submit evidence in Readiness Assessment 2.
3. **M9 Update** – The Programme presented an update on the status and timelines for M9 (SIT start).
4. **Programme Replan** – The PSG approved an updated version of the Interim Plan to take the programme to the end of ongoing replanning activity. The PSG agreed to begin Round 3 of consultation on the programme plan on 14 December 2022.
5. **Change Control** – The PSG approved CR012 (increase in programme code draft scope) and agreed to raise CR013 (commercial impacts) to Impact Assessment.
6. **Control Point 1** – The Programme updated on the outputs of Control Point 1
7. **DIP enduring mod** – Elexon provided an overview of the mod delivery plan
8. **Design Progress** – The Programme provided an update on progress of the M5 Work-Off Plan and the migration design

PSG Headline Report available [here](#).

Cross-Code Advisory Group (TMAG)

Update from CCAG 23 November 2022

1. **Horizon Scanning Log** – SEC MP162, BSC P432, and BSC P434 have been approved by the SEC Change Board and BSC Panel respectively. The changes are now with Ofgem for decision. DCUSA DCP414 and DCP415 have been raised in response to the MHHS design and the Programme will attend development working groups.
2. **Qualification Code Drafting** – Code Bodies have confirmed qualification can commence based on the qualification legal text approved by the CCAG, as opposed to awaiting formal implementation into code. This supports the release of all MHHS code drafting in one release.
3. **CR12 Impact Assessment Update** – Subject to approval by the PSG, CR12 would increase the timelines for code drafting by eight to twelve weeks. The definition of consequential change will be updated within the CCIAG ToR. An updated code drafting plan will be presented to the CCAG on 21 December 2022.
4. **Code Freeze Request** – Whilst a formal code change freeze will not be possible, the CCAG and Code Bodies are discussing how best to mitigate the potential change congestion which may arise when MHHS legal text is due to be implemented.

CCAG Headline Report available [here](#).

Design Advisory Group (DAG)

Agenda items for DAG 14 December 2022

1. **CCIAG Updates** – The DAG will be asked to approve an amended version of the Consequential Change Impact Assessment Group (CCIAG) Terms of Reference (ToR) which contains an updated definition of consequential change. 24 discussion items have been tabled at CCIAG thus far, with nine now progressing externally (e.g. via REC or BSC) and 7 incorporated into the MHHS core design.
2. **Work-Off Plan Updates** – Updates will be provided on the status of the M5 Work-Off Plan, currently under discussion at the BPRWG & TDWG Subgroup. The latest progress report can be found [here](#).
3. **Post-M5 Design Change Management** – The DAG will be asked to approve the new design change process, intended to support the management of the Design Baseline. This will include a request for approval of a 'Design Authority' ToR; a group with delegated authority to review and approve minor changes to the Design Baseline, in accordance with strict controls within the ToR.
4. **Upcoming Meetings** – The next DAG will be held 11 January 2023 at 2pm. The next CCIA

DAG Headline Report available [here](#).

Wider Programme updates

MHHS Programme Personnel Update:

From 1 December 2022, **Chris Welby** will step back from the SRO role but will continue to work closely with the Programme, lending his considerable knowledge and expertise. He will also work on other strategic programmes such as Future System Operation (FSO).

Helen Tipton, Elexon's newly appointed Director of Strategic Programmes, will take on the SRO responsibilities. Helen has extensive experience in the energy sector and on major programmes extending across a broad range of subjects including regulatory, merger and acquisitions, systems implementation and organisational redesign.

MHHS Testing:

The MHHS Testing workstream sets the scope and oversees the preparation and execution of testing for all parties involved in the Programme. Testing is split into three parts:

1. **Pre-Integration Testing (PIT)**: PIT must be performed by all users of the new settlement arrangements, to validate every system or service that is included in the end-to-end MHHS Design.
2. **Systems Integration Testing (SIT)**: SIT will be performed by the service providers of the central systems and other voluntary participants, to test end-to-end operation.
3. **User Integration Testing (UIT)**: UIT is broken down into two subparts:
 - I. Qualification: All participants not undertaking SIT must perform Qualification Testing, as part of the overall Qualification process.
 - II. End-to-end Sandbox: Where a participant can optionally use this testing service to test their systems and processes.

MHHS Webinars:

- **Readiness Assessment Two (RA2) Overall Report Webinar**: A webinar was held 29 November 2022 to walkthrough the key themes and statistics of the [RA2 Overall Report](#). The recording and slides are available on the [Events page of the MHHS website](#).
- **Data Integration Platform (DIP) Simulator Demo Webinar**: On 01 December 2022, a walkthrough was provided of MHHS testing simulators, data generators, and emulators followed by questions and answers. The recording and slides are available [here](#).
- **Design Change Control and Engagement**: Following the approval of the Design Baseline, a new design change control procedure will be implemented. A webinar will be held 16 January 2023 to provide an overview. To sign up, please contact PPC@mhhsprogramme.co.uk.

Other updates:

- **Migration Design Subgroup (MDSG)**
- **Systems Integration Testing Working Group (SITWG)**
- **2023 governance meeting [schedule](#)**

