

MHHS Testing Advisory Group Actions and Minutes

Issue date: 23/03/22

Meeting number	TAG003	Venue	Virtual – MS Teams
Date and time	16 March 2022 1000-1200	Classification	Public

Attendees

Chair

Chris Welby (CW) MHHS IM SRO

Industry Participants

Badruddin Khan (BK) Exelon Representative (as central systems provider)
 David Yeoman (DY) DNO Representative (alternate to IHat)
 Ian Hall (IHal) Supplier Agent Representative
 Ian Hatton (IHat) DNO Representative
 Martin Hanley (MH) Large Supplier Representative
 Nickie Bernsmeier-Rulow (NBR) DCC Representative (as smart meter central system provider)

MHHS IM members

Dominic Mooney (DM) Quality Manager
 Jason Brogden (JB) Industry Expert
 Kate Goodman (KG) Test Architect
 Martin Cranfield (MCra) PMO Governance & Secretariat Lead
 Miles Winter (MW) PMO Governance & Secretariat Support

Other Attendees

Martin Crozier (MCro) MHHS IM IPA Stage-Based Assurance Lead
 Sinead Quinn (SQ) Ofgem (as observer)

Apologies

Stacey Buck iDNO Representative

Actions

Area	Action Ref	Action	Owner	Due	Update
TAG governan ce	TAG03-01	Stand up / mobilise the Migration Working Group	Programme (Kate Goodman)	14/04/22	
	TAG03-02	Update all relevant TAG content to reflect the decision to move to TMAG (e.g., MHHS Governance Framework, meeting invites)	Programme (PMO)	20/04/22	

E2E Test Strategy	TAG03-03	Hold separate session to bring Martin Crozier (and any other new TAG members) up to speed	Kate Goodman	23/03/22	
	TAG03-04	Clarify CVA interactions and data flows between BSC Central Services with Ian Hall	Kate Goodman	23/03/22	
	TAG03-05	Clarify data generation queries with David Yeoman	Kate Goodman	23/03/22	
	TAG03-06	Update E2E Testing Strategy with comments as discussed. These changes will be contained in the Word version of the Strategy. For example: <ul style="list-style-type: none"> Clarification on defects Re-draw test environments to show individual PPs as separate blocks and in a timeline. Review with NBR first 	Programme (Kate Goodman)	25/03/22	
	TAG03-07	Provide any further comments and feedback to the PMO on E2E Testing Strategy as presented, to inform E2E Test Strategy document. PMO to share comments form with Headline Report	TAG members	23/03/22	Update: Comments template shared with TAG members alongside Headline Report
Other	TAG03-08	Define the Level 4 working groups expected under TMAG, when they expect to be mobilised and what deliverables will come to which groups. Present at next TMAG	Programme (Kate Goodman, Chris Welby)	20/04/22	
	TAG03-09	Provide details to PMO on SEC TAG July clash (to inform TMAG rescheduling)	Nickie Bernsmeier -Rulow	20/04/22	

Decisions

Area	Dec Ref	Decision
TAG Governance	TAG-DEC04	Approved Testing and Migration Advisory (TMAG) Group ToR
	TAG-DEC05	Approved Data Working Group (DWG) ToR
Test Data Strategy	TAG-DEC06	Approved Test Data Strategy Principles to write up in full Test Strategy document

RAID Items

RAID area	Description
None raised	

Minutes

1. Welcome and introduction

CW welcomed all to the meeting, including new supplier and DNO constituency representatives now in the TAG.

2. Minutes and Actions

The minutes from February TAG were **APPROVED**.

CW talked through the open actions as per the slide.

KG suggested closing TAG02-06 following a discussion with NBR. NBR suggested keeping it open with a view to close it next month.

3. Governance group updates

MCra provided an overview of updates from each L2 and L3 governance group as per the slide. MCra invited questions. Some clarification was provided on the acronyms for different groups. No other questions were received.

4. TAG Governance

KG outlined the intention to stand up the Migration Working Group in April so the Programme can look at the migration strategy with the aim of sign off by the end of July 2022. KG noted the Data Working Group has now been stood up, and at the first meeting there was discussion outlining the main principles for the Programme's Test Data strategy. These principles will be going out for review next week, will be debated the following week, and their recommendations discussed at TAG in April.

CW asked if everyone was comfortable with new TMAG ToR. No comments received.

CW asked if everyone was comfortable with new DWG ToR. No comments received.

DECISION TAGDEC-04: Approved Testing and Migration Advisory (TMAG) Group ToR

DECISION TAGDEC-05: Approved Data Working Group (DWG) ToR

ACTION TAG03-01: Programme to stand up / mobilise the Migration Working Group

5. E2E Testing Strategy

This agenda item was led by KG and included a quick presentation of each slide in the meeting pack with questions by exception (under the assumption members had reviewed the slides ahead of the meeting).

