

Programme Steering Group #15 07 December 2022

Version 1.0

MHHS-DEL770

Public

Agenda (1 of 2)

#	Item	Objective	Туре	Lead	Time	Page
1	Welcome			Chair	10:00-10:05 5 mins	
2	Minutes and actions review	Approve November minutes. Update on actions, closing where appropriate	Decision	Chair and Secretariat	10:05-10:10 5 mins	4
3	Sponsor update	Hear key messages from the Programme Sponsor	Information	Ofgem Sponsor (Rachel Clark)	10:10-10:15 5 mins	7
4	Migration Options Decision	Review outputs of the Migration Options Programme Participant Information Request (PPIR) and make a decision on a Migration Option	Decision	Programme (Jason Brogden)	10:15-10:30 <i>15 mins</i>	9
5	M3 next steps	 Review and agree updated M3 Acceptance Criteria Review the engagement plan for Participants that did not submit evidence in Readiness Assessment 2 	Decision	Programme (Keith Clark)	10:30-10:40 10 mins	25
6	M9 update	Provide an update on the status and timelines of M9	Discussion	Programme (Chris Harden)	10:40-10:50 10 mins	27
7	Interim Plan	 Review the updated Interim Plan highlighting the timelines and approach for delivering the replan and the plan for delivering the migration design Provide the status of the replan to inform the decision on moving to Round 3 of consultation Make a decision whether to approve the interim plan and start Round 3 of consultation 	Decision	Programme (Giles Clayden)	10:50-11:05 15 mins	29
	Change control:	Review the outputs of CR012 (code drafting scope CR) Impact Assessment and make a decision whether to accept or reject the Change Request	Decision	Programme (Jason Brogden), Chair	11:05-11:20	25
8	CR012 and CR013	Review CR013 (commercial impacts CR) and make a decision whether to raise the Change Request to Impact Assessment	Decision	I&C Supplier Representative (Gareth Evans), Chair	15 mins	35



Agenda (2 of 2)

#	Item	Objective	Туре	Lead	Time	Page
9	Control Point 1	Provide a summary of the outputs of the Programme Control Point 1 review	Information	Programme (Keith Clark), IPA	11:20-11:30 <i>10 mins</i>	39
10	DIP enduring mod	Provide an overview of Data Integration Platform (DIP) enduring modification	Information	BSCCo (James Stokes)	11:30-11:40 <i>10 mins</i>	42
11	Design progress	Update on progress of the M5 Work-Off Plan and the migration design	Information	Programme (Warren Fulton)	11:40-11:45 5 mins	45
12	Delivery dashboards	Take questions from PSG members on delivery dashboard content	Information	Chair	11:45-11:55 10 mins	47
13	Summary and next steps	Summarise actions and decisions. Look ahead to January PSG	Information	Chair and Secretariat	11:55-12:00 5 mins	66
	Appendix	Migration Options analysis CR012 Impact Assessment outputs				68
	Attachments	 Readiness Assessment 2 – full report Control Point 1 – full PSG report CR013 Commercial Impacts Change Request 				N/A

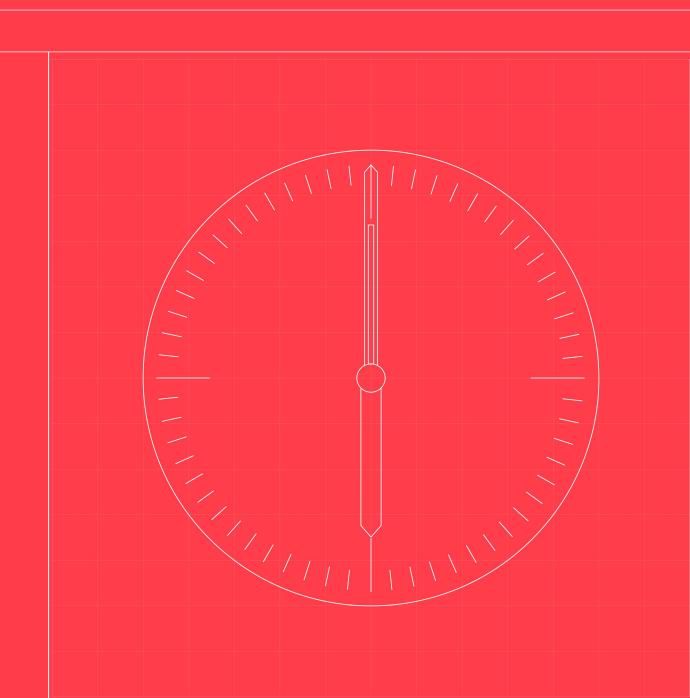


Minutes and actions review

DECISION: Approve October minutes. Update on actions, closing where appropriate

Chair and Secretariat





Minutes and actions review (1 of 2)

- 1. Approval of minutes from PSG 02 November 2022
- 2. Open actions and actions from PSG 02 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
PSG08-05	08/06/2022	Address comments received on the Benefits Realisation Plan (for example consequential impacts/dis-benefits and providing a more quantifiable measure under the MPAN success criteria)	Programme (Jason Brogden)	To be aligned to next control point	Open - ongoing	To be updated after Control Point 1
PSG13-05	05/10/2022	Set up a session to discuss the requirements (e.g. ToR) for an MHHS forum to discuss the commercial impacts on settlement from the MHHS Programme (taking learnings from Nexus). Session to include MHHSP members and PSG constituency reps as required	Programme PMO	14/11/2022	Open - ongoing	See agenda item on CR013 – change request on commercial impacts
PSG14-01	02/11/2022	Highlight to the Design team areas of priority or concern for consideration in the approach to work-off planning/scheduling	PSG Constituency Representatives	09/11/2022	Recommend closed	Work-off plan agreed at DAG 09 November 2022
PSG14-02	02/11/2022	Communicate the timeline for sharing the plan for delivering the migration design	Programme	30/11/2022	Recommend closed	To be shared under the agenda item on the migration design
PSG14-03	02/11/2022	Review attendance to DNO monthly delivery meetings to ensure the role of different DNOs and participation in SIT are appropriately considered	Programme (Keith C)	30/11/2022	Recommend closed	Attendance reviewed and plan agreed. No changes in attendance this month but attendance to be expanded in future
PSG14-04	02/11/2022	Develop a plan to target engagement with Participants that did not submit required evidence against M3 criteria as part of RA2. Share this plan at next PSG (e.g. to determine why they have not engaged, when they will be ready for DBT and how the Programme can support)	Programme (Keith C, PPC)	30/11/2022	Recommend closed	To be shared under the agenda item on M3



Public

Minutes and actions review (2 of 2)

Ref	Date	Action	Owner	Due Date	Status	Latest Update
PSG14-05	02/11/2022	Develop revised criteria for M3 (conditions to be met for full M3 approval) and how this will be assessed via the Round 3 replan consultation. Share this approach and the timeline/requirement for a full approval of the M3 milestone at PSG	Programme (Keith C)	30/11/2022	Recommend closed	To be shared under the agenda item on M3
PSG14-06	02/11/2022	Share updated interim plan (to include replan extension and migration design) for PSG decision at December PSG	Programme (Keith C)	30/11/2022	Recommend closed	Please see agenda item on the interim plan
PSG14-07	02/11/2022	Share the expected date for Round 3 consultation documentation	Programme (Keith C, Giles C)	30/11/2022	Recommend closed	Indicative date of 14 December shared with November PSG Headline Report. See agenda item on interim plan
PSG14-08	02/11/2022	Raise the RECCo consequential change Change Request to Impact Assessment	Programme (PMO)	03/11/2022	Closed	Raised to Impact Assessment on 02 November 2022
PSG14-09	02/11/2022	Review large supplier SPOCs	Programme (PPC, Graham Wood)	07/12/2022	Recommend closed	Work continues to fill and maintain SPOCs via PPC actions from RA2 and PPC BAU activity
PSG14-10	02/11/2022	Support the Programme to identify Large, Small and I&C Supplier representatives for TMAG	Relevant Supplier Representatives (Graham Wood, Gareth Evans, Vladimir Black)	07/12/2022	Open - ongoing	No new nominations received



