MHHS Programme
PoaPs & key related Planning RAIDs

MHHS-DEL545

August 2022

v1.0

Objectives of this re-planning exercise:

• To fully consult on and assess ways to ensure that the plan is set up to see MHHS implemented as early as possible and preferably no later than the date set out in the existing Transition Timetable

• To form a baseline Programme plan that can be approved by Ofgem - on the basis of a weight of agreement from Programme participants that the plan is credible, robust, achievable, and measurable.
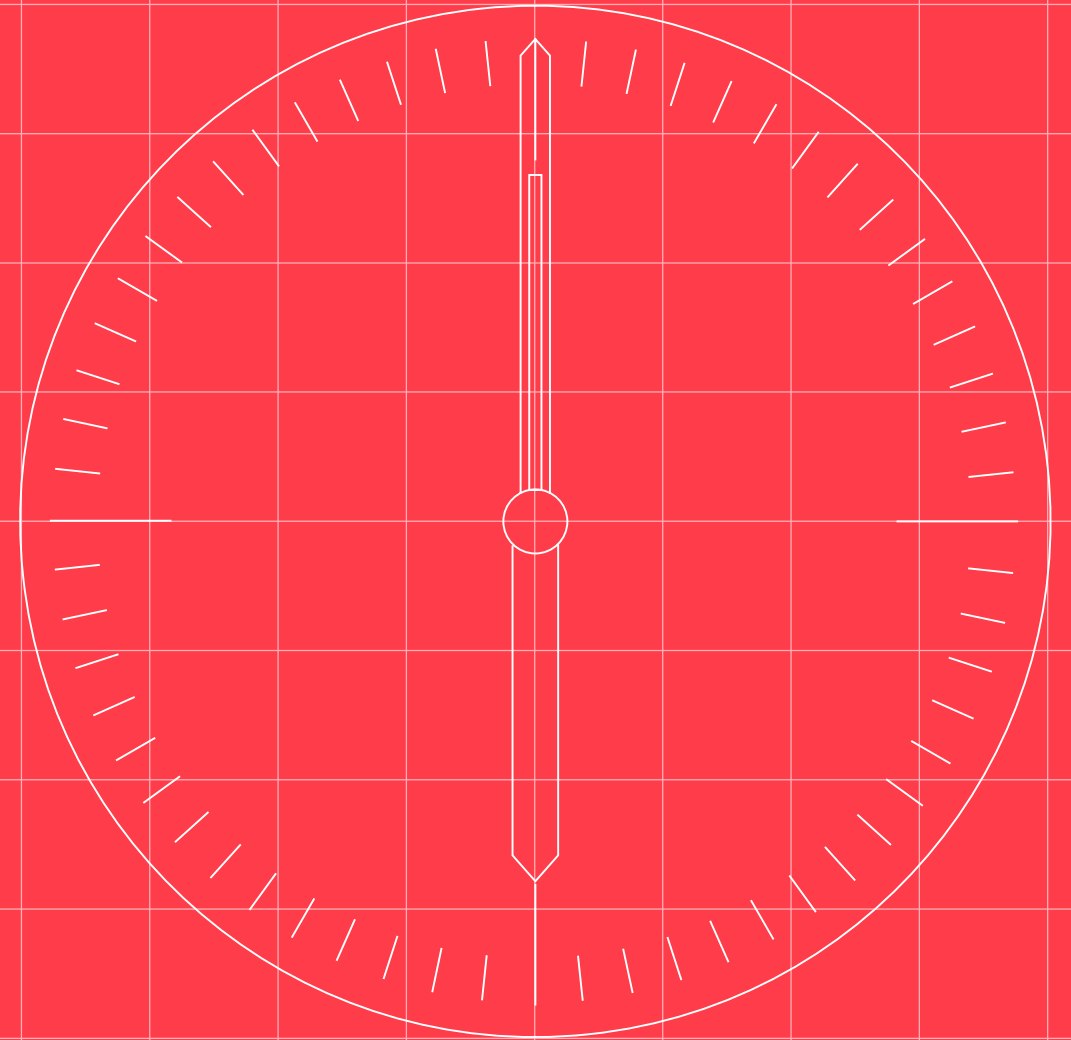
By:

• Working with industry to develop the plan – not imposing a plan on industry

The plan as it is so far:

• This draft is a working plan based on information available to MHHSP at the time of drafting. It has not been approved by Ofgem. It is an imperative to challenge and validate all assumptions in the draft with the aim of securing the earliest possible robust implementation date.

• The plan review process is designed to arrive at a credible, robust, and achievable plan that sees MHHS implemented as early as possible and preferably no later than the date set out in the existing Transition Timetable, which all programme parties are currently required to operate in accordance with.