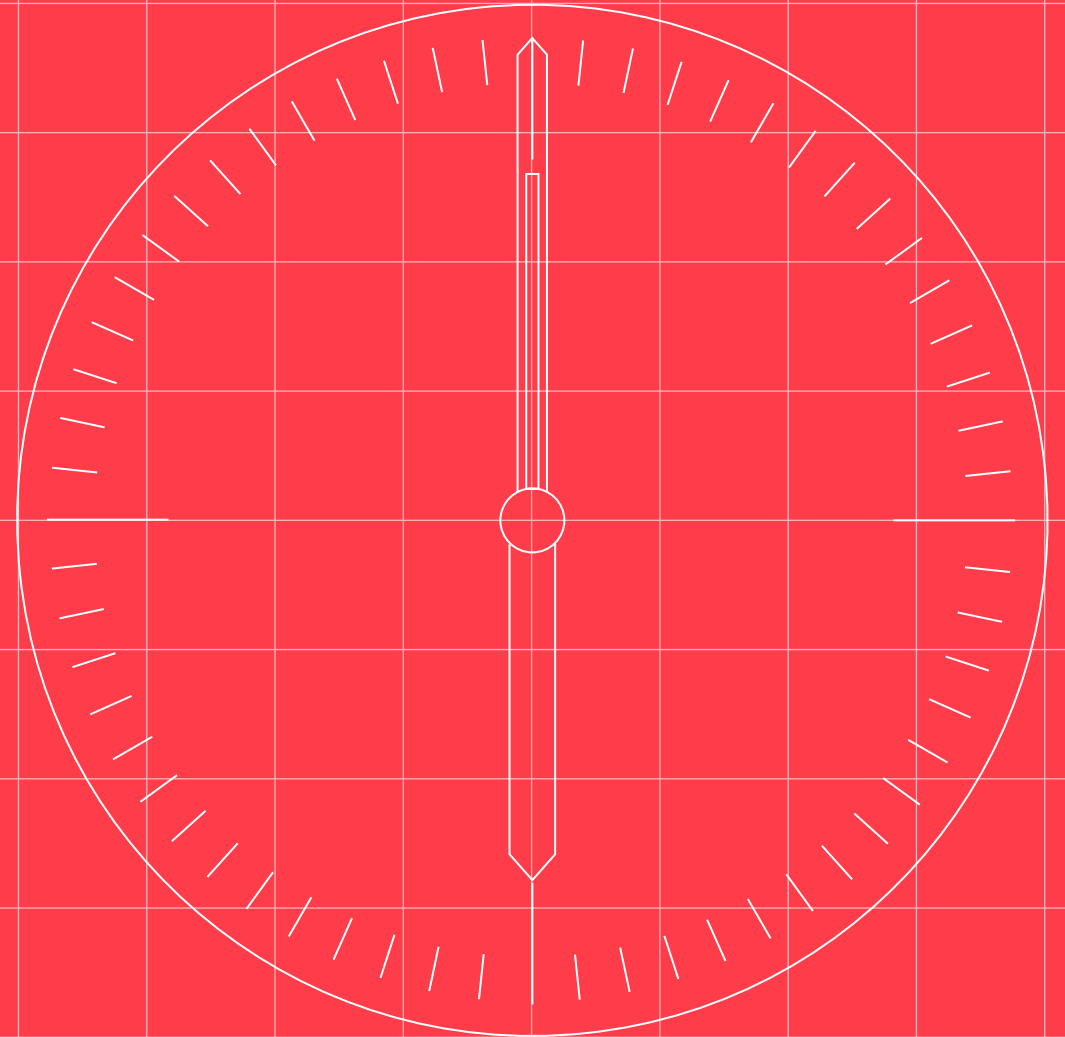
Migration update

INFORMATION:

- Update on the approved Migration Option
- Update on the Migration PoaP
- Update on activity of the Migration Design Subgroup

Programme (Jason Brodgen)

15 mins



Migration Option Analysis Recommendation

Note: A verbal update on the Migration Option recommendation and PSG decision (7 December 2022) will be shared within the TMAG meeting on 21 December 2022

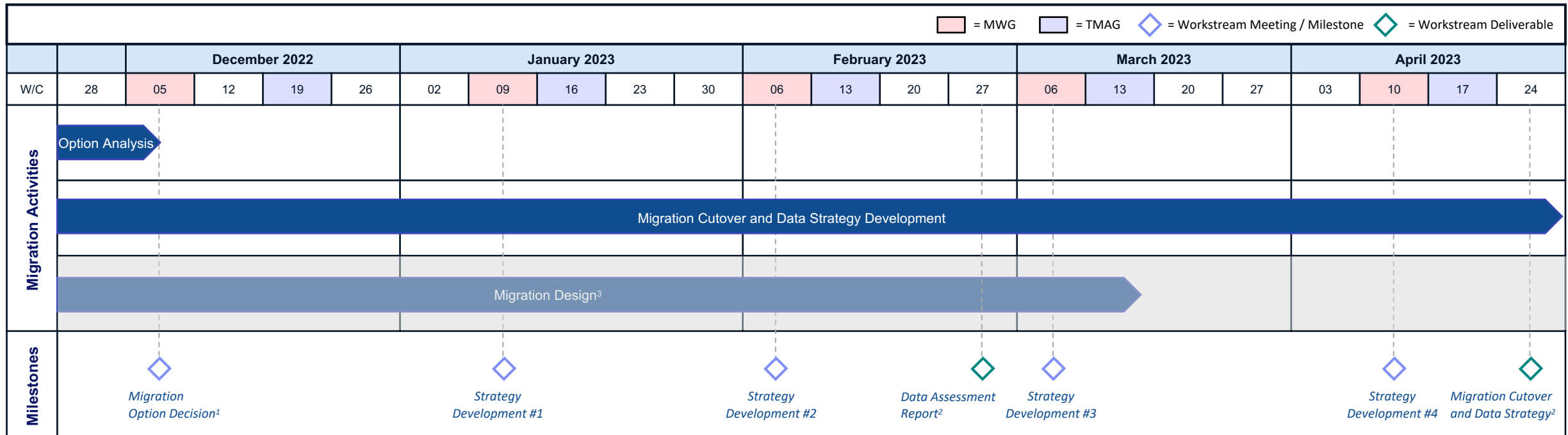
Option Decision: Following analysis of qualitative and quantitative inputs, the Programme recommendation to proceed with reverse migration was approved

Material: The analysis that informed the Migration Option recommendation can be found within the [PSG meeting papers here](#) (pages 9-24)

High-Level Migration PoaP: December 2022 to April 2023

This High-Level Migration Plan is reflective of:

- ❖ The agreement and approval of Migration Option 3 (reverse migration) at the 7 December 2022 PSG
- ❖ The MWG sessions over the latter end of 2022 and early 2023 that will be used as primary input into the development of key deliverables
- ❖ The TMAG sessions that will support the advancement and approval of the Data Assessment Report and Migration Cutover and Data Strategy
- ❖ The advancement of the Migration Design work, to be progressed via the Migration Design Subgroup



¹Note: The recommendation to proceed with Migration Option 3 (reverse migration) was approved in the 7 December 2022 PSG session

²Note: Target completion date for the Data Assessment Report is 28 February 2023; target completion date for the Migration Cutover and Data Strategy is 28 April 2023

³Note: Migration Design activities are reflected here for context and awareness, however they will not be in the scope of MWG or TMAG discussions, but rather progressed via the Migration Design Subgroup

Migration Design Subgroup Overview

Purpose

The MHHS Migration Design Subgroup (MDSG) was recently mobilised, with an initial kick-off meeting held on **Wednesday 30 November**.

- The objective of the MDSG is for the Programme and industry participants to discuss and iterate the Migration Design, which will include technical documentation and artefacts that articulate how MPANs will move from current to new MHHS arrangements.
- The Subgroup will sit under the Level 4 Design Business Process and Requirements Working Group (BPRWG) and be the primary means for participants to input to the Design

Subgroup Meetings

- MDSG meetings will take place **weekly on Wednesdays** until February, from **14:00-16:00**
- Initial sessions will focus on foundational Migration Design requirements, with subsequent sessions focused on reverse migration considerations

How To Get Involved

- Where participants would like to contribute to Migration Design discussions, we strongly encourage you to attend and participate in this Subgroup
- To be added to the Subgroup, please email PMO@mhhsprogramme.co.uk to be added to the invite and distribution list
- For queries related to Migration Design, please email Design@mhhsprogramme.co.uk , with the subject line **Migration Design**

MHHS Governance and Decision-Making Structure

Level 1

Ofgem as Sponsor

Level 2
Steering Group

Programme Steering Group (PSG)

Level 3
Advisory Groups

Cross Code Advisory Group (CCAG)

Design Advisory Group (DAG)