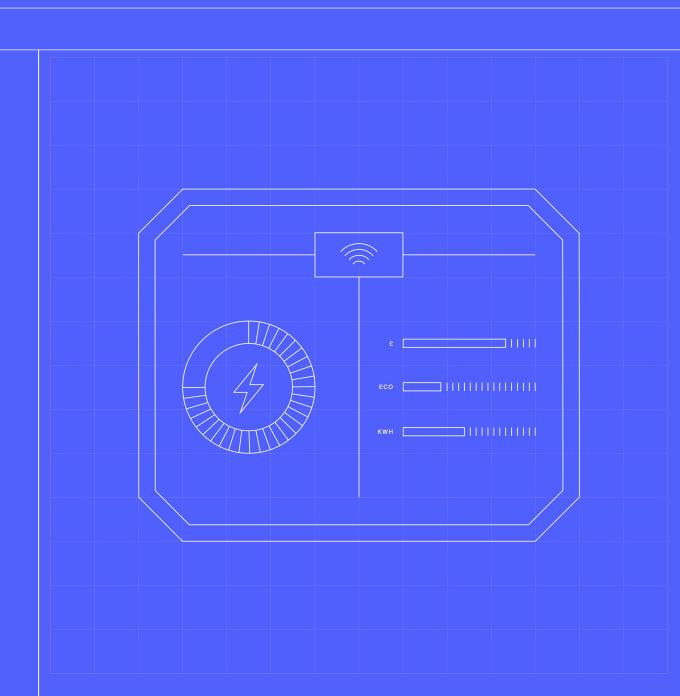
Public

Sponsor update

INFORMATION: Hear key messages from the Programme sponsor

Ofgem Sponsor (Rachel Clark)





- welcome the completion of the detailed design subject to the work off plan
- Parties need to be continuing, or commencing if they have not already started, their DBT activities
- further to the letter from Neil Lawrence, parties need to provide granular evidence to the Programme in response to the R3 replan consultation
- the Programme and Ofgem will need this information to take a robust decision
- BEIS also taking a close interest given the importance of MHHS for net zero
- MHHS implementation is an essential enabler for realisation of much of the benefits from smart metering, as well as most of the planned benefits attributable to time of use pricing and demand-side flexibility.
- These benefits are much more significant than the £1.5bn -£4.5bn that were directly attributed to MHHS in our business case, which is important to remember
- Which means that any delay carries a very heavy cost in delayed benefits
- must be a continuous focus on realising benefits from the earliest practicable date

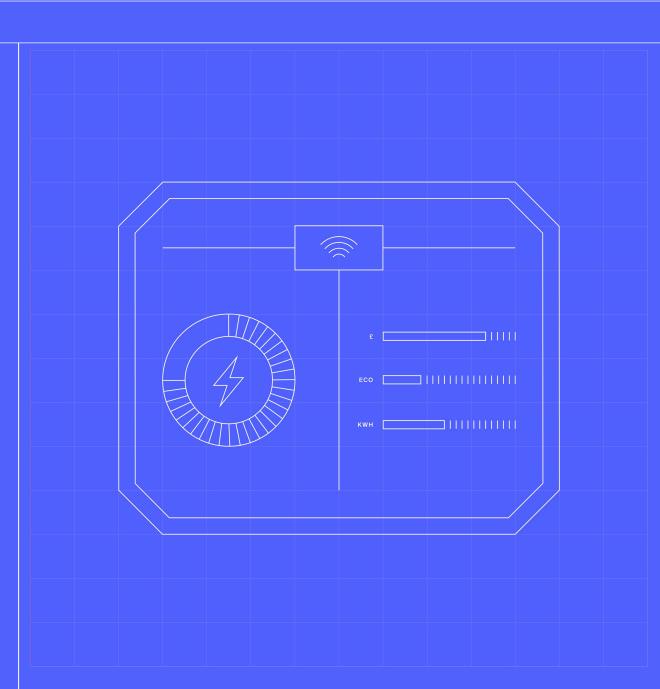


Migration options decision

DECISION: Review outputs of the Migration Options Programme Participant Information Request (PPIR) and make a decision on a Migration Option

Programme (Jason Brogden)





Introduction

Overview

- The Programme needs to recommend a Migration Option to the December Programme Steering Group to progress Migration Design and Round 3 replanning from a solid baseline
- The Programme has been building an evidence base to support a decision on the Migration Option over the last number of months with the Migration Working Group (MWG)
- The MWG evidence base has been primarily captured in a baselined Migration Option Evaluation Framework which assesses each option on a qualitative basis against set criteria
- The Programme issued a Programme Participant Information Request (PPIR) to gather further quantitative evidence from industry on the timing and cost of the options
- The Programme has used the PPIR evidence to supplement the Evaluation Framework and has undertaken further analysis to assess migration option impacts on the Programme

Key Considerations

- It is difficult to objectively quantify and compare the variations in option benefits and drawbacks, as all key areas of variation are not easily comparable
- The Programme has limited and imperfect quantitative data available upon which to assess and recommend an option
- The Evaluation Framework includes a criterion for delivery timescales which has largely been assessed on time to develop migration options for participants, rather than the overall impact on the Programme plan; the Programme has now assessed the impact on the Programme plan as a whole, informed by the PPIR responses
- The current Evaluation Framework does not have an explicit criterion for Programme Delivery Risk; this has had to be included in the Delivery Time criterion and makes it difficult to assess as part of quantifiable delivery timescales

Approach to Programme recommendation:

- The Evaluation Framework scored the Options on the as a starting point, leveraging the work baselined with the MWG to date
- Supplemented the Evaluation Framework with additional evidence from:
 - The PPIR on cost, timing and customer segments that we might apply reverse migration to under that Option;
 - · MHHS Programme analysis of the impact of each option on Programme timelines and potential consumer detriment; and
 - MHHS Programme analysis of Programme Delivery Risk
- Reviewed all commentary to validate that there were no technical concerns raised around the feasibility of any of the options



Migration Option Recommendation

Recommendation

The Programme should proceed with Migration Option 3 with early adoption and reverse migration

PSG is being asked to agree the Programme recommendation on the basis that:

The Evaluation Framework baselined a score for the Options before the Programme Participant Information Request (PPIR): Option 1 3.6 (out of 5); Option 2 3.2; and Option 3 3.5

The assessment of the options from the PPIR evidence and Programme analysis results in a much stronger case for Option 3 than was suggested from the Evaluation Framework, largely due to the following factors:

- Option 3 results in a significantly reduced Programme delivery risk, where Option 1 is likely to result in a significant delay to all Programme milestones from M9 onwards and a later Programme end date
- 2 The additional industry development time for reverse migration is not on the critical path, therefore does not impact the Programme end date
- 3 The additional costs of developing reverse migration for Option 3 are likely to be far exceeded by the cost of anticipated Programme delays under Option 1
- 4 Option 3 allows consumer benefits to be realised early with no detriment from blocking switching during migration for early mover customers, and no technical concerns identified

Further Action

The MHHS Migration Design work should be used to consider the impact on design of potentially excluding customer segments, determine potential consumer detriment and recommend where there would be value in excluding particular customer segments from scope



Options, Approach and Original Evaluation Framework



Migration Options Overview

The MHHS Programme has evaluated the following four migration options in collaboration with programme participants over the last few months. Upon review of the Evaluation Framework and associated qualitative scoring, a decision was made to remove Option 4 from scope in October 2022. This decision took into consideration the ambiguity around how this option would work in practice, and its likely impact to ongoing settlement accuracy. It was a decision aligned on with Ofgem and the IPA, and informed by the MWG¹.