• The programme looks forward to working with parties to challenge and identify opportunities to shorten the overall timelines in this plan in order to secure a swift introduction of MHHS and to allow the generation of the benefits that MHHS will bring, in particular for customers and in supporting broader activity to drive towards net zero.
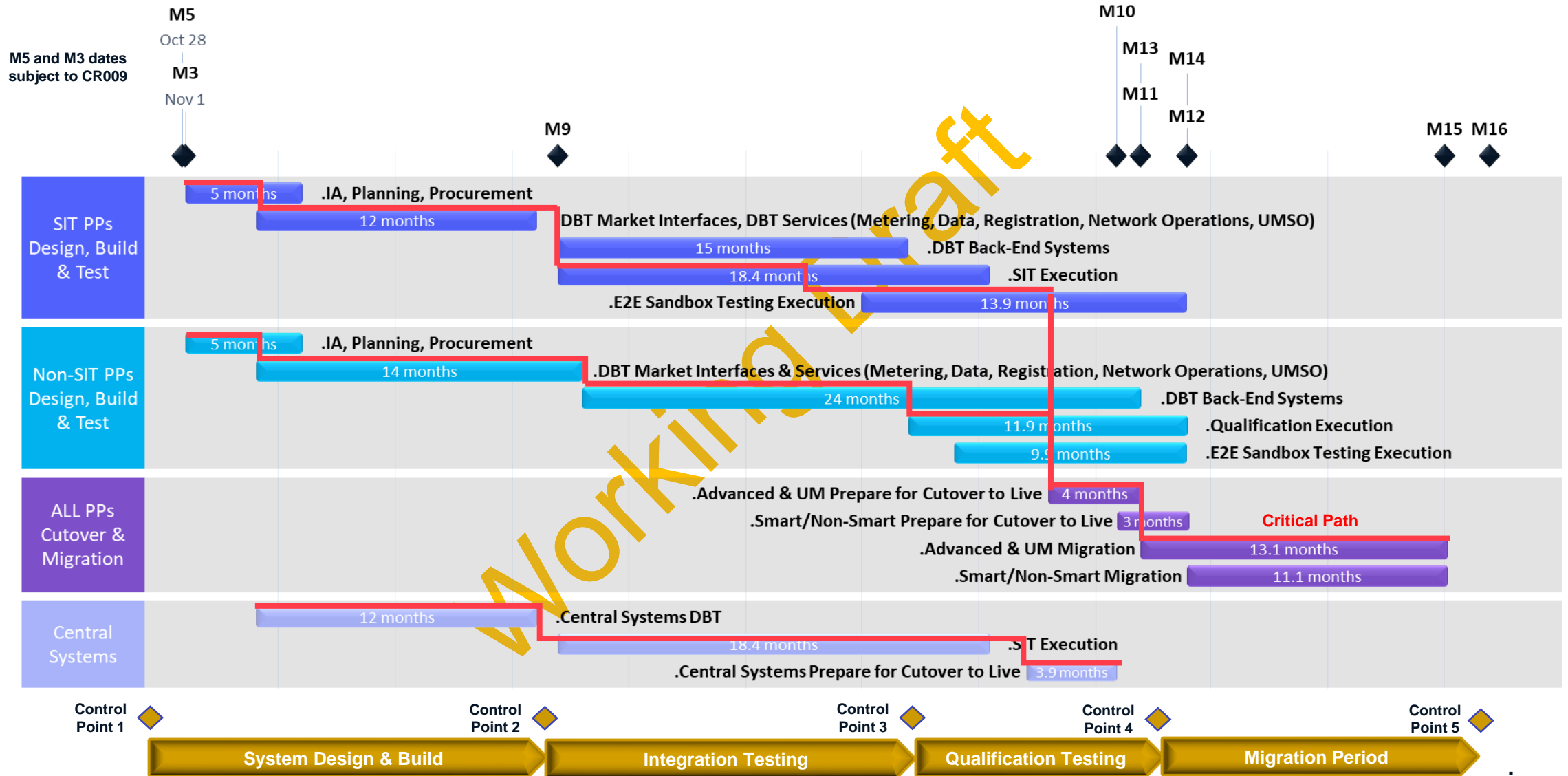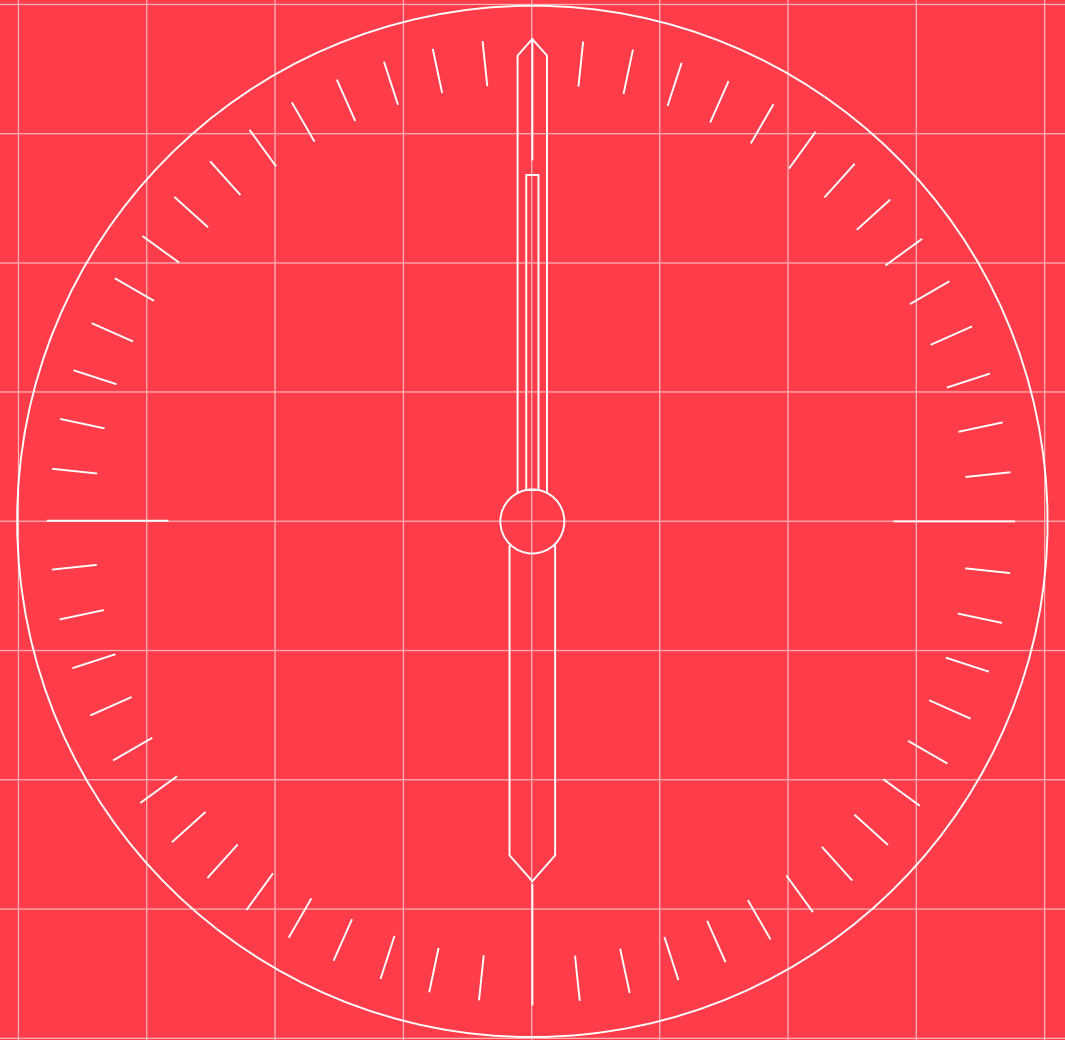
Overall Programme

PoaP – Overall Programme

M5
Oct 28

M5 and M3 dates subject to CR009

M3
Nov 1

M10

M13

M14

M11

M12

M9

M15 M16

SIT PPs Design, Build & Test

- 5 months — .IA, Planning, Procurement
- 12 months — DBT Market Interfaces, DBT Services (Metering, Data, Registration, Network Operations, UMSO)
- 15 months — .DBT Back-End Systems
- 18.4 months — .SIT Execution
- .E2E Sandbox Testing Execution — 13.9 months

Non-SIT PPs Design, Build & Test

- 5 months — .IA, Planning, Procurement
- 14 months — .DBT Market Interfaces & Services (Metering, Data, Registration, Network Operations, UMSO)
- 24 months — .DBT Back-End Systems
- 11.9 months — .Qualification Execution
- 9.9 months — .E2E Sandbox Testing Execution

ALL PPs Cutover & Migration

- .Advanced & UM Prepare for Cutover to Live — 4 months
- .Smart/Non-Smart Prepare for Cutover to Live — 3 months
- **Critical Path**
- .Advanced & UM Migration — 13.1 months
- .Smart/Non-Smart Migration — 11.1 months

Central Systems

- 12 months — .Central Systems DBT
- 18.4 months — .SIT Execution
- .Central Systems Prepare for Cutover to Live — 3.9 months

Control Point 1 — Control Point 2 — Control Point 3 — Control Point 4 — Control Point 5

System Design & Build | **Integration Testing** | **Qualification Testing** | **Migration Period**

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Planning RAID
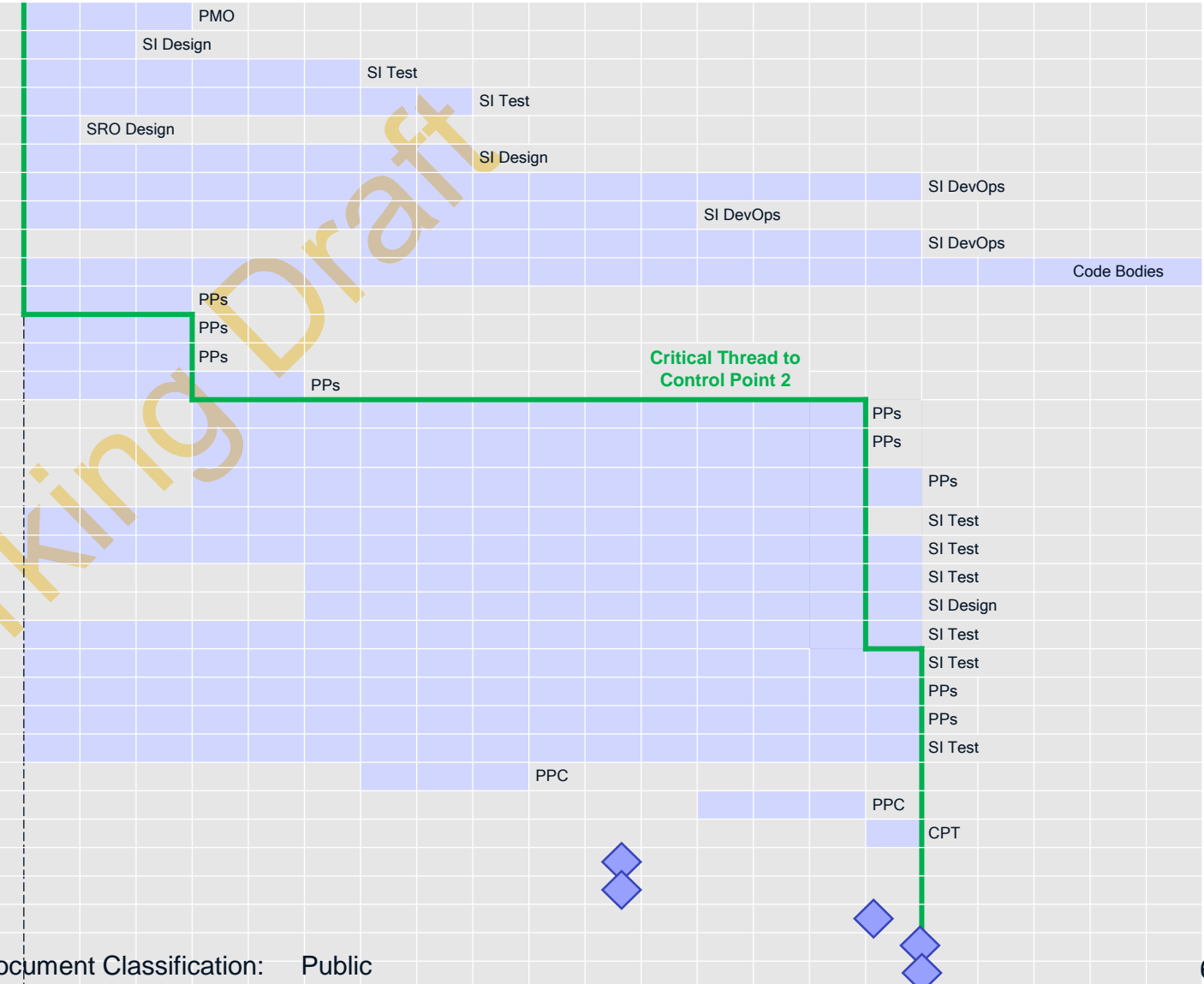## System Design & Build

PoaP – System Design, Build & Test

This draft is a working plan based on information available to MHHSP at the time of drafting. It has not been approved by Ofgem. It is an imperative to challenge and validate all assumptions in the draft with the aim of securing the earliest possible robust implementation date.