Testing and Migration Advisory Group (TMAG)

Implementation Advisory Group (IAG)

Closed attendance of nominated constituency reps only

Level 4
Working Groups

Code Drafting Working Group (CDWG)

Business Process & Requirements (BPRWG)

Technical Design Working Group (TDWG)

Security Design Working Group (SDWG)

Post-M5 Design change groups

Consequential Change Impact Assessment Group (CCIAG)

Migration Working Group (MWG)

Data Working Group (DWG)

Environments & Configurations Mgmt Working Group (EWG)

Qualification and E2E Sandbox Working Group (QWG)

SIT Working Group (SITWG)

Engagement and Comms Group

Commercial Impacts Group

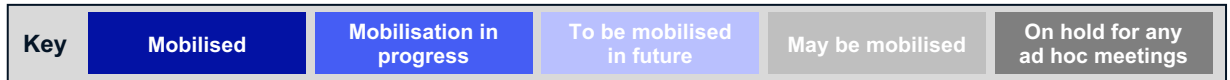
Attendance open to all (excluding SDWG)

Level 4
Sub groups

Code body subgroups

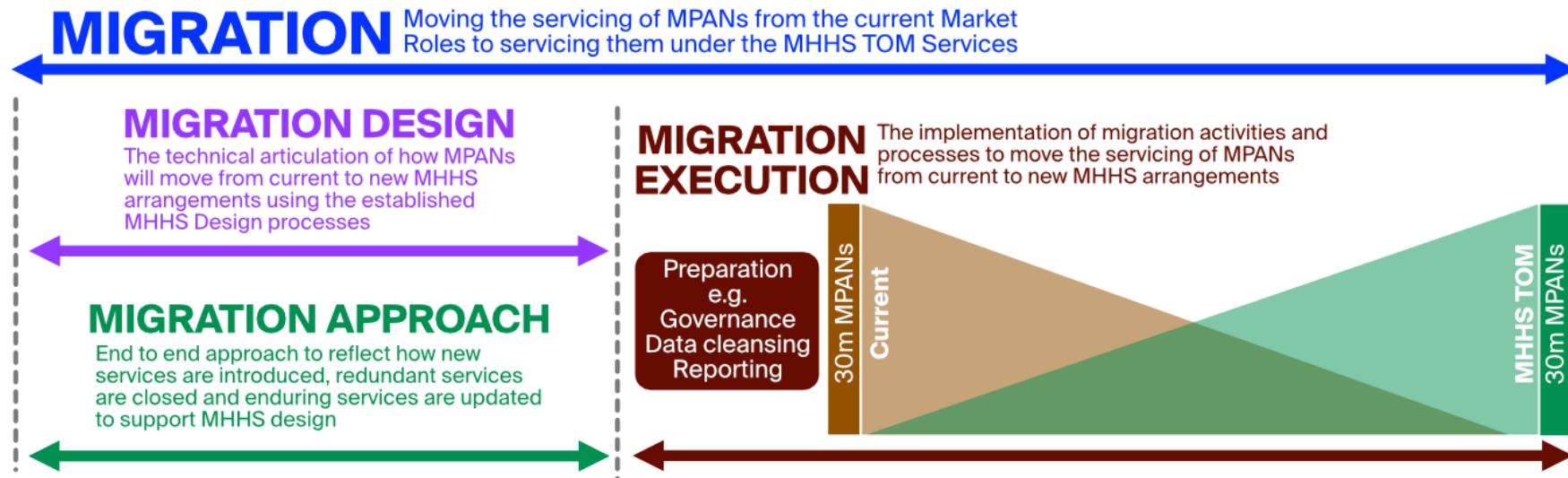
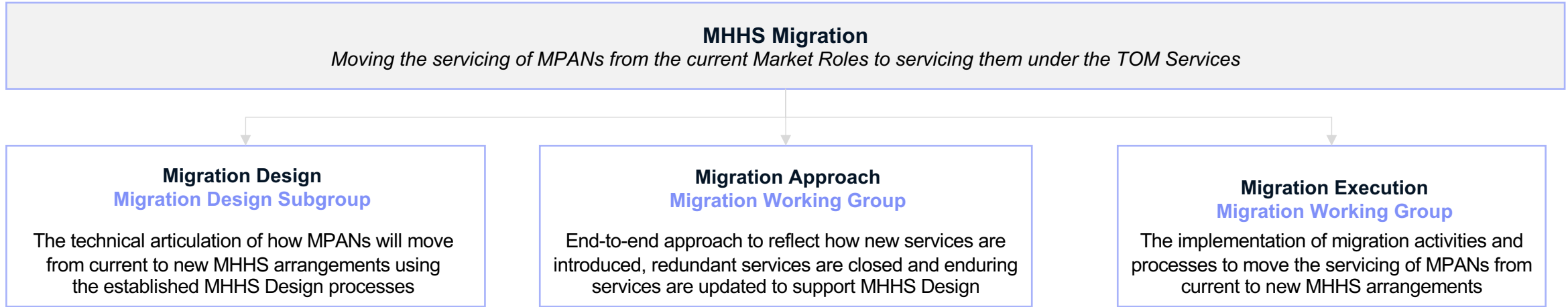
Subgroups as required to resolve M5 work-off list

Migration Design Subgroup (MDSG)

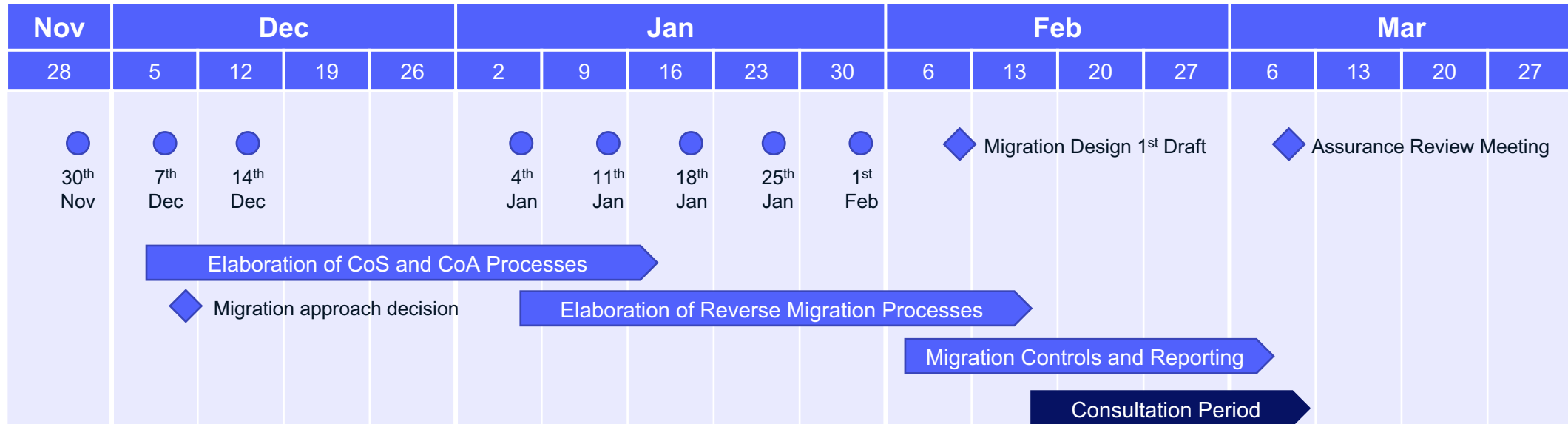


Migration Design Terminology & Scope

The following reflects key Migration terminology, and the associated scope to be accelerated across the MDSG and the MWG. In particular, the Migration Design Subgroup will be focused on the technical articulation of how MPANs move from current to new MHHS arrangements, using the established MHHS Design processes.