Option 1

Migration Starts at M14 Deadline Date – start migration at the M14 deadline date (i.e., when all programme participants are obligated to be ready to accept MPANs under the new MHHS arrangements), noting that migration will go ahead at that date even if not *all* participants are ready

Option 2

Early Adoption with No Reversal of Migration – allowing programme participants to start migrating MPANs to the new MHHS arrangements earlier than M14 (i.e. early adoption), with an MPAN <u>unable</u> to move back to current arrangements once it has been switched over to new MHHS arrangements

Option 3

Early Adoption with Reversal of Migration – allowing programme participants to start migrating MPANs to the new MHHS arrangements earlier than M14 (i.e. early adoption), with an MPAN <u>able</u> to move back to current arrangements once it has been switched over to new MHHS arrangements

Option 4
removed from
scope

Early Adoption with No Reversal of Migration but Mitigation in place – allowing programme participants to start migrating MPANs to the new MHHS arrangements earlier than M14 (i.e. early adoption), with customers <u>able</u> to move back to a supplier on current arrangements by implementing operational workarounds at Elexon Central Services to use load shapes to estimate consumption data and find a non-DIP method to send settlement reports to suppliers on current arrangements

Option 4 eliminated as an option

¹Note: This decision aligns to discussion and commentary as discussed within the Migration Working Group (MWG) and captured in prior versions of the Evaluation Framework.



Migration Options Analysis Approach

Following our last discussion on 19 October 2022, the Programme leveraged the following sources to further evaluate the three remaining options. With all evidence assessed, Option 3 was found to be the most compelling choice, taking close qualitative scoring between Option 1 and 3, no material concerns in PPIR data and valid Programme delivery risks into account.

Migration Option Evaluation Framework

Capturing qualitative inputs and scoring around the benefits and drawbacks of each of the migration options

Programme Participant Information Request

Requesting quantitative information from participants to determine the cost and time impacts for each option

Programme Delivery Risk

Assessing the timeline implications of each migration option on Programme Delivery Timescales

Key Takeaways

The Framework scored each option on a qualitative basis against weighted criteria associated with: Customer, Competition, Delivery and Solution Impact

- It was baselined in the 10 November 2022 MWG
- Options 1 and 3 scored closely at 3.6 and 3.5
- Option 2 presented as an outlier, scoring at 3.2

Key Takeaways

The PPIR requested quantitative data to supplement the Framework, with cost and time details related to: DBT, Migration DBT and Migration Execution

- 60% of PPIRs included some time or cost info
- Participants noted an expected increase in cost for Option 3, particularly in consideration of testing

Key Takeaways

The Programme assessed the anticipated impact of each option on programme timelines, informed by: PPIR responses and the indicative MHHS PoaP

- Delivery risk of Option 1 likely to delay Programme milestones significantly increasing cost
- Float in the execution of SIT Migration allows time for reverse migration development delays
- Option 2 anticipated to restrict customers from switching from MHHS suppliers for 10 months
- Reverse migration likely to be in place for 9 months



Migration Options: Baselined Evaluation Framework (1/3)¹

			Con	sumer	Compe	etition		Delivery			Solution		
Migration Option		Assessment	Consumer Choice	Consumer Benefits	Early Adoption	Market Competition	Delivery Time	Delivery Cost	Readiness	Settlement Accuracy	Solution Complexity	Average Score	Weighter Scored
Option 1: Migration Starts at M14	Weight	Pros	No restriction on consumer choice	Benefits would be realised across all		No impact to competitive	Migration testing would be simplified in	Anticipated to add minimal cost to delivery			Simplest migration option as would look to migrate once all		
Deadline Date			An easier and	segments at the same time		environment as all parties would be in a	comparison to all other options, representing a	considering this solution has the lowest		settlement accuracy	parties are ready to do so		
Start migration at the M14 deadline date (i.e. when all programme participants are			simplified process for consumers to switch suppliers			position to migrate at the same time	1	t complexity, and there is no requirement to modify the existing design / TOM	,		Contradicts CCDG recommendation related to Transition timetable		
obligated to be ready to accept MPANs under the new MHHS								/ change proposal			Migration testing would be		
arrangements), noting that migration will go ahead at that date even if not <i>all</i> participants are ready											simplified in comparison to other options as the technical requirements for option 1 would form the baseline for all		
,											options		
Assumption: Migration would proceed once the M14 deadline		Cons	 Whilst there is no restriction on choice, 	 Benefits would be realised across all 	 Those who are ready to migrate early would have 		• The pace of delivery to be informed by the M14		Involves hard dependency on	 In the absence of early adoption, the 			
s hit - any party not ready by that timeframe would not delay			the choice itself will be available at a later		to wait until all participants are ready in	severely limits incentives to active	date as no one can proceed until M14 starts		qualification testing in relation to M14	scale of any issues related to settlement			
migration, but rather would have to incur the associated penalties.			date in comparison to other options due to the need to wait for	than if early adoption was possible	order to proceed with migration	participation in SIT, resulting in significant risk of no supplier	Risk that there would be a delay to the SIT start		obligation	may be more pronounced with this option			
Assumption: We have assumed that this would either be			the M14 deadline date		The lack of early	volunteers for SIT. This	date due to a need to			Орион			
triggered by a change of supplier event in process map 1 or a			to start migration		the ability to actively	would have a very high impact on the	mandate participation in SIT; MWG noted that there are potential ways						
change of agent event in process map 2.					risks that may apply to all (or many) at an earlier	Restriction on the opportunities for	to manage this risk (e.g. staggering), however on the whole would						
Assumption: The Programme would retain the approach to SIT with a subset of participants,					ramp up to migration, early adopters would be	innovators to be able to offer differentiating	anticipate that the lack of benefits associated with voluntary participation in						
with the remaining participants going through Qualification					flag issues by way of going earlier)	customers early	SIT would delay timelines						
following the completion of	60%	Qualitative Score	4	4	1	3	2	5	4	4	5	3.56	2.13
functional SIT	10%	Central Party Impact	5	5	1	3	4	5	4	4	5	4.00	0.40
Note: From a technical perspective, this option reflects	10%	Agent Impact	4	4	1	3	2	5	4	4	5	3.56	0.36
the baseline requirements that will apply to all migration	10%	Network / Registration Service Impact	4	4	1	3	2	5	4	4	5	3.56	0.36
options; requirements for the other options would reflect a	10%	Supplier Impact	4	4	1	3	2	5	4	4	5	3.56	0.36
delta in net effort in comparison to this baseline	Migratio	on Option 1 Weighted Sco	re										3.60



¹Note: As reflected in the slides above, based on review of PPIR responses, it is anticipated that Programme Delivery Cost for Options 1 and 3 would be most accurately reflected as a 4 (Medium Benefit). This would update Option 3 to a score of 3.63 and Option 1 to 3.53. Whilst Delivery Time is likely more impacted for Option 1 in comparison to Option 3, given that they both currently sit at a 2 (Medium Detriment) in the Framework, we have not proposed different scoring at this time.

oposed different scoring at this time.