The plan review process is designed to arrive at a credible, robust, and achievable plan that sees MHHS implemented as early as possible and preferably no later than the date set out in the existing Transition Timetable, which all programme parties are currently required to operate in accordance with.

The programme looks forward to working with parties to challenge and identify opportunities to shorten the overall timelines in this plan in order to secure a swift introduction of MHHS and to allow the generation of the benefits that MHHS will bring, in particular for customers and in supporting broader activity to drive towards net zero.

Task	Start relative to M5 (months after M5)	Finish relative to M5 (months after M5)	Duration (months)
.Programme Re-Plan Baseline	0.0	2.9	2.9
.Design support for PPs	0.0	2.0	2.0
.Test Artefact Development and Publication	0.0	5.9	5.9
.Migration Artefact Development and Publication	0.0	7.0	7.0
.Migration Design Development and Publication	0.0	1.0	1.0
.PIT Stub Specification and Delivery	0.0	7.0	7.0
.SIT Stub Specification and Delivery	0.0	15.9	15.9
..Data Service Emulators	0.0	12.0	12.0
..UIT Test Stub Development - CSS & SMRS simulators	6.2	15.9	9.7
.Regulatory	0.0	20.8	20.8
.PP Mobilisation	0.0	3.0	3.0
.PP Impact Assessment	0.0	3.0	3.0
.PP Planning	0.0	3.0	3.0
.PP Software / Service Procurement	0.0	5.0	5.0
.Central Systems DBT	3.1	15.0	11.9
.SIT PP Market Interfaces & Services DBT (Metering, Data, Registration, Network Operations, UMSO)	3.1	15.0	11.9
.Non-SIT PP Market Interfaces & Services DBT (Metering, Data, Registration, Network Operations, UMSO)	3.1	15.9	12.8
.DBT Progress Monitoring of Central Systems	0.0	15.0	15.0
.DBT Progress Monitoring of PPs	0.0	15.9	15.9
.DBT Progress Monitoring of Consequential Change	5.1	15.9	10.8
'Design Assurance of PPs	5.1	15.9	10.8
.Test Assurance of PPs	5.1	15.9	10.8
.SI SIT Preparation	0.0	15.9	15.9
.PP SIT Preparation	0.0	15.9	15.9
.PP UIT Preparation	0.0	15.9	15.9
.SI UIT Preparation	0.0	15.9	15.9
.Readiness Assessment 3 - Design & Build Checkpoint	6.0	9.0	3.0
.Readiness Assessment 4 - Start of Integration & Test	12.3	15.3	3.0
.Control Point 2 Preparation	14.3	15.6	1.3
.MILESTONE M6 - Code change baselined	10.5	10.5	0.0
.MILESTONE M7 - Smart Meters Act powers enabled	10.5	10.5	0.0
.MILESTONE M9 - System Integration Testing Start	15.3	15.3	0.0
MILESTONE M8 - Code changes delivered	16.0	16.0	0.0
Control Point 2 - Start of Integration and Test	16.0	16.0	0.0

M5

Critical Thread to Control Point 2

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Planning Issues – System Design & Build Phase

RAG Statuses will change as the Consultation process proceeds

Issue	Theme	Planned resolving activities	Current Impact
DCC release (including SEC MP162) is required to deliver the functionality needed for MHHS and has been pushed back from November '23 to February '24 to allow for an extra round of consultation (due to add 2 months to the decision timetable)	Duration of Testing	• Continue to liaise with SEC and DCC about SIT timings and implications	Low
There will be consequential changes across electricity systems: Charging/Billing (DUBS), Registration (MPRS), Network Operations (LDSO) and UMS (LOCUS). Until full requirements are known, the changes required for each system and therefore, the build implications, are unknown	Back-End (Consequential) DBT	• Not in scope of the programme plan (other than to monitor the Participants' management of 'Back-End' DBT • Where the changes result in impact to non-settlement systems, this can be discussed at CCIAG, and the programme may suggest options for Participants, where possible • Programme plan to articulate how the programme will assess Participants' progress and readiness post-DBT and manage any related RAID items	Medium
Programme has not yet allocated an appropriate owner for Certificate Management	Roles and Resources	• Will either be addressed by the selection of the DIP Service Provider (who will do it), or Elexon will kick off a procurement for a provider	Low
Transition / Migration Design will not be ready by M5. This information influences Participant design due to the provisions that will need to be built to facilitate the migration window i.e., running new world and old-world processes within a single system / set-up	Participant DBT	• Re-plan is stating assumptions about the migration / go-live approach, and that approach should be agreed before the plan consultation is completed	High
The enduring Design Authority approach has not been documented	Governance	• Outline proposal has been drafted by the LDP for this, to be reviewed with Elexon SRO team	Low

There is no plan (or there is an immature plan) to manage impact	There is a plan to manage impact but with some uncertainty of outcome	There is a plan to manage impact and outcomes are predictable

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Planning Risks (1) – System Design & Build Phase

RAG Statuses will change as the Consultation process proceeds

Risk	Theme	Planned mitigating activities	Potential Impact
There is a risk that delivery timescale slippage may run into DSP re-procurement timescales, impacting DCC costs and delivery timescales for MP162	Duration of Testing	• Monitor the dependency and manage any related RAID items • DCC continue to report delivery monthly to PSG	Medium
Participant consequential change may not be clear at M5. These changes (which may be significant) may affect timing / size of Participant impact assessments and create risk of impact on overall Participant DBT	Back-End (Consequential) DBT	• Programme plan to acknowledge the period during which Participants will need to have conducted DBT of back-end systems – and articulate how the programme will assess Participants' progress and readiness post-DBT and manage any consequential change-related RAID items	Medium
A lack of clarity of the consequential change impact on Participants may affect quality of DBT outcomes	Back-End (Consequential) DBT	• Programme plan to acknowledge the period during which Participants will need to have conducted DBT of back-end systems – and articulate how the programme will assess Participants' progress and readiness post-DBT and manage any consequential change-related RAID items	Medium
Late delivery of test stubs / tools may delay the DBT activities of Participants	SI Testing Tools	• Plan contains clear milestones for development and delivery to test stubs	Low
Transition / Migration Design needs to be understood early – otherwise there is a risk of some Participants' DBT re-work (as it is assumed that some elements of the core design around change of agent/services will be re-used for migration)	Design	• Transition / Migration Design development is expected to be materially progressed in October, so that risk to the programme plan can be assessed before the plan is approved • If the migration / go-live approach is changed from that which exists (based on CCDG report and TOM), then there could be higher impact on the plan for DBT • This is to be resolved during the planning consultation period	Medium
Large number of core design artefacts for Participants to review (not including the full scope of the consequential change). Key information may be missed that may impact design decisions and subsequent DBT activities	Design	• This is mitigated by getting the remaining design artefacts out as early as possible, and by offering design playbacks and Q&A leading towards M5 • CCIAG is addressing consequential change-related matters	Low

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Planning Risks (2) – System Design & Build Phase