KG outlined the aims of the discussion and gave an overview of the timeline for delivering the Test Strategy as per the slide.

KG walked through the Test Strategy agenda. NBR noted she had expected to see a stage between Pre-Integration Testing (PIT) and System Integration Testing (SIT) for TRT for when all parties would come to test the full system together. KG responded that this was covered by component integration, with this element included at the start of SIT to get all elements of testing starting together in a coordinated way e.g., starting with Data Integration Platform (DIP), adding ECS and building up. NBR queried if there is an expected governance aspect to be defined within this. KG confirmed it would. MH asked if this governance would include SEC TAG within DCC. KG agreed DCC governance would be included and MHHS cannot pass stages unless they have passed through both DCC governance and MHHS governance. The assurance process for this is yet to be confirmed. JB added that the need for dual governance has been recognised in the TMAG ToR. MCro asked if operations or security testing would be covered under the test strategy. KG clarified operations would be included under SIT and security testing would be included in environment testing. Environment testing plan is to be confirmed by end of year and will include security testing. MCro asked if migration testing will also be included. KG clarified this will be included in the migration path to ensure transition works in practice (e.g. MPAN migration).

ACTION TAG03-03: Kate Goodman to hold separate session to bring Martin Crozier (and any other new TAG members) up to speed

KG talked through the overall test scope. The test scope includes everything inside the green shaded area presented on the test scope slide, as well as the interfaces. MHHS will be testing interfaces and the overall internal E2E process but not testing every detail of wider external systems. This will be up to the Programme Participants themselves. DY

queried if the plan for PIT and SIT testing would follow a similar process to CSS whereby MPRS testing was done on behalf of DNO's by CSS and individual parties joined later in User Integration Testing (UIT) phases. KG agreed this could be the way of doing things but that the Programme would need DNO input. DY agreed this approach worked well for CSS, with wider parties joining later. IHal agreed and found this worked well for Western Power Distribution. IHal queried why BSC central services are split in two boxes in the test scope diagram, asking what is in and out of scope in this area (e.g. settlement operations)? KG responded MHHS will go as far as volume allocation as this has the data to produce figures, and anything beyond this will be out of MHHS scope. CW noted Programme Participants need to do their own testing, which is why MHHS will stop at interfaces. IHal added that the DWG will have to determine how data is added for these groups. KG noted she imagined data would flow the other way. JB noted this diagram is being refined by the design team. CW added the Programme would welcome St Clements input via L4s to define detail under the strategy.

ACTION TAG03-04: Kate Goodman to clarify CVA interactions and data flows between BSC Central Services with Ian Hall

KG talked through the test phases and stages including how different industry Programme Participants will be introduced across each stage to ensure the design works E2E. KG noted the Programme needs to ensure the right level of engagement from data services. Mandating engagement would not be appropriate, but the Programme does need to have enough engagement to properly test the system. This will be answered at a higher level. JB noted the Programme needs to determine how DNOs and iDNOs are engaged in testing as well (network, not just supplier and data services). KG added the next level of detail will have a plan for each stage that will define who is engaging and how. SIT and PIT are the main areas to define as these are critical to get the right level of engagement.

NBR asked on test phase dependencies and where system capacity testing would be included. KG clarified this was included in functional testing and would be further determined in PIT by asking questions to Programme Participants. NBR asked if PIT and SIT would be individual systems or the whole system. KG clarified this would be individual systems in PIT and the full system in SIT. This approach is different to Faster Switching Programme (FSP). NBR asked if non-functional and capacity testing would be anywhere other than SIT. KG answered that SIT would not be in a single environment. JB noted qualification would include both functional and non-functional testing.

MH queried if defects would be included in SIT testing. KG answered yes and this would be similar to FSP. MH asked if this will be for the overall system as well as individual providers. JB noted this needs to be thought through (i.e. what is tested by parties and what is tested by E2E design). There will be some issues from parties that can be resolved in parallel once SIT is exited. The Programme needs to define the metrics for exiting SIT for the Programme and for individual parties.

KG provided detail on UIT for how the Programme would provide an environment for Programme Participants to use to test business processes and required changes. The environment would become an enduring test environment. MH noted this is where defects are found in central systems and queried what the feedback process would be and how the Programme would then go back to the PIT and SIT stage. KG clarified these points are included, using learnings from FSP.

KG talked through the test process, management and organisation including use of Azure Dev Ops (ADO) for doing test management (similar to JIRA as per FSP). This will be accessible via the Portal where scenarios for test will be defined for individual Programme Participants to enter their own test details. This means all test data is in one place so test outputs can be easily linked back to design and provide a picture of testing progress across MHHS and Programme Participants. The Programme will look to make ADO as usable and efficient as possible (e.g., import and export between test management tools). DY asked if this central test tool could be integrated into party's own test management tools. KG agreed ADO would be provided centrally with integration to make life as easy as possible for Programme Participants. Programme Participants will be engaged to get their requirements.