Document Classification: Confidential

15

Migration Options: Baselined Evaluation Framework (2/3)¹

			Cor	nsumer	C	Competition		Delivery			Solution		
ligration Option		Assessment	Consumer Choice	Consumer Benefits	Early Adoption	Market Competition	Delivery Time	Delivery Cost	Readiness	Settlement Accuracy	Solution Complexity	Average Score	Weighte Scored
ption 2: Early Adoption with lo Reversal of Migration		Pros	Consumers could switch to new	Consumer benefits would be realised at an		adopters which would	Migration qualification testing	This option would not require a modification to	Participants can start migration when		Aligned to the CCDG recommendation		
Illowing programme articipants to start migrating MPANs to the new MHHS rrangements earlier than M14 i.e. early adoption), with an MPAN unable to move back to urrent arrangements once it as been switched over to new MHHS arrangements **ssumption:** We have assumed nat M11 and M12 are oincident (i.e. the Smart egment would go at the same me as UMS and Advanced), and that there would be a gap etween M11/M12 and M14 where suppliers can migrate MPANs as soon as they are eady in line with the PoaP **lote:* If this is the preferred ption choice, the Programme round need Ofgem approval iven impact to consumer hoice		Cons	have advantageous tariffs at an earlier date (i.e. as early adopters	introduction of early adopters	go early can migrate as soon as possible • Those who would be able to proceed early would be able to identify and mitigate risks early and for all participants as part of the ramp up to migration, resulting in a smoother migration overall	Note: supplier participation would involve a dependency on data and metering services being ready to support the early adopters, and win the business. Would be more likely to be ready if they did not have to additional work around reverse migration • Suppliers not on new MHHS arrangements would not be able to realise the benefits of operating in the new world (i.e. if they are not an early adopter) • Suppliers operating under current arrangements would	comparison to other options (i.e. reverse migration or operational workarounds), representing a positive or neutral impact to delivery time • Encourages voluntary SIT participation, giving best chance of protecting SIT delivery timescales • Based on the extra solution complexity (e.g. from a supplier and PCW perspective), would anticipate the Transition Design period to be extended, which may impact delivery timescales		they are ready		Additional complexity introduced to incorporate functionality to prevent the movement of MPANs supplied under new arrangements back to current arrangements, and to ensure new MHHS tariff offerings are not presented to customers whose suppliers are still operating under current arrangements		
	60%	Qualitative Score	3	3	5	1	4	2	5	5	1	3.22	1.93
	10%	Central Party Impact	2	3	5	1	3	2	5	5	1	3.00	0.30
	10%	Agent Impact	3	3	5	1	4	2	5	5	1	3.22	0.32
		Network / Registration	3	3	5	1	4	2	5	5	1	3.22	0.32
	10%	Service Impact					1				1		

¹Note: As reflected in the slides above, based on review of PPIR responses, it is anticipated that Programme Delivery Cost for Options 1 and 3 would be most accurately reflected as a 4 (Medium Benefit). This would update Option 3 to a score of 3.63 and Option 1 to 3.53. Whilst Delivery Time is likely more impacted for Option 1 in comparison to Option 3, given that they both currently sit at a 2 PROGRAMME (Medium Detriment) in the Framework, we have not proposed different scoring at this time.

Migration Options: Baselined Evaluation Framework (3/3)¹

Position Exercised Managements that a window programme required with the result and transported to the result of t				Cons	sumer		Competition		Delivery			Solution		
with Reversal of Migration Moving programme Moving programme Moving programme Move abortangeous to the Investment of the companies to that Investment of the companies to the Investment of the Investment of the companies to the	Migration Option		Assessment	Consumer Choice	Consumer Benefits	Early Adoption	Market Competition	Delivery Time	Delivery Cost	Readiness		Solution Complexity	_	Weighte Scored
*No restriction on consumer choice of supplier a shallow to proceed early would be able to gain a participant in a smoother migration overall consumer benefits. **Cons** Cons** **Anticipated in part to delivery cost would negatively impact or overall consumer benefits. **Supplier event* **Overall consumer benefits. **Cons** **Anticipated in part to delivery cost would negatively impact or overall consumer benefits. **Overall consumer benefits. **Overall consumer benefits. **Ordinate proceed with a state of the same implementation and the proceed early would not be able to realise the benefits of operating in the new wolf-its arrangements. **On summary to benefit is should they choose to move from new WHHS arrangements buck to current arrangements b	with Reversal of Migration Allowing programme participants to start nigrating MPANs to the new		Pros	switch to new arrangements that have advantageous tariffs at an earlier date (i.e. as early adopters	would be realised at an earlier (albeit smaller scale in comparison to option 1), with the introduction of early	adoption, such that those who are ready to go early can migrate as soon as	which would incentivise suppliers to participate Note: supplier participation would involve a dependency on data and	participation, giving best chance of protecting SIT delivery timescales	the programme reducing	can start migration when		anticipated to be less than originally thought, with the principle of re-using existing technical mechanisms, and primary		
cons Anticipated impact to delivery cost would may be perfain guident new many programme due to the additional regression overall parties to move from pre-MHHS arrangements Poncision of products between suppliers and continued in gration processes Anticipated impact to delivery cost would may be perfained in the new world (i.e., they) obtained to engage the procession of the new world (i.e., they) obtained to engage the procession of the new world (i.e., they) obtained to engage the procession of the new world (i.e., they) obtained to engage the procession of the new world (i.e., they) obtained to engage the procession of the new world (i.e., they) obtained to engage the procession of the new world (i.e., they) obtained to engage the programme due to the additional option process would not be able to engage the new world (i.e., they) obtained to engage the programme due to the additional option process would not be able to engage the new world (i.e., they) obtained to the end that the decrease intentive for all parties to move from a programme to the new world (i.e., they) obtained to engage the new world (i.e., they) obtained to the end that the fact that the programme due to the additional option process of the programme of the fact that the programme of the fact tha	doption), with an MPAN ble to move back to current rrangements once it has een switched over to new			consumer choice of suppliers - although there may be an		able to proceed early would be able to identify and mitigate risks early and for all	Would anticipate additional work / effor required in the case of reverse migration All suppliers will be able to gain	t				Service and Elexon Central Services (as opposed to a		
**Suppliers not on MHHS arrangements **Would add time to the would not be able to realise the benefits of operating in the new world (i.e. if they solution complexity, and the fact that this would necessitate a rare not an early adopter) **Anticipated impact to delivery cost would negatively impact overall consumer benefits ** **Consumers may benefit less should they choose to move from new MHHS arrangements back to current arrangements of current arrangements and early adopters who will not benefit a made any adopters who will not benefit from -MHHS suppliers do not gain customers, this would be incurred by the programme and early adopters who will not benefit from -MHHS suppliers do not gain customers, this would be regret spend 60% Qualitative Score 5 5 5 5 4 4 2 2 2 5 5 3 2 2 3.67 2 10% Central Party Impact 5 2 5 5 4 1 1 1 1 3 3 3 1 1 2.78 10 10% Agent Impact 5 3 3 5 4 1 1 1 5 3 3 2 2 3.22 10% Network / Registration Service impact 5 5 3 3 5 4 1 1 1 5 5 3 2 2 3.22 10% Network / Registration Service impact 5 5 3 3 5 4 1 1 1 5 5 3 2 2 3.22 10% Network / Registration Service impact 5 5 3 3 5 4 1 1 1 5 5 3 2 2 3.22 10% Network / Registration Service impact 5 5 3 5 5 4 1 1 1 5 5 3 2 2 3.22 10% Network / Registration Service impact 5 5 3 5 5 4 1 1 1 5 5 3 2 3 3 2 3.22 10% Network / Registration Service impact 5 5 3 5 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Assumption: Reverse nigration would only be riggered by a change of			choice of products between suppliers operating under new MHHS arrangements versus current		the ramp up to migration, resulting in a smoother migration	, · ·							
10% Central Party Impact 5 2 5 4 1 1 1 3 3 1 1 2.78 C 10% Agent Impact 5 5 5 5 4 2 2 5 3.67 C 10% Network / Registration Service Impact 5 3 5 4 1 1 1 5 3 2 2 3.22 C			Cons	arrangements	delivery cost would negatively impact overall consumer benefits Consumers may benefit less should they choose to move from new MHHS arrangements back to		would not be able to realise the benefits of operating in the new world (i.e. if they are not an early adopter) • Anticipated to decrease incentive for all parties to move to the new MHHS arrangements • There are development costs that would be incurred by the programme and early adopters who will not benefit; if non-MHHS suppliers do not gain	programme due to the additional solution complexity, and the fact that this would necessitate a change to the current design / TOM / change proposal • Would add time to migration testing to test reverse migration process • Aside from programme-related timelines, anticipated to impact DBT particularly for the Registration	programme due to the additional solution complexity, and the fact that this would necessitate a change to the current design, TOM / change proposal Aside from programme-related costs, would require additional investment from al programme parties in order to deliver this		additional reverse migration process may introduce increased risk of errors that could degrade the quality	complex as an additional process, and only used by a small group of participants for a limited period of time • Suppliers who are not ready are going to need to develop processes to support this option • Counter to the CCDG		
10% Agent Impact 5 5 5 4 2 2 5 3 2 3.67 0 10% Network / Registration Service Impact 5 3 5 4 1 1 5 3 2 3.22 0		60%	Qualitative Score	5	5	5	4	2	2	5	3	2	3.67	2.20
10% Network / Registration 5 3 5 4 1 1 5 3 2 3.22 0		10%	Central Party Impact	5	2	5	4	1	1	3	3	1	2.78	0.28
10% Service Impact 5 3 5 4 1 1 5 3 2 3.22 0		10%	Agent Impact	5	5	5	4	2	2	5	3	2	3.67	0.37
10% Supplier Impact 5 5 4 1 1 5 3 1 3.33 C		10%		5	3	5	4	1	1	5	3	2	3.22	0.32
		10%	Supplier Impact	5	5	5	4	1	1	5	3	1	3.33	0.33