RAG Statuses will change as the Consultation process proceeds

Risk	Theme	Planned mitigating activities	Potential Impact
The baselined design may not be sufficient to draft required code changes and therefore code drafting could impact the baselined design	Code changes	• M5 Success Criteria related specifically to ability to draft code from the design • Post-M5 design Change Control process • Post-M5 CCAG process for identifying design queries and raising them to the design team	Low
Changes to the baselined design after M5 may change the approach to code drafting and implementation, and/or extend code drafting timelines	Code changes	• M5 Success Criteria • Post-M5 design Change Control process • Post-M5 CCAG process for actioning changes to the design as a result of any change requests	Low
Parties involved in code drafting and review may not dedicate sufficient resource to deliver drafting and review within given timescales and therefore code drafting may take longer than given	Code changes	• Resource requirement defined and agreed with relevant parties in advance of M5 • Resource position of relevant parties transparently shared ahead of M5	Medium
If adapters are required, the plan may need to allow additional time to procure and test adapter service	Participant DBT	• This will be important to assess during the planning consultation exercise	Medium
It may not be known how long build will take until detailed design complete and IT vendors have confirmed their plans – Participants may not have E2E view until all component plans have been defined	Participant DBT	• DBT timescales in the plan should plan contingency to mitigate this risk – should be part of dialogue during planning consultation • Programme should consider checkpoints in relation to this	Medium
Participants' pre-emptive requirements gathering / design work could be disrupted if there are any major changes to the design as a result of industry consultation	Participant DBT	• Given the consultative nature of the development of the design, there will be no further consultation. No red flags on the design are being raised, so the risk of rework is seen as low	Low
When Participants undertake their design, issues in the core design baseline may be identified, which could result in re-work / increased complexity	Participant DBT	• Design change control process to triage and impact assess all proposed changes post M5 to control how issues are managed	Low

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Planning Risks (3) – System Design & Build Phase

RAG Statuses will change as the Consultation process proceeds

Risk	Theme	Planned mitigating activities	Potential Impact
DIP service provider may not be able to align with MHHS timelines	3rd Parties	• Proposed delivery plans from DIP bidders are a key part of the selection process	Low
Programme test environments may not be available to support Participant testing, when required	Environments	• Early development of the Environment Approach & Plan before M5 is specifically to mitigate this risk	Low
Risk from lack of clarity on the data migration / cleansing approach / plan, and scope of activities required to be done by technical service providers such as St Clements and DNOs	Data	• Relates to CP1558 • Agree ownership for the activities, and therefore also the plan	Medium

There is no plan (or there is an immature plan) to manage impact	There is a plan to manage impact but with some uncertainty of outcome	There is a plan to manage impact and outcomes are predictable

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Planning Assumptions (1) – System Design & Build Phase

RAG Statuses will change as the Consultation process proceeds

Assumption	Theme	Commentary	Assumption Uncertainty
The migration and go-live approach – and the related Transition / Migration Design is generally aligned with the recommendations of CCDG (with the exception that for the start of migration for each segment, all participants in that segment will be ready to accept MPANs under the new arrangements	Participant DBT	• Transition / Migration Design development is expected to be materially progressed in October, so that risk to the programme plan can be assessed before the plan is approved • If the migration / go-live approach is changed from that which exists, then there could be higher impact on the plan for DBT • This is to be resolved during the planning consultation period (Round 1)	High
Participant High-Level Impact Assessment (HLIA) is a prerequisite for Participant detailed design	Participant DBT	• Participant HLIA is the first activity to be complete in the DBT phase (if not already completed) • Participants should be able to start HLIA (if they have not already started or completed this) once all design artefacts are available (Phase 1 of design delivery plan)	Medium
Participants will develop their own PIT plans	Participant DBT	• This will be clear in the proposed plan, via SI assurance activities • SI will make available the PIT exit criteria	Low
LDP (SI) will assure designs for all participants	Participant DBT	• This will be clear in the proposed plan, via SI assurance activities • Assurance will be greater / deeper on key central parties	Low
LDP (SI) will assure Participants' PIT activities for all SIT participants and selected non-SIT participants	Participant DBT	• This will be clear in the proposed plan, via SI assurance activities	Low
DIP service provider delivery plan will align to the required MMHS DBT timelines	3rd parties	• Expected DIP provider delivery plan is shown in the plan	Medium
There may be a need for adapter(s) due to unique system infrastructure and operational requirements	3rd parties	• Engagement on a provider basis may help make the plan and its execution more efficient	Medium
Testing tools (simulators, emulators, generators) will be available as required for Participant DBT	SI Testing Tools	• Plan contains clear milestones for development and delivery to test stubs	Low

The assumption is likely to change	The assumption may change	The assumption is unlikely to change

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Planning Assumptions (2) – System Design & Build Phase

RAG Statuses will change as the Consultation process proceeds

Assumption	Theme	Commentary	Assumption Uncertainty
Ofgem will use the Smart Metering Act to direct the Code bodies to make the all changes to the Code	Code Changes	• M7 and all subsequent Ofgem-owned activities to M8	Low
Code bodies – and the core programme team - will dedicate enough resource to deliver code changes within the timescales of the code draft plan	Code Changes	• All activities under M6, M7 and M8	Medium
Any changes to the design via the Programme's change control process and subsequent changes required to industry codes can be managed within timeframes in the code draft plan	Code Changes	• All activities under M6, M7 and M8	Medium
Any MHHS-related code changes required after MHHS code changes are implemented (M8) will be managed by the relevant code	Code Changes	• No activities proposed	Medium
Transition text code drafting can take place in each topic area without a baselined Transition / Migration design. The baselined Transition / Migration design is only required for the last code draft topic area dedicated to transition text	Code changes	• Transition text code drafting under each code draft topic area • Final transition text code draft topic area	Medium
A code release to remove old text and transition text following go-live will be led by individual codes and falls outside the scope of the Programme plan (the Programme has no obligation to remove old and transition text)	Code Changes	• A final 'house-keeping' code release • All topic area drafting of transition text in code and subsidiary documents	Low

The assumption is likely to change	The assumption may change	The assumption is unlikely to change

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Planning Assumptions (3) – System Design & Build Phase

RAG Statuses will change as the Consultation process proceeds

Assumption	Theme	Commentary	Assumption Uncertainty
Code changes may be drafted based entirely on core design artefacts available at M5 and once subsequent impact assessment of the design has been completed by code bodies	Code Changes	• Approval of M5, using published acceptance criteria • Code body impact assessment • All drafting of code and subsidiary documents	Low
Ofgem will be able to deliver all activity required for M7 (to enact SMAP) and then consult and make a decision to implement code changes for the planned release date	Code Changes	• All Ofgem-owned activities ahead of and following M7	Low
The Programme will deliver all required code drafting (including subsidiary documents) to the BSC	Code Changes	• All topic area drafting of code and subsidiary documents	Low
The code draft resource model and approach to code drafting and review cycles means that drafting of one topic area can occur in parallel with the review of another	Code Changes	• All activities under each code draft topic area across drafting and review cycles	Low
Performance assurance and data cleansing fall outside the scope of the CCAG and does not need to be considered in the code draft plan	Code Changes	• No activities proposed	Low
Ofgem can specify a code implementation date that is within 56 days of their decision (assuming the implementation date has been included as part of their consultation)	Code changes	• Ofgem consultation and decision • M8 (code implementation)	Low
Code draft changes will be directed by BSC and REC (these are the codes with the largest changes). Changes to BSC and REC will inform changes to other codes, and these can be delivered at the same time as BSC and REC changes	Code Changes	• All topic area drafting of code and subsidiary documents	Low
Drafting can begin against the code draft plan before the programme re-plan is approved	Code Changes	• All activities under M6, M7 and M8	Low
Old code text will run in parallel with new code text during migration - transition text will be required to refer between the two	Code Changes	• All topic area drafting of transition text in code and subsidiary documents • Transition text code drafting topic area	Low

The assumption is likely to change	The assumption may change	The assumption is unlikely to change

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Planning Dependencies (1) – System Design & Build Phase