Migration Design High-Level PoaP



Key

- Migration Design Subgroups
- ◆ Milestone
- Activity
- Industry Consultation Period

MDSG Meeting	Process	Design Area	Description
7 th December	CoS, CoA	The MPAN migration in the Registration Service	- The change in status of an MPAN
	CoS, CoA	Request Transfer of Data	- The initiation of a request from Registration Service to (Outgoing) Agents
	CoS, CoA	Transfer of MTDs	- The transfer of MTDs from (Outgoing) MOP to Service Providers
14 th December	CoS, CoA	Transfer of Advanced Meter Reads	- The transfer of Meter Reads from (Outgoing) DC to Service Providers (Advanced)
	CoS	Transfer of Meter Reads for Traditional Meter	- The transfer of Meter Reads from (Outgoing) DC to Service Providers (Traditional)
	CoA	Transfer of Meter Reads	- The transfer of Meter Reads from Supplier to Service Providers

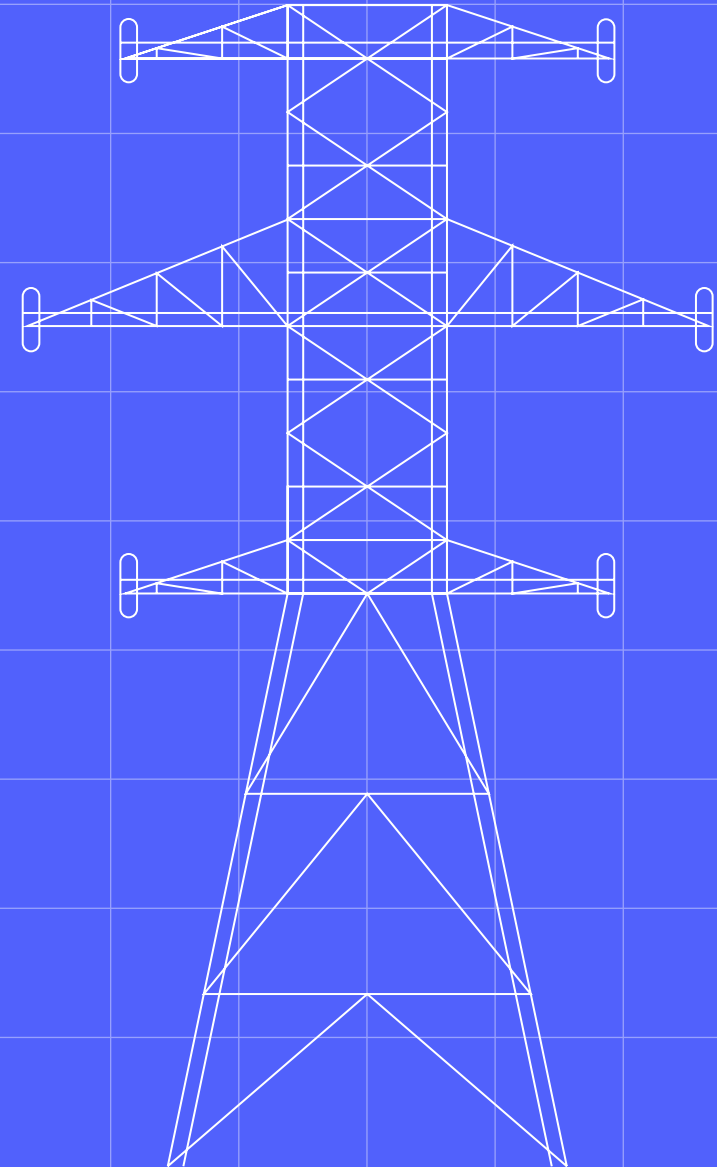
Programme replan

Please note, content for this section will be taken from the Round 3 planning artefacts to be issued 14 December 2022. Please refer to these artefacts

INFORMATION: Provide an overview of the content of Round 3 of consultation on the Programme replan, focusing on the areas most relevant for TMAG

Programme (Jason Brodgen)