¹Note: As reflected in the slides above, based on review of PPIR responses, it is anticipated that Programme Delivery Cost for Options 1 and 3 would be most accurately reflected as a 4 (Medium MHHS Benefit). This would update Option 3 to a score of 3.63 and Option 1 to 3.53. Whilst Delivery Time is likely more impacted for Option 1 in comparison to Option 3, given that they both currently sit at a 2 PROGRAMME (Medium Detriment) in the Framework, we have not proposed different scoring at this time.

PPIR Evidence Base and Analysis



MHHS Programme Assessment of Programme Delivery Risk with Option 1

Option 1 presents delivery risks to the Programme, with the lack of early adoption opportunities resulting in a significant disincentive to SIT participation. With no incentive to realise benefits early, programme parties have indicated that they are unlikely to volunteer for SIT and would also be unlikely to mobilise their programme at pace to enter into SIT early.

Other key considerations to note from in regard to Option 1 Delivery Risk include:

- Proceeding with Option 1 would likely necessitate a fundamental change in the approach to SIT, with an anticipated requirement to mandate SIT participation (non-discriminatory) and the associated scaling up on MHHS SIT activities. Uncertainty in the testing approach is likely to result in delays in progressing Programme outcomes
- This would result in a delay to the start of SIT, as a revised approach would be required to be approved and enacted, and we expect that programme parties would not be ready as early as they would be under Options 2 & 3
- We have seen from the Faster Switching Programme that the programme was subject to uncertainty, inertia and delays until the point 20 months out from the end of the Programme at which Ofgem set the implementation window in the final replan, which was then delivered against
- SIT will be more onerous than Qualification as SIT will identify issues that will require retesting that will not be in place in Qualification and there may be End 2 End tests that we execute in SIT that might not be required to be executed in Qualification
- Without a staggered start to migration, it is likely that migration will take longer to execute overall as all participants will be migrating in parallel, and this will require more management and is likely to result in more volume constraints in industry systems and processes. We identify later in these slides that approximately 12% of the customer base could migrate early therefore it is likely the migration window would be extended by this amount under Option 1
- Programme participants are likely to want to qualify at the same time to be ready for M14, putting strain on qualification at the end of the Programme
- The lack of a natural incentive to move fast, and ongoing uncertainty on how SIT will be executed, will slow the rhythm and pace of the Programme which the Programme and Ofgem have worked hard to embed and maintain up to now. That lack of Programme pace is very likely to extend timescales and exceed the costs highlighted in the PPIR
- If SIT had to be mandated to all participants, then the evidence from the PPIR would suggest that the start of SIT could be delayed by up to 12 months, given the range of dates for DBT provided in PPIR responses

Whilst it is difficult to quantify the delay this is likely to introduce into the Programme, we do not think it is unrealistic for this to delay the start of SIT (M9), and therefore subsequent milestones, by 3-6 months. The relative assessment of costs from a predicted delay to the Programme in Option 1 is included in the cost assessment below.



Document Classification: Confidential 19

Migration Option Impact on Programme Timelines

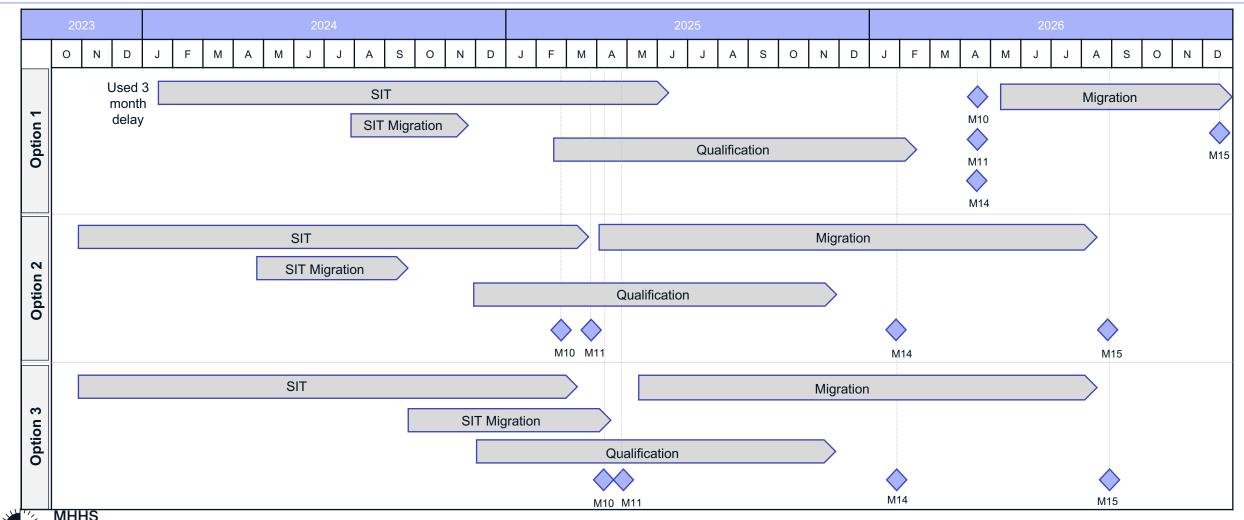
Based on Programme analysis, it is anticipated that the Programme end date will be extended under Option 1, and be the same under Options 2 & 3, as per the following outline:

· SIT Migration is not on the critical path of the Programme

PROGRAMME

• Once Option 3 timescales are mapped into the Programme plan, it does not impact M14

The timeline is illustrative to allow the comparison of Migration Options and should not be considered the latest planning position, which will be published with the Round 3 replan consultation



Migration Options: BEIS Estimate of Scale of Benefits Lost from MHHS Delay

- 1. MHHS is a key enabler for realising demand-shifting benefits for transmission networks. Estimate £1.4bn by 2034. A single year's delay in MHHS would lead to £90m in lost benefits. Both those figures come from their 2019 smart meter roll out CBA, so if the exercise were repeated today, both figures would likely be higher. There are also unmonetized benefits for the distribution network from demand-shifting that would likely be reduced by any delay.
- 2. New licence conditions requiring non-domestic suppliers to provide free, user-accessible energy use information to help customers make informed choices about their energy consumption were designed based on MHHS arriving in 2025. (Many of the system changes needed to deliver the policy are shared with MHHS) Thus, delays to MHHS will increase supplier compliance costs and could increase the likelihood of them seeking a delay in line with any delay to MHHS. This would put at risk a further £1.2bn of benefits to 2034.
- 3. Delay in MHHS will also have a wide range of unquantified impacts resulting from knock-on delays in:
 - retail innovation, for example in smart tariff development
 - development of associated smart technologies such as heat pumps and electric vehicles, which in turn hampers progress on electrification of heat and transport (on which HMG has made key, headline commitments)
 - realising system benefits arising from a reduced need for generation and network infrastructure investment and lower balancing costs
- 4. This could in turn limit the benefits realised by initiatives like the Secure Smart Electricity Systems Programme which depend on a healthy market in smart tariffs and services and high uptake of smart appliances. For context, the Smart Systems and Flexibility Plan estimated that flexibility from technologies such as electricity storage, smart charging of EVs, flexible heating systems and interconnection could save up to £10bn a year to 2050.



Migration Options: Comparing Cost

We have received cost information from a subset of participants, therefore we are unable to build a quantitative, complete set of cost data for comparison. However, we are able to draw some conclusions from the data provided and the impact of the timescales on cost.

Option 1 introduces a 4 month delay to the Programme as a whole, which would result in additional:

- Cost of benefits lost (as per previous slide £30m)
- Central Programme costs (£ms)
- Central Parties (and their Service Provider) costs (as yet unquantified)
- Industry Participant costs (see below)

Industry Participant Costs:

Some Programme Parties have given us quantitative costs for their DBT Programmes and the incremental cost for their reverse migration DBT costs.

This enables us to calculate the run cost for their DBT programmes and by dividing this into the incremental reverse migration costs, it gives us an estimate of what delay to the Programme would be equivalent to the incremental cost of reverse migration

- For Suppliers, their additional costs of Migration DBT for Option 3 would be equivalent to a delay of 1-3 months for their Programmes
- For Agents, one agent stated that there were no additional costs for Options 2 & 3, one agent identified costs equivalent to 2 month delay for Option 2 and 4 month delay for Option 3; one Agent highlighted additional costs for Option 3, but did not provide DBT costs, so we cannot quantify a potential equivalent to cost of delay
- Two DNOs highlighted their costs were based on St Clements; one DNO stated Option 3 would have additional costs for DBT and Migration DBT; one DNO stated option 3 would bear less additional costs when compared to Option 2 for Migration Execution

In conclusion, the cost to industry of implementing reverse migration for Option 3 would be less than the cost of a 4 month delay from Option 1

In delivering to Option 1, programme parties would be likely to plan right to left to minimise their costs and, given that M14 will be a regulatory requirement, it is likely programme parties will build in contingency. This is inherently more inefficient than left to right planning and is likely to result in additional run costs for those participants, which we could quantify with an estimate (say 2 months run cost). Any Programme Parties not ready at M14 will be unable to take on new customers, imposing costs on their businesses.

In the baselined Evaluation Framework, the Delivery Cost criterion for Option 1 is marked as a High Benefit (score 5) and Option 3 is marked as Neutral (score 3). If they were levelled at the same score, this would result in Option 3 outscoring Option 1. If Option 1 is scored higher, as concluded above, this results in Option 3 significantly outscoring Option 1.



Migration Options: Quantifying Consumer Detriment – Option 2

The key consumer detriment is associated with Option 2 where there is no reverse migration in the period between M11 & M14, therefore consumers who have switched to a supplier operating in MHHS arrangements are restricted in switching to other MHHS operating suppliers and cannot switch to non-MHHS operating suppliers. The quantification of this detriment is a product of the time delay between M11 & M14 under Option 2 and the potential number of customers impacted.

Having undertaken the analysis of the impact on the plan of Option 2, we estimate that there will be a 10-month period between M11 & M14

On the basis of the responses to RA2, there were 3 Suppliers (1 I&C Supplier, 1 Medium Supplier and 1 Small Supplier) who would complete their PIT in 2023 and therefore, if we are to make an assumption on the volume of consumers that may be aligned to SIT participants, the best estimate we have at this point would be the customer base of those suppliers before we have agreement on participation in SIT. There was also 1 Large Supplier who would be ready from evidence provided in the PPIR. We have made an estimate of the number of MPANs on the basis of either the Medium Supplier of Large Supplier being a participant in SIT

Assumptions:

- The number of MPANs registered to early movers is 4.5m
- 10-month period of switch restriction from M11
- Migration over 12 months, ramp up 1 month, 10 months steady state, ramp down 1 month, therefore we broadly assume 75% of the customer base will be migrated
- Change of Supplier is at pre-price cap levels when MHHS is live approximately 20% of customers per annum changing supplier
 - Migrated customers will only be live for, on average, 4 months during this period, therefore we will assume that only 7% would switch in normal circumstances
 - We assume that if they have been switched to MHHS, they will be less inclined to switch to old arrangements, therefore we will reduce this by half to 3.5%

An estimate of the number of customers migrated to MHHS that might be affected by constraining CoS could be in the region of 118k customers

There is a significant reputational risk for industry of customers not being able to switch to potentially cheaper and/or more innovative tariffs. This will erode consumer confidence in flexibility products and fundamentally undermine the benefits of MHHS



Migration Options: Customer Segments

The PPIR asked an open question "Would your MHHS project be simplified by any exclusions (e.g. of market segment)?"