RAG Statuses will change as the Consultation process proceeds

Dependency	Theme	Impacting Milestone or Activity	Impacted Milestone or Activity	Manageable?
Security policy / design should be defined and in place for the design baseline (M5)	Design			Yes
DBT cannot complete unless Central Parties (central capabilities) are ready for SIT – i.e. DIP, Elexon Central Services, DCC, LDSOs (MPRS), Electralink (DTN)	Participant DBT		M9	Yes
Participants' DBT is dependent on the E2E design providing detail of data items and PKI / security requirements, etc.	Participant DBT			Yes
Participants need to form their own understanding of the consequential change implications of the E2E design	Back-End (Consequential) DBT			Yes
Participant execution of their DBT requires the relevant testing tools (simulators, emulators, generators) to be available as required	SI Testing Tools			Yes
A final consultation will be required by the Programme on all drafted code before it is submitted to Ofgem (to enact via SMAP)	Code Changes	Final Programme consultation on MHHS code changes	M6	Yes
M7 is dependent on a trigger being raised to Ofgem to enact SMAP	Code Changes	MHHS trigger to Ofgem to enact SMAP	M7	Yes
Code releases to deliver MHHS code changes are dependent on activation of the Smart Meters Act powers	Code Changes	M7	M8	Yes
Code drafting can only begin once the design has been baselined and subsequent impact assessment of the design has been completed by Code Bodies	Code Changes	M5 and subsequent Code Body impact assessment	Start of M6 activity	Yes
Code releases to deliver MHHS code changes are dependent on the industry code release schedule (3 releases / year), unless an extraordinary release is planned	Code Changes	Industry code release windows	M8	Yes

There is no clear plan to manage dependency yet	There is an outline plan to manage dependency	There is a clear plan to manage dependency

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Planning Dependencies (2) – System Design & Build Phase

RAG Statuses will change as the Consultation process proceeds

Dependency	Theme	Impacting Milestone or Activity	Impacted Milestone or Activity	Manageable?
The strategy and approach to qualification, migration and transition needs to be completed and approved before code drafting for these areas can finalised	Code Changes	Qualification, migration and transition strategy/approach	Qualification, migration and transition code drafting (drafting activities under M6)	Not yet
The Transition / Migration design needs to be baselined for code drafting of transition text to be finalised	Code changes	Delivery of the Transition / Migration design	M6 code draft activities: the 'soft start' drafting of transition text within each code draft topic area, and the final transition text topic area	Yes
DIP PKI defined and published for Participants to be able to design and build DIP security requirements for signing and validating messages to / from DIP	3rd Parties			Yes
Confirmation of DTN changes required for new market roles (e.g. SDS to be able to access the continuing DTN flows that are part of MHHS design)	3rd Parties			In process

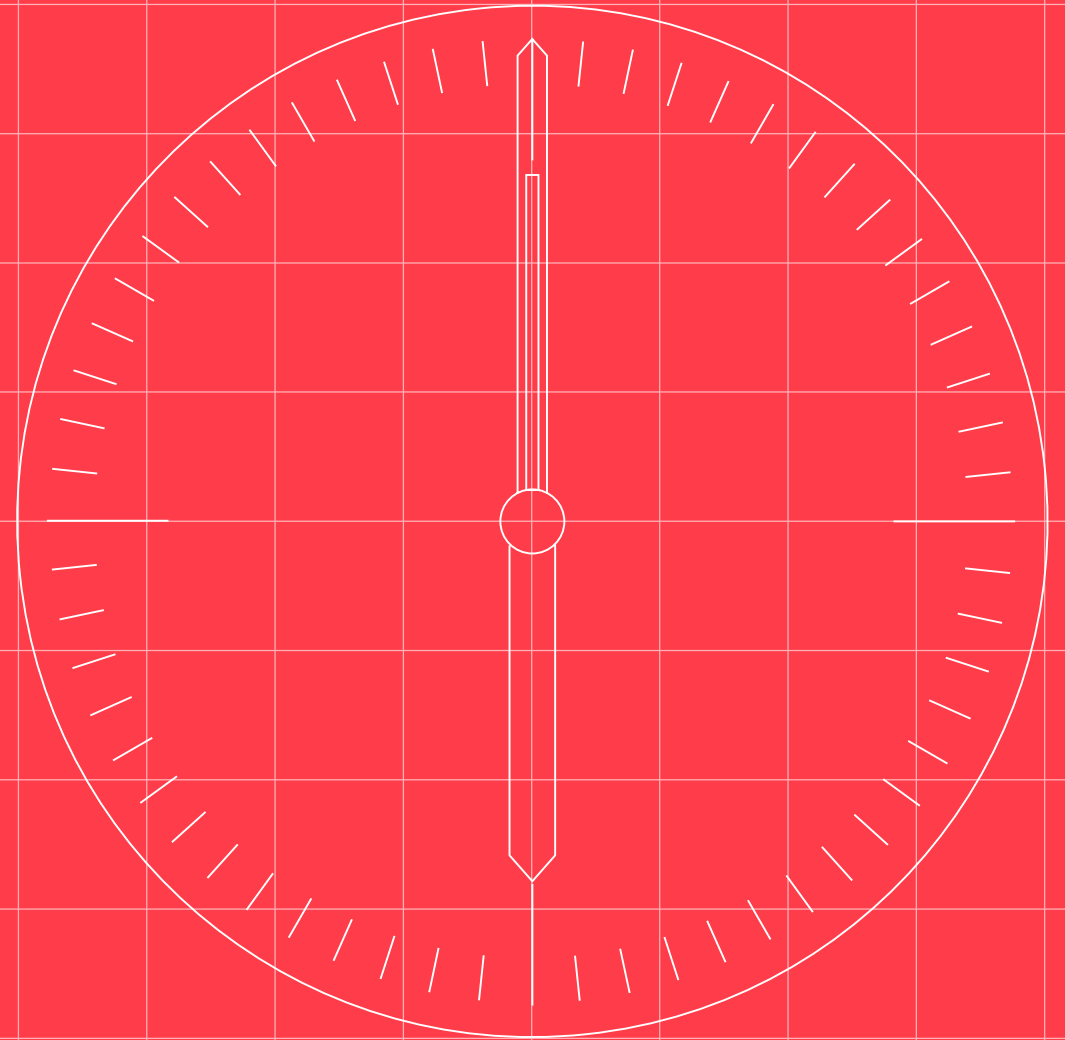| There is no clear plan to manage dependency yet	There is an outline plan to manage dependency	There is a clear plan to manage dependency

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Planning RAID
Integration Testing

PoaP – Integration Testing Phase

Task	Start relative to M5 (months after M5)	Finish relative to M5 (months after M5)	Duration (months)
.Non-SIT PP Market Interfaces & Services (Metering, Data, Registration, Network Operations, UMSO) DBT	16.0	17.0	1.0
.SIT PP Back-End Systems DBT	16.0	31.0	15.0
.Non-SIT PP Back-End Systems DBT	17.0	31.0	14.0
.SI SIT Preparations	16.0	21.0	5.0
.SI UIT Preparations	16.0	16.9	0.9
.SIT Execution	16.0	31.0	15.0
.PP UIT Preparation	16.0	29.0	13.0
.PPS E2E Sandbox Execution	29.0	31.0	2.0
.PP Pre-Qualification Assurance	25.1	31.0	5.9
.PP Support of Pre-Qualification Assurance	25.1	31.0	5.9
.DBT Progress Monitoring of PPs	16.0	31.0	15.0
.DBT Progress Monitoring of Consequential Change	16.0	31.0	15.0
.Design Assurance of PPs	16.0	31.0	15.0
.Test Assurance of PPs	16.0	31.0	15.0
.Migration Period Planning	16.0	31.0	15.0
.Regulatory	19.9	19.9	0.0
.Support PAB in Qualification Setup	25.1	31.0	5.9
.Control Point 3 Preparations	29.2	30.5	1.3
.Readiness Assessment 5-Design & Build Checkpoint 2	18.2	21.2	3.0
.Readiness Assessment 5 - Start of Qualification	27.5	30.5	3.0
.Control Point 3 - Start of Qualification	30.5	30.5	0.0

M5+16

Critical Thread to Control Point 3

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Planning Issues – Integration Testing Phase

RAG Statuses will change as the Consultation process proceeds

Issue	Theme	Planned resolving activities	Current Impact
Systems Integration Testing is on the programme's critical path – and its duration is not yet validated	Duration of Testing	• MHHSP to conduct quantitative assessment of MHHS design complexity / size and compare with that of Faster Switching or any other suitable benchmarks. Then the current estimated duration of SIT may be better contextualised and validated	High

There is no plan (or there is an immature plan) to manage impact	There is a plan to manage impact but with some uncertainty of outcome	There is a plan to manage impact and outcomes are predictable

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Planning Risks – Integration Testing Phase