10 mins

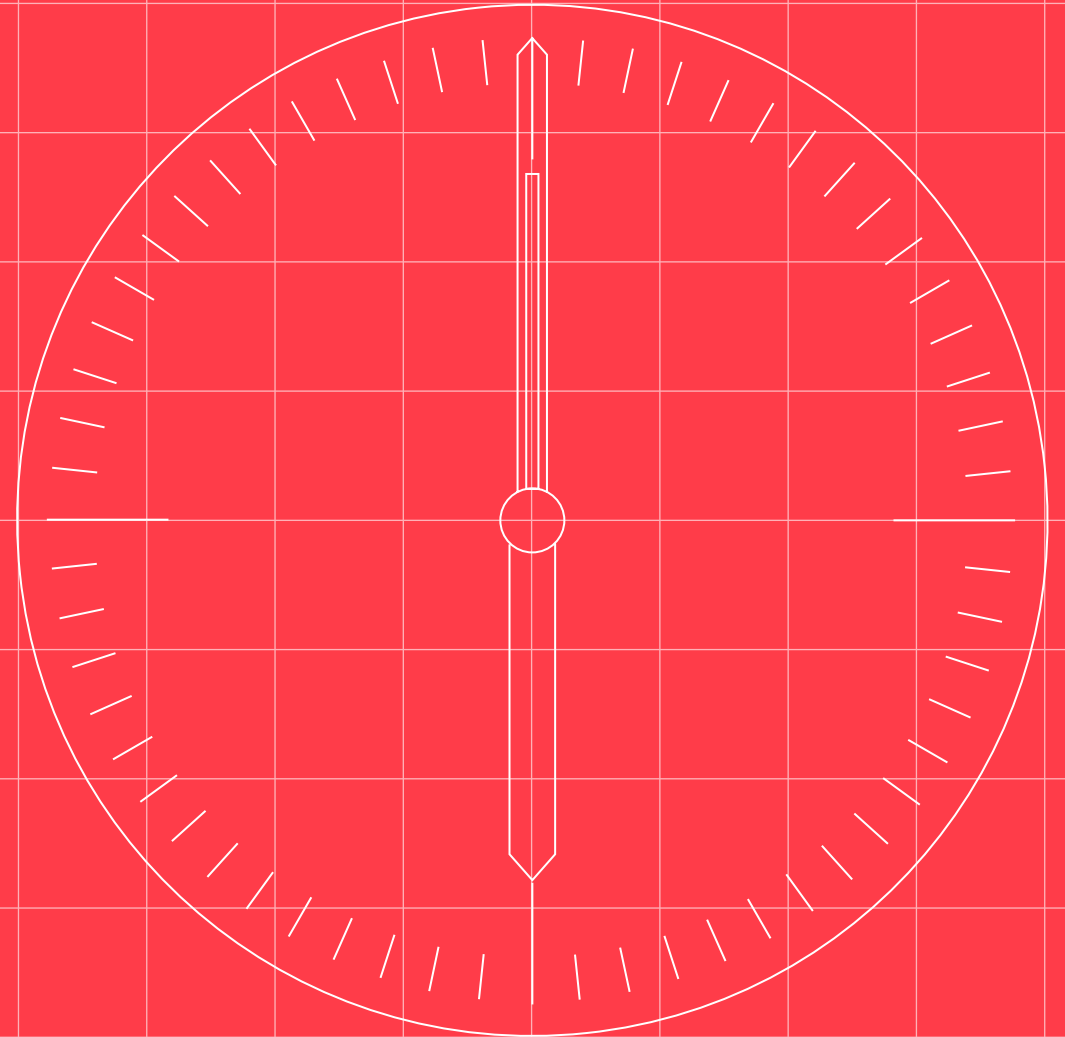


Qualification/pre-qualification

INFORMATION: Update on discussions with code bodies on qualification and progress at the QWG

Programme (Jason Brogden/Dom Mooney)

10 mins



- Since last TMAG Meeting:

- A number of meetings have been held with BSC & REC Co to align on the high level scope and responsibilities for MHHS changes to Qualification and Performance Assurance.
- Code Delivery Bodies are now actively involved with QWG and supporting material for presentation.
- MHHSP provided slides summarising Pre Qualification (Pre-Integration Testing) and equivalence for Qualification.
- BSC have provided a draft MHHS Qualification Approach document to support Qualification and MHHSP collaboration to planning and delivery.
- Code Bodies will produce a Qualification Assessment Document which sets out detailed requirements and evidence criteria.
- MHHSP setting up bi-weekly planning session from 03-Jan-23 onwards.

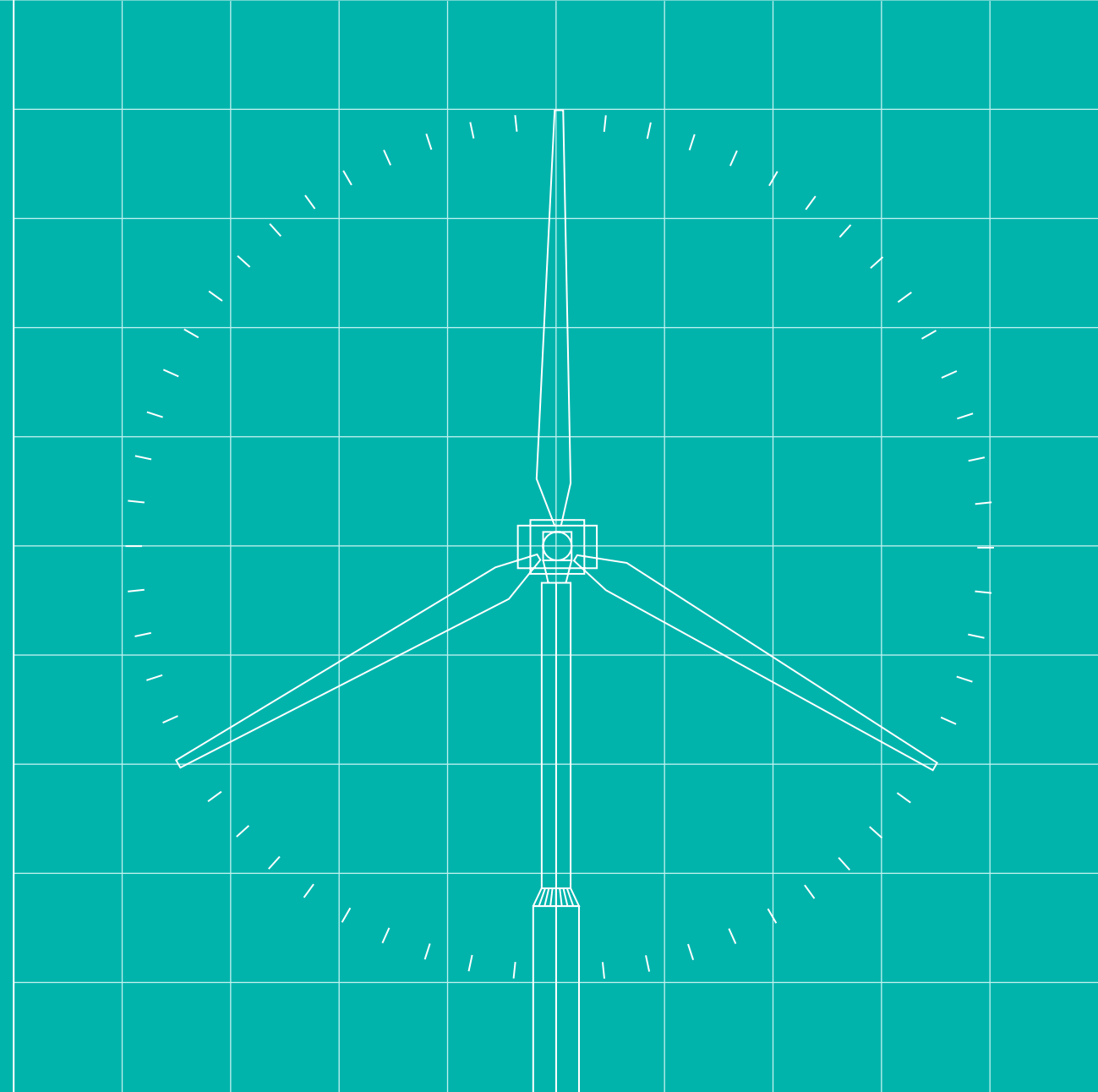
Data Working Group update

INFORMATION:

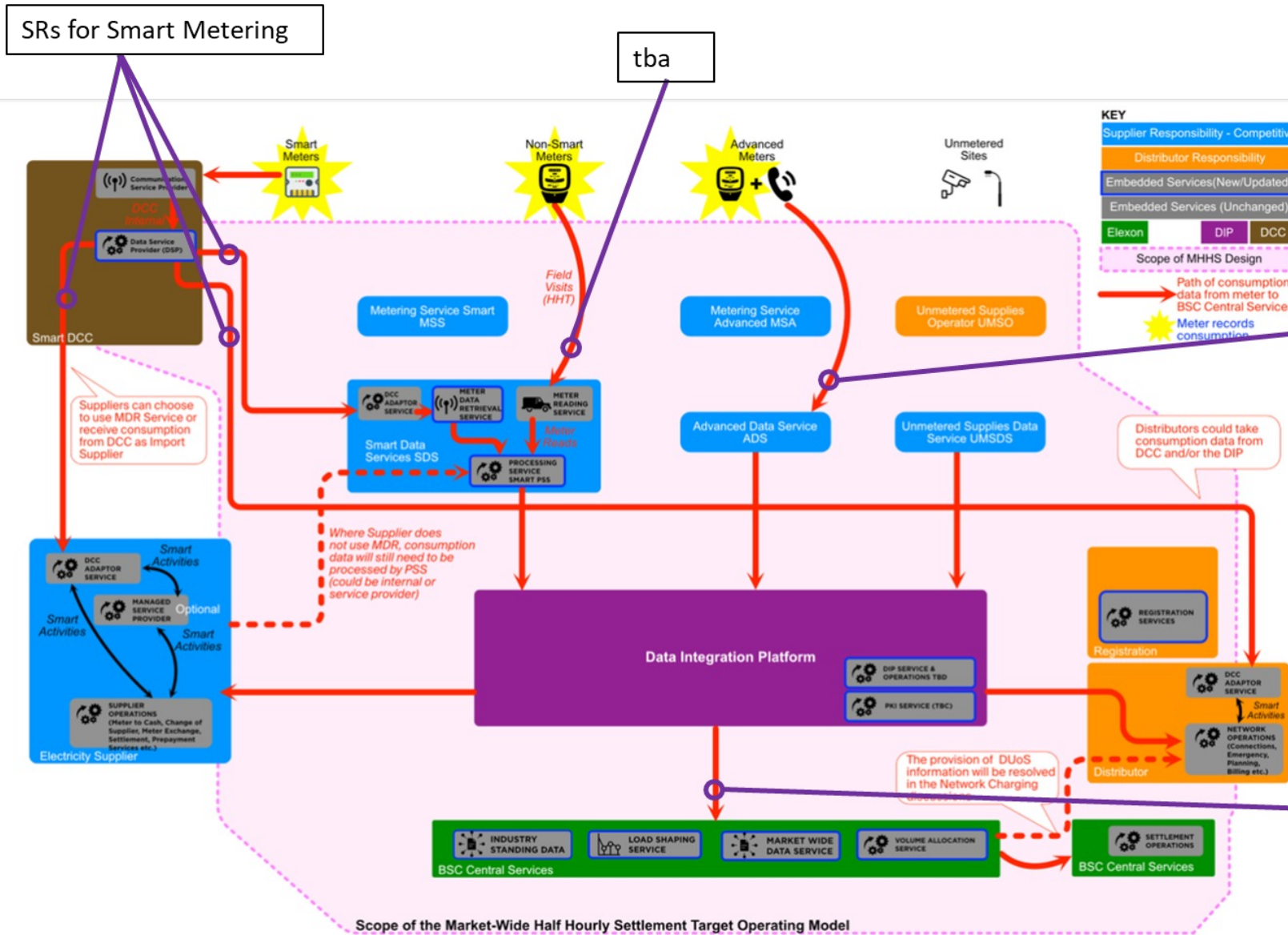
- Update on Test Data Generators
- Update on progress of the Test Data Approach and Plan

Programme (Kate Goodman)

15 mins



Consumption Data Generator - Generating realistic consumption data



We need to model the data we generate on these data flows

tba – D036 being replaced

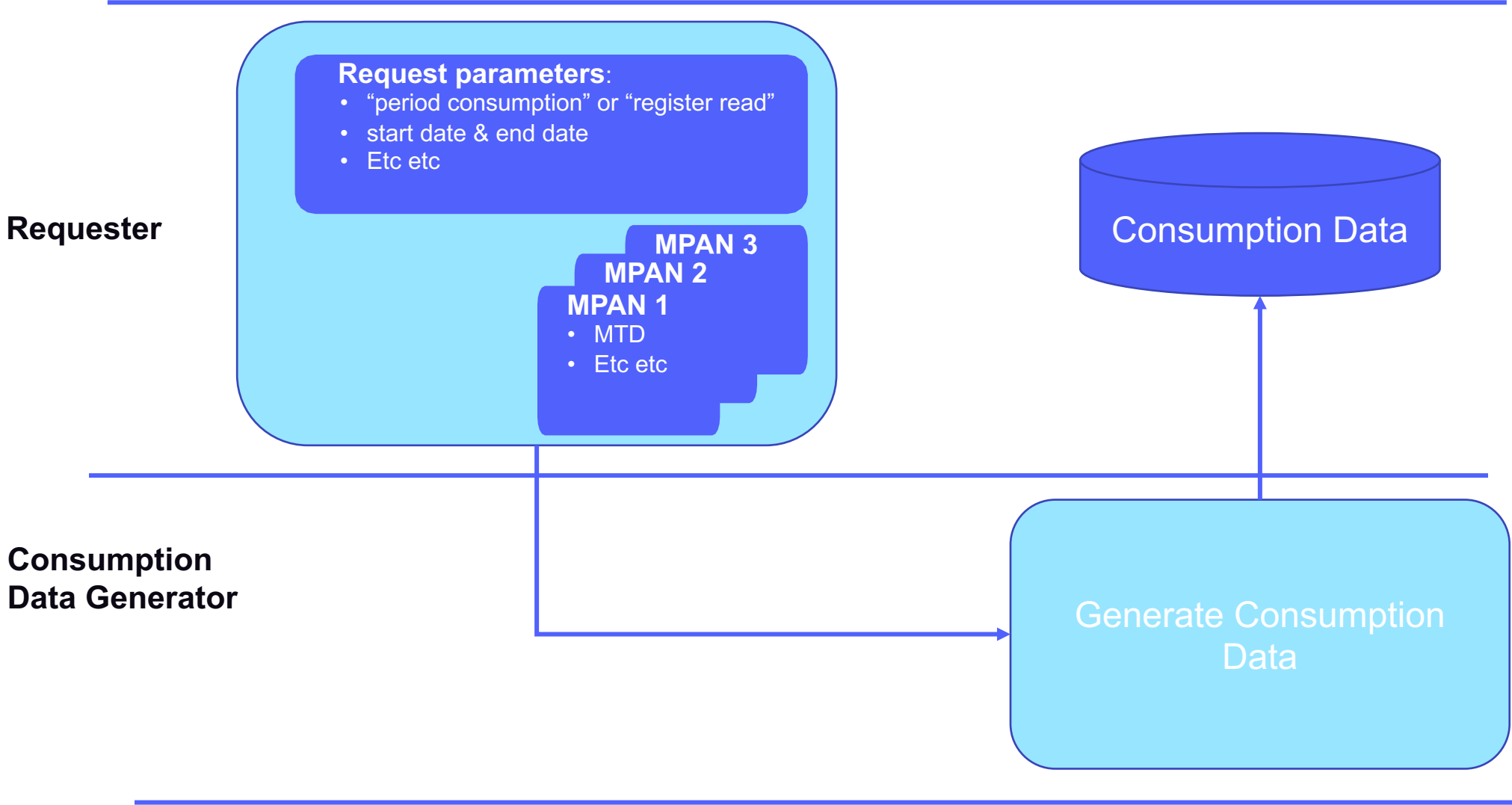
We will generate data for both:

- Period consumption
- Register reading

SRs for Smart Metering:
 SR4.1.1
 SR4.2
 SR4.6.1
 SR4.6.2
 SR4.8.1
 SR4.8.3
 SR4.17

IF-021

Process for generating consumption data

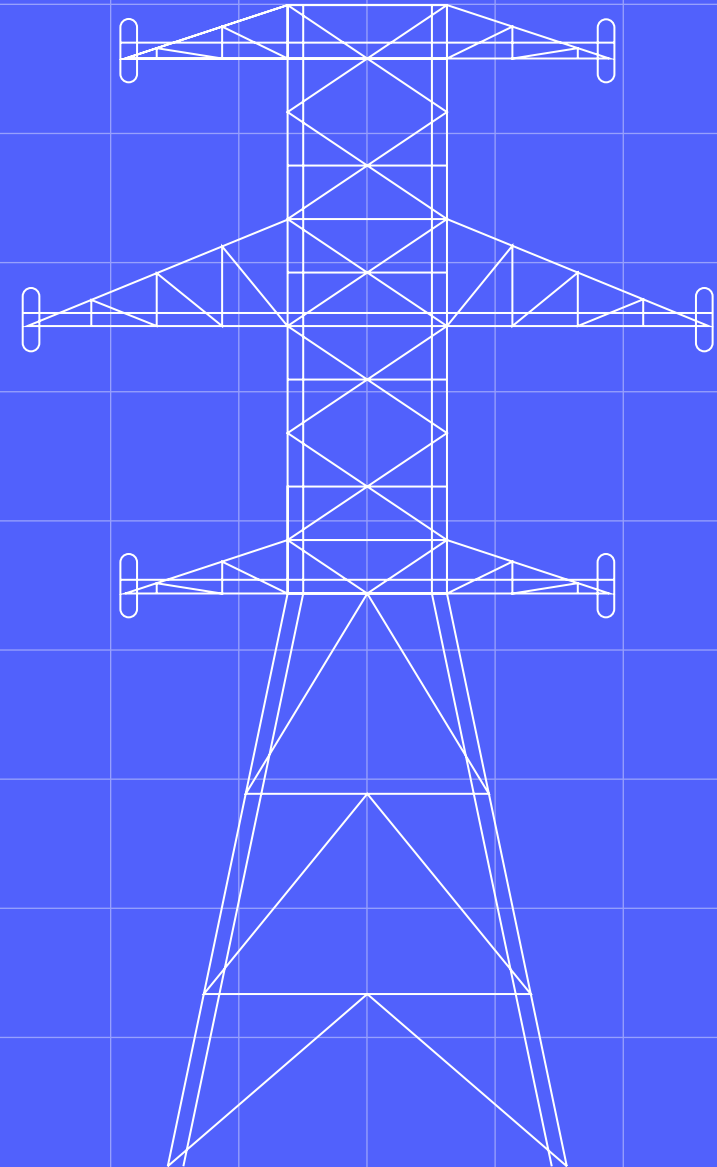


SIT Working Group

INFORMATION: Update from the first Systems Integration Test Working Group (SITWG)

Programme (Dom Mooney)

5 mins



Systems Integration Test Working Group (SITWG) update

Update on discussion from the first SITWG, 01 December 2022

1. **Terms of Reference** – recommended for approval at TMAG
2. **Recap on strategy and principles** – reviewed scope and testing phases and stages
3. **SIT deliverables and preparation** – reviewed planned deliverables
4. **SIT readiness** – update on DBT and PIT expectations
5. **Minimum Viable Cohort** – introduction to the MVC concept
6. **Progressive integration approach** – overview of component integration approach
7. **Environments** – overview of environments required for SIT and UIT

Agenda items for January SITWG

- Initial review of key principles and sections of the CIT & Functional Test Approach & Plan
- First view of SIT test scenarios

For decision at December TMAG

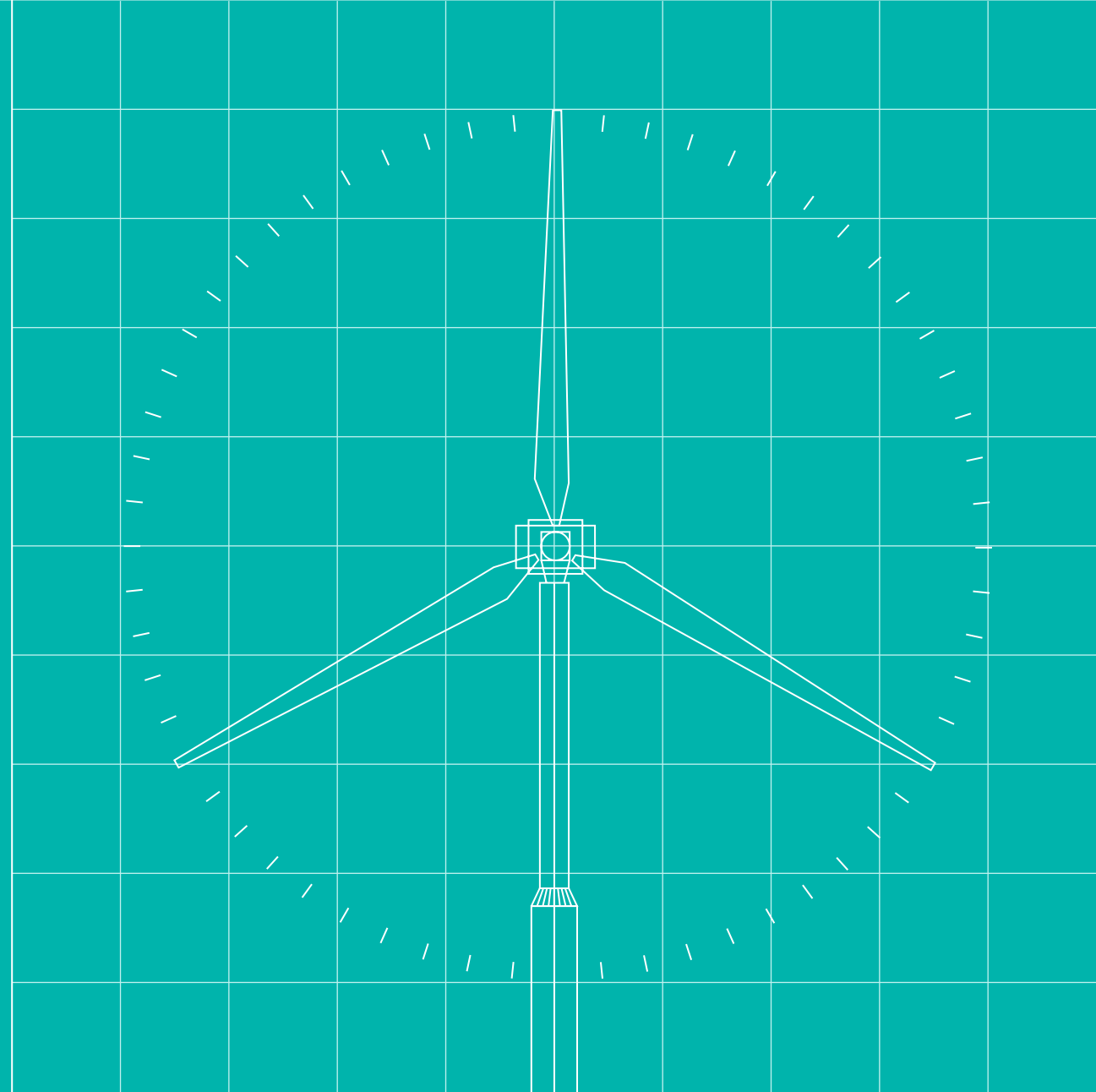
The SITWG ToR was recommended for approval by TMAG by the SITWG