14 participants highlighted that removing certain customer segments would simplify the migration options (including: four DNOs and three Suppliers), as highlighted below:

Programme Category	Non-Domestic	Unmetered	Advanced	Customer Own Agents	Pre-Dated SSDs	Import / Export	Complex Sites	Smart	Non-Smart	AMR	I&C	Total
Central Party	-	-	-	-	-	-	-	-	-	-	-	0
DNO	4	1	-	-	-	-	-	-	-	-	-	5
iDNO	-		-	-	-	-	-	-	-	-	-	0
Large Supplier	-	1	-	1	1	1	-	1	-	-	-	7
Medium Supplier	-	-	-	-	-	-	-	-	-	-	-	0
Small Supplier	-	-	-	-	-	-	-	-	-	-	-	0
I&C Supplier	-	-	-	-	-	-	-	-	-	1	1	0
In-House Supplier Agent	-	-	1	-	-	-	-	-	-	-	-	6
Independent Agent	-	1	1	-	-	1	1	-	1	-	-	0
Software Supplier	1	-	-	-	-	-	-	-	-	-	-	1
Other MHHS Participant	-	-	-	-	-	-	-	-	-	-	-	0
Total	5	3	2	1	1	2	1	1	1	1	1	19

- Given the spread of responses from Programme Participants, the Programme conclude on which customer segments might be able to be removed from reverse migration
- · A number of participants highlighted benefits of excluding certain customer segments and that the detriment to customers would be low
- Some participants highlighted that it may be more complex to design the exclusion of certain categories into the reverse migration process, therefore the Programme recommends that the potential exclusion of customer segments is considered in Migration Design and that any potential consumer detriment is considered further



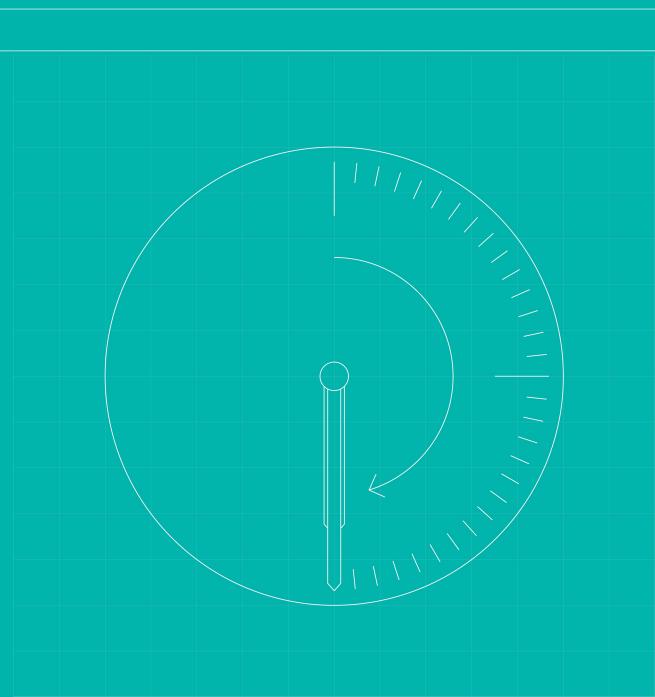
M3 next steps

DECISION:

- Review and agree updated M3 Acceptance Criteria
- Review the engagement plan for Participants that did not submit evidence in Readiness Assessment 2

Programme (Keith Clark)





Proposed M3 Criteria compliance to be achieved via Replan Round 3 Consultation process

What criteria need to be met to pass M3 unconditionally after Replan Round 3?

1. Delivery Timelines

All responders to the Round 3 re-plan consultation will be required to submit a delivery timeline which covers the Participants' own Design, Build and Test activities up to M9 (only). Any document format (e.g. a plan on a page or list of activities with dates) will be acceptable

• >50% of Round 3 responders must have provided such a document for M3 to be met (and constitute a basis for the MVC)

2. Resources

We will include a question which asks for a self-declaration ('Yes' or 'No') of whether each organisation has the resources (in their own organisation or via a third-party provider) to deliver their DBT timeline

• >50% of Round 3 responders must have provided a self-declaration of 'Yes' for M3 to be met

3. Dependencies

- M5 approved with clear plan to deliver work-off list
- Interim plan agreed with PSG and published, with a clear timeline to re-baseline the programme plan

Supporting PPC activities

PPC aims to encourage the gathering of evidence from participants, via the Round 3 consultation process, so that the new criteria for M3 can be met

Organisations who responded to Readiness Assessment 2 (RA2) and provided plans that meet Criterion 1 will not need to be engaged specifically on this. PPC will prioritise engagement with the other (c.60) responders that did not provide that information

Targeted communications will be done through a combination of emails and bilateral conversations to encourage participants to respond to replan Round 3, to support M3 completion. A webinar on replan Round 3 will be run (see interim plan).

Action from PSG 02/11/22

Develop revised criteria for M3 (conditions to be met for full M3 approval) and how this will be assessed via the Round 3 replan consultation. Share this approach and the timeline/requirement for a full approval of the M3 milestone at December PSG

PSG conditionally approved M3 on the condition of further evidence to be provided by participants through Round 3 of consultation on the replan on adapted M3 criteria focusing on Participant plans for DB.

In addition to sourcing evidence through Round 3 consultation, the Programme would also have targeted engagement with Participants via the PPC to further understand risks to DB and identify any mitigating actions

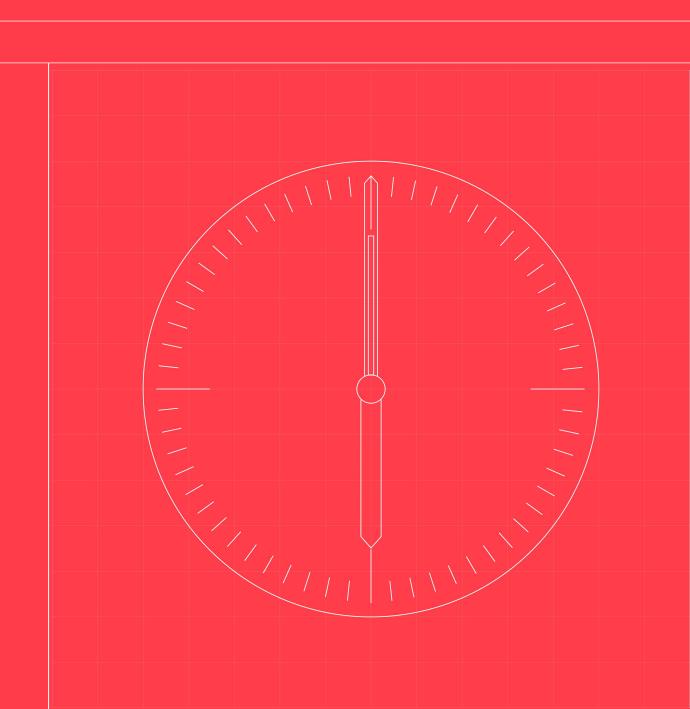


M9 update

DISCUSSION: Provide an update on the status and timelines of M9

Programme (Chris Harden)





M9 Update

For the Round 3 consultation we intend to set a plan based on M9 (System Integration Testing Start) as 30-Oct-23

The basis for this is:

- 1. That a migration approach will be agreed that enables programme delivery to be phased
- 2. That there will be a Minimum Viable Cohort (MVC) established to expedite SIT:
 - MVC allows SIT to start at the earliest point possible
 - focus on an MVC also allows for earliest commencement of qualification activities (which can start soon after SIT Functional Testing)
 - other SIT parties will be allowed to complete full SIT testing to ensure their qualification needs are minimised
- 3. That current plans for Core Capability Providers show that they believe they should be able to support this date (or close to it), or that there is a reasonable chance of doing so
 - There is high confidence in Helix and DIP, which are the first to be integrated
 - We are engaging with other parties to align them with specific dates for when they would need to join SIT (Component Integration Testing)

Minimum Viable Cohort (MVC)