RAG Statuses will change as the Consultation process proceeds

Risk	Theme	Planned mitigating activities	Potential Impact
There is a risk that Ofgem do not approve SEC Mod P162 with the currently proposed solution in the currently planned timescales or there is a delay to approval whilst the competition issue escalated to IPA from Independent Agents is considered	Testing Duration	• IPA to review escalation and provide a view to Ofgem and the Programme on the issue raised and action required to resolve the issue, if any • MHHSP to discuss implications with SECAS and DCC to prepare for any impact and replanning • DAG to agree position on applying the "level playing field" principle to Mod MP162	High
There may not be enough volunteers to participate in Systems Integration Testing (SIT)	Resources	• The plan needs to clarify all SIT requirements and activities • The fact that qualification testing will not be required of SIT participants, needs to be formally confirmed • Benefits of SIT need to be communicated to all Participants • SIT should be set up in order that it may be executed with few Participants (where risk is manageable) • Mandatory participation may need to be considered as a contingency • Participant test stubs or proxies may also be considered as contingency plans	High
SIT participants may have to be dropped from SIT participation prior to Component Integration Testing commencement, if either: - they have not reached a sufficient point of progress in their independent DBT activities or - they decide not to participate after all	Resources	• Identify likely SIT volunteers during re-plan process • In the programme plan, clarify when Participants must decide about SIT participation • SI assurance activities should provide adequate early warning of potential issues in Participant DBT progress • There needs to be contingency in the list of expected SIT volunteers • Timescales for Participant DBT (for SIT participants) need to be realistic • Incentives or benefits for SIT participation need to be clear (as do disincentives – and how these might be removed) • Identify criteria for mandatory SIT participation, should this be required	Medium
Some participants may decide that adapters are required, and in such cases the plan may need to allow additional time to integrate any adapter services	Scope	• Capture specific risks in the baseline plan and identify any potential contingency • Participants to identify at the earliest opportunity, whether adapters are envisaged	Medium

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Planning Assumptions – Integration Testing Phase

RAG Statuses will change as the Consultation process proceeds

Assumption	Theme	Commentary	Assumption Uncertainty
All Central Parties (those who will be providing core capabilities for MHHS) are mandatory participants in SIT – DIP, Elexon Central Services, DCC, LDSOs (MPRS), Electralink (DTN)	Roles & Resources	• This makes the SIT readiness of these Participants a critical path item for the plan	Low
All other SIT participants are voluntary	Roles & Resources	• Whilst this assumption is per the current Ofgem plan, it may need to be revisited depending on Participants' appetite to be a SIT party	Medium
If Participants have completed SIT, they do not need to complete Qualification Testing	Scope	• Participants are likely to expect written confirmation of this	Low
Participants will undertake their own data cleansing	Data		Low
Timing of delivery of test stubs / tools will not delay planned SIT activities	SI Testing Tools	• Plan contains clear milestones for development and delivery to test stubs	Low

The assumption is likely to change	The assumption may change	The assumption is unlikely to change

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Planning Dependencies – Integration Testing Phase

RAG Statuses will change as the Consultation process proceeds

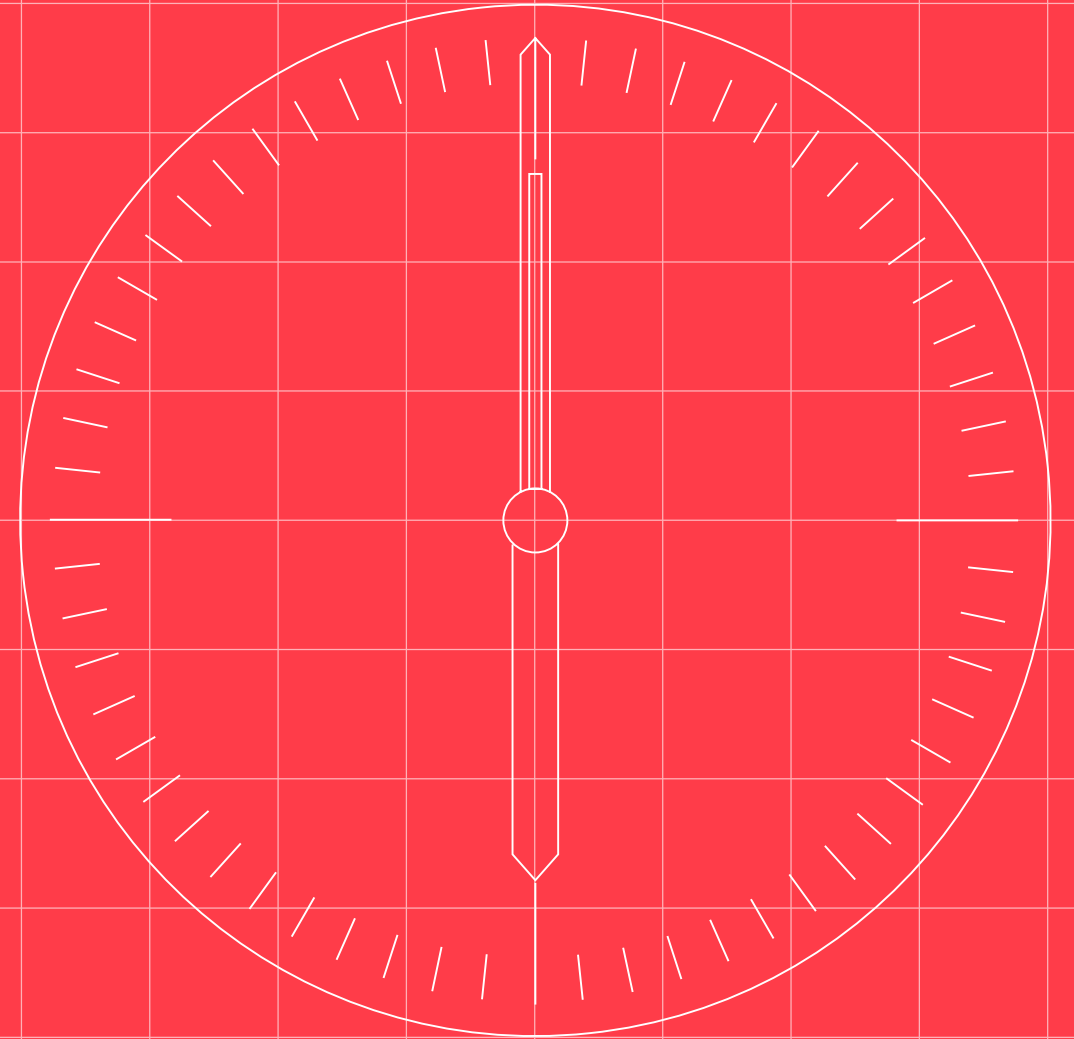| Dependency	Theme	Impacting Milestone or Activity	Impacted Milestone or Activity	Manageable?
A CR to update the CSS is needed (to enable CSS to receive and send on, to the DSP, registration details for the new SDS Provider) – and for it to be processed sufficiently in advance of SIT (REC CP R0044)	External dependency		System Integration Testing Start – M9	Yes
SEC MP162 - SEC changes required to deliver MHHS	External dependency	MP162 delivered (DCC)	Central systems ready for migrating MPANs - M10	Not yet
Establishment and configuration of MDR role to allow suitable access to smart meters (MP162 and REC CP R0044-dependent) needs to be in place at the appropriate point in Component Integration Testing in SIT	External dependency	MP162 delivered (DCC)	System Integration Testing Start – M9	Not yet
Data cut for SIT is dependent on the implementation of Supplier Meter Registration Service (SMRS) system changes relating to CP1558 - 'New Registration data items to facilitate MHHS'.	External dependency			In process
Participant provision of adequate data cuts is required in advance of the start of related testing	Data			Yes
The Programme and all data providers must complete and / or participate in DPIAs before data cuts can be extracted from their systems and shared	Data			Yes
Participants are dependent on the programme to provide required information to make their decision on SIT participation	Roles & Resources			Yes

There is no clear plan to manage dependency yet	There is an outline plan to manage dependency	There is a clear plan to manage dependency