KG walked through proposals and rationale for test environments and environment management, such as the requirements for the environment through transition. KG asked for feedback on two discussion points: requirements for another SIT environment and when the Programme would perform operational testing. KG proposed these should be resolved under the environment plan. NBR queried the SIT environment – NBR believed this was delivery of the whole system by all Programme Participants as per the MHHS design. NBR believes their individual PIT, SIT and UIT needs to be completed to feed into the programmes overarching SIT. NBR noted it is not clear how environments will be laid out and fit together. KG agreed the environment diagram could be clearer e.g., individual parties should be separated out given federated nature. NBR agreed this would help but added that they needed to know where individual Programme Participants sit in the process and how. KG agreed this needs to be factored and is dependent on own Programme Participants timings. JB agreed this would be better illustrated in a timeline as the onus is on parties to

provide their own inputs from their own environments into each stage/phase. KG agreed and added that the overall test scope could be used to support a better diagram.

ACTION TAG03-06: Programme (Kate Goodman) to re-draw test environments to show individual PPs as separate blocks and in a timeline. Review with NBR first

DY asked if individual Programme Participants will need three test environments themselves? KG said there is scope for Programme Participants to determine their own need and repurpose their own environments. Central systems will require detailed conversation due to the need for a few environments. NBR added this conversation needs to happen soon due to commercials. DY noted a risk that re-purposed environments could be required in parallel under some circumstances. JB agreed that the Programme needs to discuss with NBR and noted environment conflicts in FSP. MH asked about release management given the volume of systems coming together – will this be under programme control? JB noted this was to be agreed and would be included in environment strategy later this year.

KG described the simulators the Programme intends to provide to support Programme Participants in testing, included how these would be included per test strategy phase. KG described how the programme would provide data to Programme Participants for Programme Participants to use in their internal testing processes e.g., injection.

DY asked why someone is generating data for Programme Participants. KG answered that this is more with supplier agents in mind than DNOs. On the data side, the Programme recognises it must be careful about using real data with real MPANs and real consumption as it constitutes personally identifiable information. This will be discussed in the data plan. The intention is to use some real consumption data, though some of it will be simulated.

ACTION TAG03-05: Clarify data generation queries with David Yeoman

KG outlined functional testing intention to build a 'digital twin' that emulates the function of the smart data service. The form it will eventually take is not yet confirmed, but this will generate data that can be compared against supplier agent services real data.

CW welcomed comments via the PMO mailbox or directly to Kate in the next 5WD (23 March). The PMO will share the template for sharing comments with the meeting headline report.

ACTION TAG03-07: Provide any further comments and feedback to the PMO on E2E Testing Strategy as presented, to inform E2E Test Strategy document. PMO to share comments form with Headline Report

6. Test Data Strategy

KG provided an overview of next steps for the data strategy as per the timeline slide. CW noted all Programme Participants will see the full data strategy document for review, for TAG members to highlight to constituencies.

KG asked for agreement on test strategy principles described in the slides.

DECISION TAGDEC-06: Approved Test Data Strategy Principles to write up in full Test Strategy document

7. Summary and next steps

MCra summarised the actions.

CW raised one item of AOB on attendance at TMAG. There have been requests for additional attendees (e.g., software providers) at the TMAG. The intention is for the TMAG to be a decision-making group and for L4s to be where the detail of testing and migration work is undertaken, once the testing strategy is agreed. TMAG does not intend to have further members/representatives and should not be doing the leg work/detail. DY asked when the Level 4 Working Groups will be set up. CW clarified that the DWG is set up. KG added the MWG is to come in April and that an Environment Working Group may come. IHat noted if St Clements can join TMAG given their role. CW responded that this has been discussed and that St Clements should input via their TMAG rep. CW noted that all groups would benefit having their software providers in the TMAG but there would be too many. Software providers are represented by the TMAG rep they provide software to. JB agreed development work should happen at L4 and that the TMAG is a decision group. CW added that reps can nominate alternates/additional for specific agenda items. DY asked if, as DNO rep, they should be representing iDNOs as well? MCra responded that Stacey Buck is the iDNO rep but has sent her apologies for this month's meeting.

ACTION TAG03-08: Programme to define the Level 4 working groups expected under TMAG, when they expect to be mobilised and what deliverables will come to which groups. Present at next TMAG

CW presented the agenda roadmap. NBR noted the 22 July 2022 clashes with SEC TAG.

ACTION TAG03-09: Nickie B-R to provide details to PMO on SEC TAG July clash (to inform TMAG rescheduling)

DY asked about communications from these groups. MC clarified that these are emailed directly to attendees and available on the MHHS website. CW added that content is available through the Clock.

Date of next meeting: 20 April 2022