Working group report

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

Programme (working group leads as required)

0 mins – taken as read, questions by exception



TMAG Working Group Progress Report – December 2022

	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)
Upcoming deliverables	<ul style="list-style-type: none"> Overall Test Data Approach and Plan (planned 31 Jan 2023, to come to January TMAG) 	<ul style="list-style-type: none"> Migration Option Analysis Update and Recommended Approach post PPIR (to come to December TMAG) 	<ul style="list-style-type: none"> Environments Approach and Plan (final version planned to come to February TMAG for decision) 	<ul style="list-style-type: none"> Qualification Test Approach and Plan (planned 28 Feb 2023, to come to February TMAG) 	<ul style="list-style-type: none"> CIT & Functional Test Approach & Plans (Apr 23) CIT & Functional Test Scenarios (May 23) CIT & Functional Test Scripts (Aug 23)
Next month's agenda items	19 January 2023 1. Overall Test Data Approach & Plan 2. DCC GUID	12 January 2023 1. Migration, Cutover and Data Strategy Development	10 January 2023 1. Update on Environment Approach & Plan 2. Feedback on Template and Catalogue process	10 January 2023 To be updated in meeting	09 January 2023 <ul style="list-style-type: none"> Initial review of key principles and sections of the CIT & Functional Test Approach & Plan
Agenda items from last month	01 December 2022 1. Principles of populating Day 0 test data 2. Consumption Data Generator	08 December 2022 1. Migration option recommendation 2. Migration PoaP 3. Update on migration design 4. Migration Strategy development 5. High-level migration modelling	06 December 2022 1. Environments and Approach Plan and TMAG approval	13 December 2022 1. Pre-qualification guidance 2. Qualification Test 3. Defining MHHS qualified entities 4. Confirming MHHS qualified entities	01 December 2022 <ul style="list-style-type: none"> Terms of Reference Strategy and principles recap SIT deliverables Minimum Viable Cohort Integration approach Environments
TMAG escalations	None	None	None	None	SITWG ToR for approval

Summary and next steps

INFORMATION: Summarise actions and look ahead to December TMAG

Chair and Secretariat

5 mins

Next Steps

Next steps:

1. Confirm actions and decisions from meeting
2. Date of next TMAG: 18 January 2023

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

Meeting dates	21-Dec	18-Jan	15-Feb	15-Mar	19-Apr
Relevant milestones or activities	Round 3 replan consultation, Control Point 1				
Agenda items	<ul style="list-style-type: none"> • Programme re-plan • Migration, Cutover & Data Strategy update • Qualification update 	<ul style="list-style-type: none"> • Test Data Approach and Plan approval 	<ul style="list-style-type: none"> • Data Assessment Report approval • Migration, Cutover & Data Strategy approval • Environments Approach and Plan review 	<ul style="list-style-type: none"> • Qualification Test Approach and Plan approval • Review of E2E Testing & Integration Strategy (schedule after the replan and other documents have been baselined) 	
Standing items	<ul style="list-style-type: none"> • Minutes and actions review • Programme updates • Working group report • Next steps and agenda roadmap 	<ul style="list-style-type: none"> • Minutes and actions review • Programme updates • Working group report • Next steps and agenda roadmap 	<ul style="list-style-type: none"> • Minutes and actions review • Programme updates • Working group report • Next steps and agenda roadmap 	<ul style="list-style-type: none"> • Minutes and actions review • Programme updates • Working group report • Next steps and agenda roadmap 	<ul style="list-style-type: none"> • Minutes and actions review • Programme updates • Working group report • Next steps and agenda roadmap

If you would like to propose an agenda item for TMAG, please contact the PMO (PMO@mhhsprogramme.co.uk)

Appendix

Testing and Migration workstream artefacts

Artefact Title
E2E Integration & Test Strategy
Test Data Strategy
Environment Approach & Plan
SIT - Component Integration Test Data Approach and Plan
SIT - Component Integration Test Approach & Plan
SIT - Component Integration Test Scenarios
SIT - Component Integration Test Cases/Scripts
SIT - Component Integration Test Readiness Report
SIT - Component Integration Test Completion Report
SIT - Functional Test Data Approach and Plan
SIT - Functional Test Approach & Plan
SIT - Functional Test Scenarios
SIT - Functional Test Cases/Scripts
SIT - Functional Test Readiness Report
SIT - Functional Test Completion Report
Migration, Data and Cutover Strategy
SIT - Migration Test Data Approach and Plan
SIT - Migration Test Approach & Plan
SIT - Migration Test Scenarios
SIT - Migration Test Cases/Scripts
SIT - Migration Test Readiness Report
SIT - Migration Test Completion Report
SIT - Non-Functional Test Data Approach and Plan
SIT - Non-Functional Test Approach & Plan
SIT - Non-Functional Test Scenarios
SIT - Non-Functional Test Cases/Scripts
SIT - Non-Functional Test Readiness Report

Artefact Title
SIT - Non-Functional Test Completion Report
SIT - Operational Test Data Approach and Plan
SIT - Operational Test Approach & Plan
SIT - Operational Test Scenarios
SIT - Operational Test Cases/Scripts
SIT - Operational Test Readiness Report
SIT - Operational Test Completion Report
Qualification Test Data Approach and Plan - TBA
Qualification Test Approach & Plan - TBA
Qualification Test Scenarios - TBA
Qualification Test Cases/Scripts - TBA
Qualification Test Readiness Report - TBA
Qualification Test Completion Report - TBA
E2E Sandbox Guidance
E2E Sandbox Test Data Approach and Plan
Data Assessment report
Requirement Traceability Matrix
Security Test Completion Report
Test Exit report for all core systems
Overarching Test Data Approach and Plan