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Planning RAID

Qualification Testing

PoaP – Qualification Testing Phase

Task	Start relative to M5 (months after M5)	Finish relative to M5 (months after M5)	Duration (months)		
.Non-SIT PP Back-End Systems DBT	31.1	41.0	9.9		PPs
.SIT Execution	31.1	35.6	4.5	SI Test / Critical Thread to Control Point 4	
.Qualification Part 1 Test Execution (Market Interfaces & Services) (likely to be tranched)	31.1	41.0	9.9		PPs
.Qualification Part 2 Test Execution (Supplier Back-End Systems & Processes)	31.1	41.0	9.9		PPs
.PPs E2E Sandbox Execution	31.1	41.0	9.9		PPs
.Central Systems Prepare for Cutover to Live	36.1	39.9	3.8		PPs
.Advanced & UM Prepare for Cutover to Live	37.1	41.0	3.9		PPs
.Smart/Non-Smart Prepare for Cutover to Live	40.0	41.0	1.0		PPs
.PP Business Change	31.1	41.0	9.9		PPs
.Support for PP Business Change	31.1	41.0	9.9		PPC
.Migration Period Planning	31.1	41.0	9.9		SI
.PP Readiness Assessment 7 - Start of Migration	37.6	40.6	3.0		PPC
.Control Point 4 Preparation	39.2	40.6	1.4		CPT
.Milestone M10 - Central Systems Ready for Migrating MPANs	40.0	40.0	0.0		
.Milestone M11 - Start of 1 Year Migration for UMS/Advanced	41.0	41.0	0.0		
.Milestone M13 - Load Shaping Service Switched On	41.0	41.0	0.0		
.Control Point 4 - Start of Migration	40.6	40.6	0.0		

M5+31

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Planning Issues – Qualification Testing Phase

RAG Statuses will change as the Consultation process proceeds

Issue	Theme	Planned resolving activities	Current Impact
Roles and responsibilities for management of Qualification Testing are not yet fully agreed	Roles & Resources	• Programme is discussing this with code bodies to agree roles and responsibilities	Medium

There is no plan (or there is an immature plan) to manage impact	There is a plan to manage impact but with some uncertainty of outcome	There is a plan to manage impact and outcomes are predictable

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Planning Risks – Qualification Testing Phase

RAG Statuses will change as the Consultation process proceeds

Risk	Theme	Planned mitigating activities	Potential Impact
The scope of Qualification Testing (QT) is not yet clear. If Participants must conduct full testing (rather than a re-qualification), this may impact the required overall duration currently in the plan (12 months) and cause the window to need to be longer	Scope of testing	• Programme is discussing this with code bodies to agree scope	Medium
The time taken for each Participant to go through Qualification Testing may be a significant proportion of the overall window allowed – meaning that Elexon BSC may not have the capacity to manage the volume of Participants going through testing at any one time	Duration of testing	• Dependent on scope clarification • Programme is discussing this with code bodies to agree roles and responsibilities	High

There is no plan (or there is an immature plan) to manage impact	There is a plan to manage impact but with some uncertainty of outcome	There is a plan to manage impact and outcomes are predictable

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Planning Assumptions – Qualification Testing Phase

RAG Statuses will change as the Consultation process proceeds

Assumption	Theme	Commentary	Assumption Uncertainty
All Qualification testing can be carried out within the 12-month window currently outlined in the Ofgem Transition Timetable	Roles & Resources	• All Participants are ready on time to start Qualification Testing • Clarify scope of testing • Identify maximum volume of Participants that may go through Qualification Testing based on available capacity of the Elexon BSC team • Look at alternative or hybrid options – e.g. MHHSP taking some responsibility for Qualification Testing management (but not accountability)	High
Elexon BSC team will manage Qualification Testing and has the capability and capacity to do so	Roles & Resources	• As above	High
Tranching will be required in Qualification Testing	Testing Approach	Tranching options / criteria being discussed: • By portfolio: Smart, Non-Smart, Advanced, Unmetered • By supplier size / constituency group Considerations for tranching: • Fair mechanism • Approach on Faster Switching (which worked well) • Risk that Suppliers require maximum amount of time to qualify, resulting in backlog in final tranche • Participant pairing (e.g. Suppliers and agents) - is the successful test execution of a unique combination of supplier and agent considered representative of suppliers with the same combination?	Medium
If Participants have completed SIT, they do not need to complete Qualification Testing	Scope	• Participants are likely to expect written confirmation of this	Low
Go-live preparation activities can be conducted in parallel to Qualification Testing (for Participants in later tranches)	Readiness for Go-Live	• If this assumption is not reliable, the overall programme timeline could be negatively impacted	Medium

The assumption is likely to change	The assumption may change	The assumption is unlikely to change

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Planning Dependencies – Qualification Testing Phase

RAG Statuses will change as the Consultation process proceeds

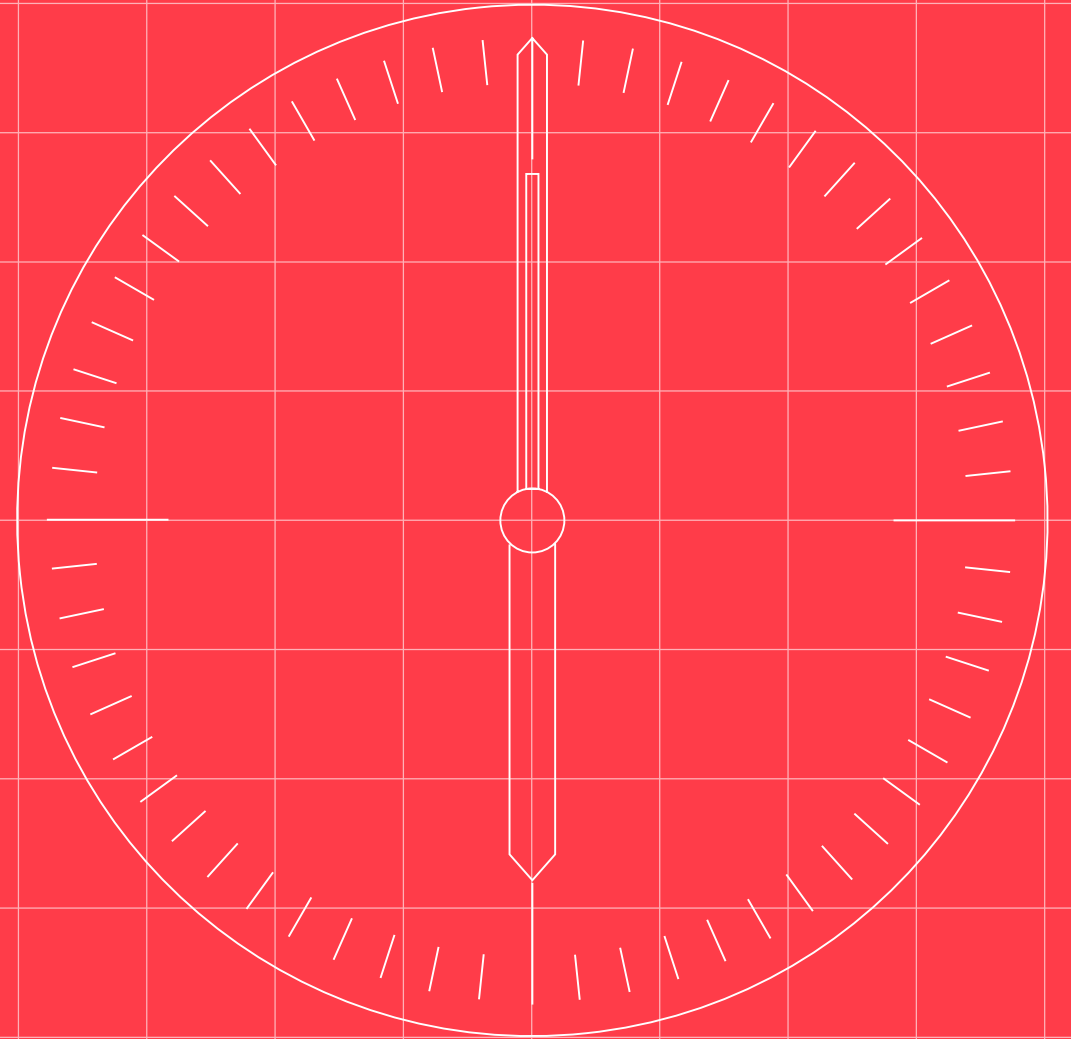| Dependency	Theme	Impacting Milestone or Activity	Impacted Milestone or Activity	Manageable?
Quality of Programme reporting on Qualification Testing progress is dependent on information provided by the PAB	External dependency			Yes
A Test Approach and Plan document is required for each test stage to define the test stage-specific data cut requirements for Participants, if any	Data			Yes
Participant provision of adequate data cuts is required in advance of the start of related testing	Data			Yes
The Programme and all data providers must complete and / or participate in DPIAs before data cuts can be extracted from their systems and shared	Data			Yes

There is no clear plan to manage dependency yet	There is an outline plan to manage dependency	There is a clear plan to manage dependency

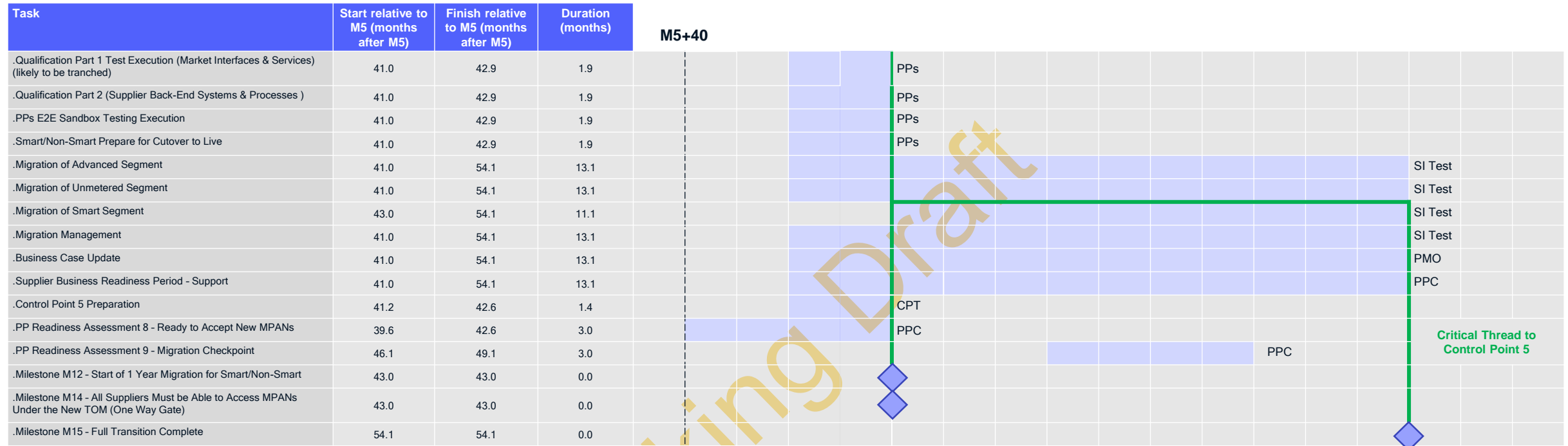**MHHS PROGRAMME**
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Planning RAID

Migration

PoaP – Migration Phase

Task	Start relative to M5 (months after M5)	Finish relative to M5 (months after M5)	Duration (months)		
.Qualification Part 1 Test Execution (Market Interfaces & Services) (likely to be tranched)	41.0	42.9	1.9	PPs	
.Qualification Part 2 (Supplier Back-End Systems & Processes)	41.0	42.9	1.9	PPs	
.PPs E2E Sandbox Testing Execution	41.0	42.9	1.9	PPs	
.Smart/Non-Smart Prepare for Cutover to Live	41.0	42.9	1.9	PPs	
.Migration of Advanced Segment	41.0	54.1	13.1		SI Test
.Migration of Unmetered Segment	41.0	54.1	13.1		SI Test
.Migration of Smart Segment	43.0	54.1	11.1		SI Test
.Migration Management	41.0	54.1	13.1		SI Test
.Business Case Update	41.0	54.1	13.1		PMO
.Supplier Business Readiness Period - Support	41.0	54.1	13.1		PPC
.Control Point 5 Preparation	41.2	42.6	1.4	CPT	
.PP Readiness Assessment 8 - Ready to Accept New MPANs	39.6	42.6	3.0	PPC	
.PP Readiness Assessment 9 - Migration Checkpoint	46.1	49.1	3.0		PPC
.Milestone M12 - Start of 1 Year Migration for Smart/Non-Smart	43.0	43.0	0.0		
.Milestone M14 - All Suppliers Must be Able to Access MPANs Under the New TOM (One Way Gate)	43.0	43.0	0.0		
.Milestone M15 - Full Transition Complete	54.1	54.1	0.0		

M5+40

Critical Thread to Control Point 5

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Planning Issues – Migration Phase

RAG Statuses will change as the Consultation process proceeds

Issue	Category	Planned resolving activities	Current Impact
Migration / Go-live approach informed by CCDG (and the TOM) is not currently workable without clarification	Design	• MHHSP to provide options to Ofgem for migration and go-live, and to agree how any preferred option may be consulted on, or otherwise settled • Important to conclude this matter whilst planning consultation is active (in Round 1), so that any impact can be managed via adjustment to the programme plan	High

There is no plan (or there is an immature plan) to manage impact	There is a plan to manage impact but with some uncertainty of outcome	There is a plan to manage impact and outcomes are predictable

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Planning Risks – Migration Phase

RAG Statuses will change as the Consultation process proceeds

Risk	Category	Planned mitigating activities	Potential Impact
Given that the Migration / Go-live approach informed by CCDG (and the TOM) may not be workable without clarification, the existing planning assumptions for the programme plan may become invalid – which could affect multiple elements of the plan	Migration Approach	• MHHSP to provide options to Ofgem for migration and go-live, and to agree how any preferred option may be consulted on, or otherwise settled • Important to conclude this matter whilst planning consultation is active (in Round 1)	High
Certain outcomes of the discussion to confirm the Migration / Go-Live approach might mean that there is no incentive for Participants to reach migration readiness at the earliest opportunity	Migration Approach	• As part of the above-mentioned mitigating activity, programme plan adjustments may need to be made and included in the planning consultation (in Round 1)	High
Certain outcomes of the discussion to confirm the Migration / Go-Live approach might mean that there may be some constraint of consumer choice until milestone M14 is reached	Migration Approach	• As part of the above-mentioned mitigating activity, programme plan adjustments may need to be made and included in the planning consultation (in Round 1)	High
Certain outcomes of the discussion to confirm the Migration / Go-Live approach might mean that the Transition / Migration design and / or Participants' designs may need to be adjusted to accommodate 'reverse migration' (allowing consumers to move from HH to non-HH arrangements) between the start of migration and M14	Migration Approach	• As part of the above-mentioned mitigating activity, programme plan adjustments may need to be made and included in the planning consultation (in Round 1)	High

There is no plan (or there is an immature plan) to manage impact	There is a plan to manage impact but with some uncertainty of outcome	There is a plan to manage impact and outcomes are predictable

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Planning Assumptions – Migration Phase

RAG Statuses will change as the Consultation process proceeds

Assumption	Category	Commentary	Assumption Uncertainty
The currently-proposed 'strawman' (draft) programme plan assumes that there will be no requirement to change the design to accommodate 'reverse migration' (allowing consumers to move from HH to non-HH arrangements) between the start of migration and M14. Nor will there be need to add design for prohibiting the movement from the new arrangements back to the old. The fundamental understanding upon which the plan is based, is that the MHHS Target Operating Model (TOM) being delivered by this programme is based on recommendations from the Code Change and Development Group (CCDG) report on "Transition Consultation on Market-Wide Half Hourly Settlement" dated 5th July 2021, with the exception that at the start of migration for each segment, all participants must be able to accept new MPANs under the new arrangements. This is because there are issues associated with either allowing an MPAN to switch from the new HH arrangements to the old arrangements or with prohibiting this from happening. This is the subject of active debate within the programme. It is therefore assumed M12 and M14 are co-incident, which is not fully in line with the sequence of activities outlined in the Ofgem Transition Timetable – where Smart migration is also allowed before M14.	Migration Approach	• See 'Risks' and 'Issues'.	High

The assumption is likely to change	The assumption may change	The assumption is unlikely to change

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Planning Dependencies – Migration Phase

RAG Statuses will change as the Consultation process proceeds

Dependency	Category	Impacting Milestone or Activity	Impacted Milestone or Activity	Manageable?
Migration start is dependent on completion of the data cleansing activity that must be carried out following the implementation of system changes relating to CP1558 - 'New Registration data items to facilitate MHHS' and R0032 New Registration data items and processes - to support the transition to Market-wide Half-Hourly Settlement (MHHS)	Data			Yes
Implementation of mods P432 and P434 (recommendation from CCDG to ease the migration load on Suppliers to move CT meters to HH ahead of the MHHS migration window) is required before migration start	External Dependency			Not yet

There is no clear plan to manage dependency yet	There is an outline plan to manage dependency	There is a clear plan to manage dependency

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