- 1. Core Capability providers:
 - o Elexon (Helix)
 - DIP Provider
 - o DCC
 - o RECCo
 - St Clements (for MPRS)
 - Electralink
- 2. At least one of each of the following:
 - DNO or iDNO (providing Network Operations Services and UMSO Services)
 - Service Provider (providing Metering Services Smart)
 - Service Provider (providing Metering Services Advanced)
 - Service Provider (providing Smart Data Services)
 - Service Provider (providing Advanced Data Services)
 - Service Provider (providing UMS Data Services)
 - Supplier
 - Agent (providing DC, DA, MOP services for migration testing)



Public

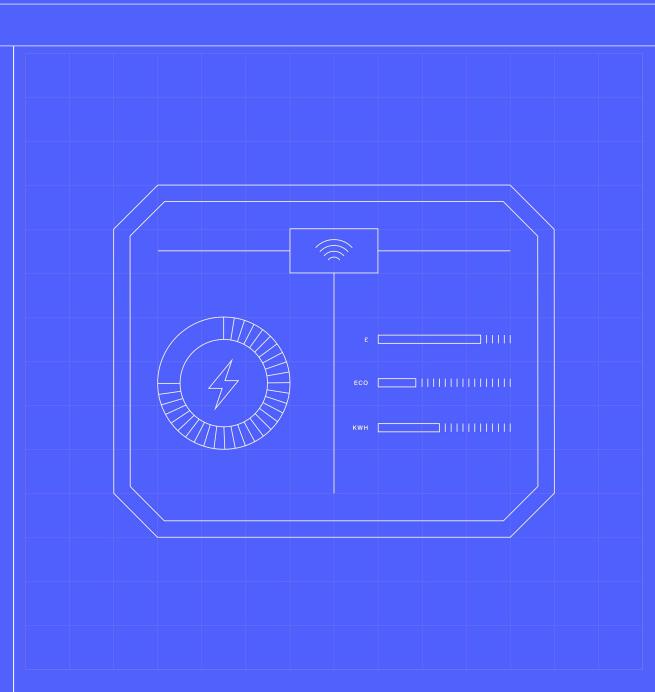
Interim Plan

DECISION:

- Review the updated Interim Plan highlighting the timelines and approach for delivering the replan and the plan for delivering the migration design
- Provide the status of the replan to inform the decision on moving to Round 3 of consultation
- Make a decision whether to approve the interim plan and start Round 3 of consultation

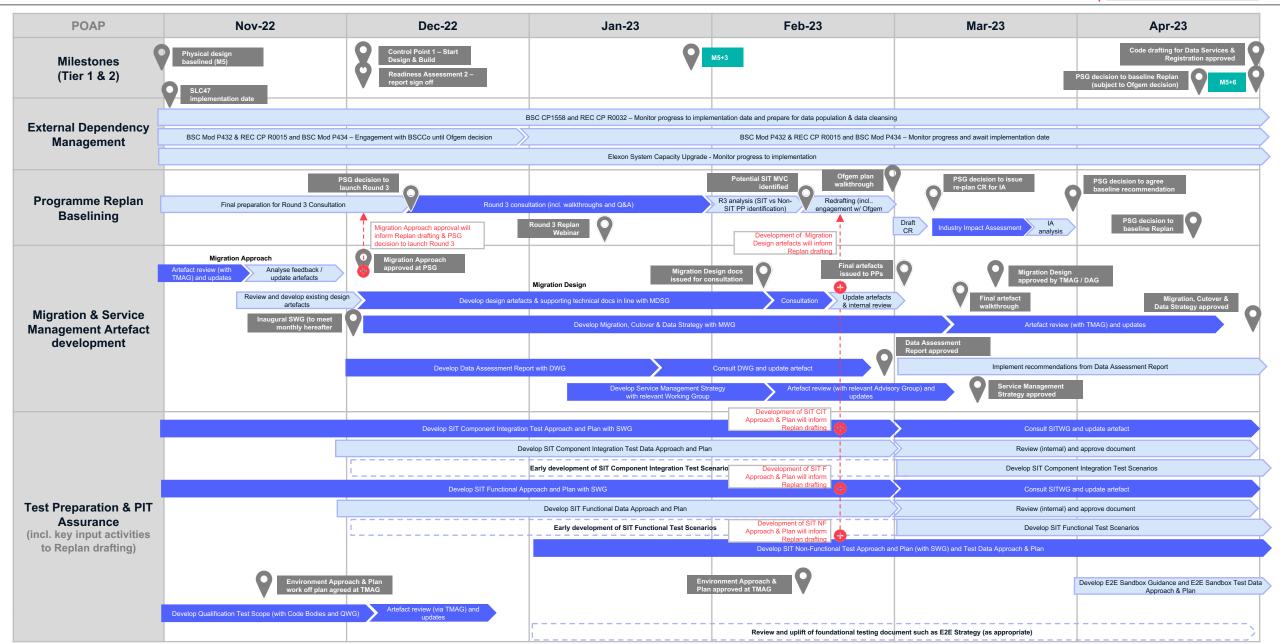
Programme (Giles Clayden)





MHHS Interim Plan (1 of 2)



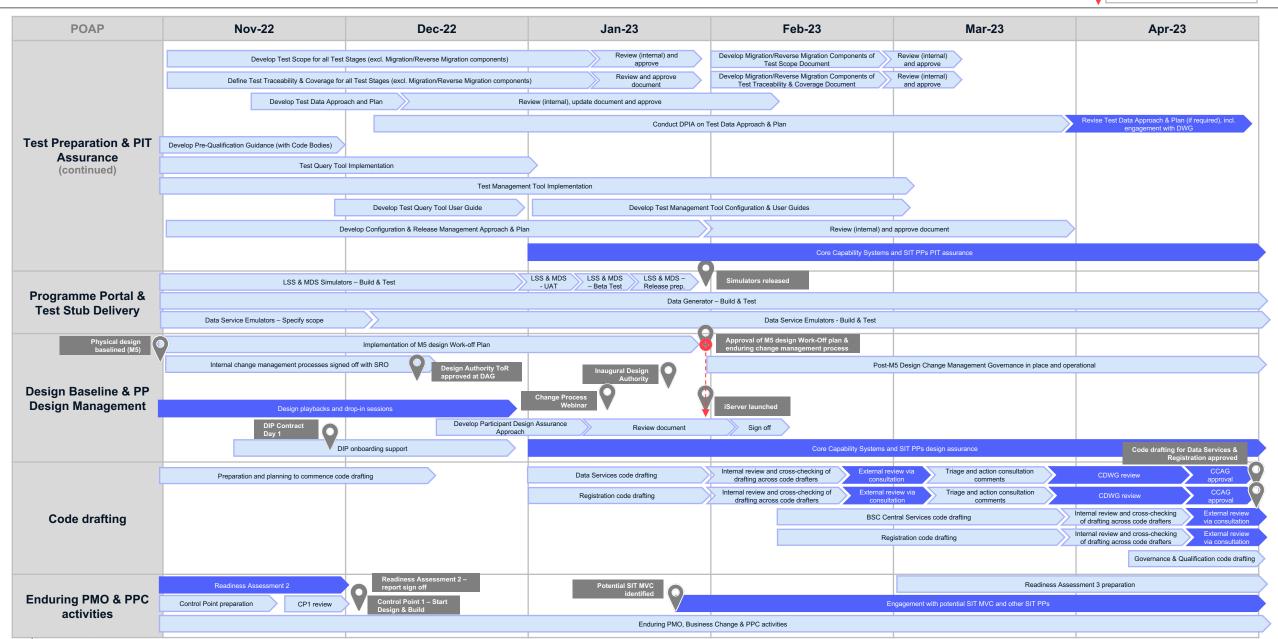


MHHS Interim Plan (2 of 2)



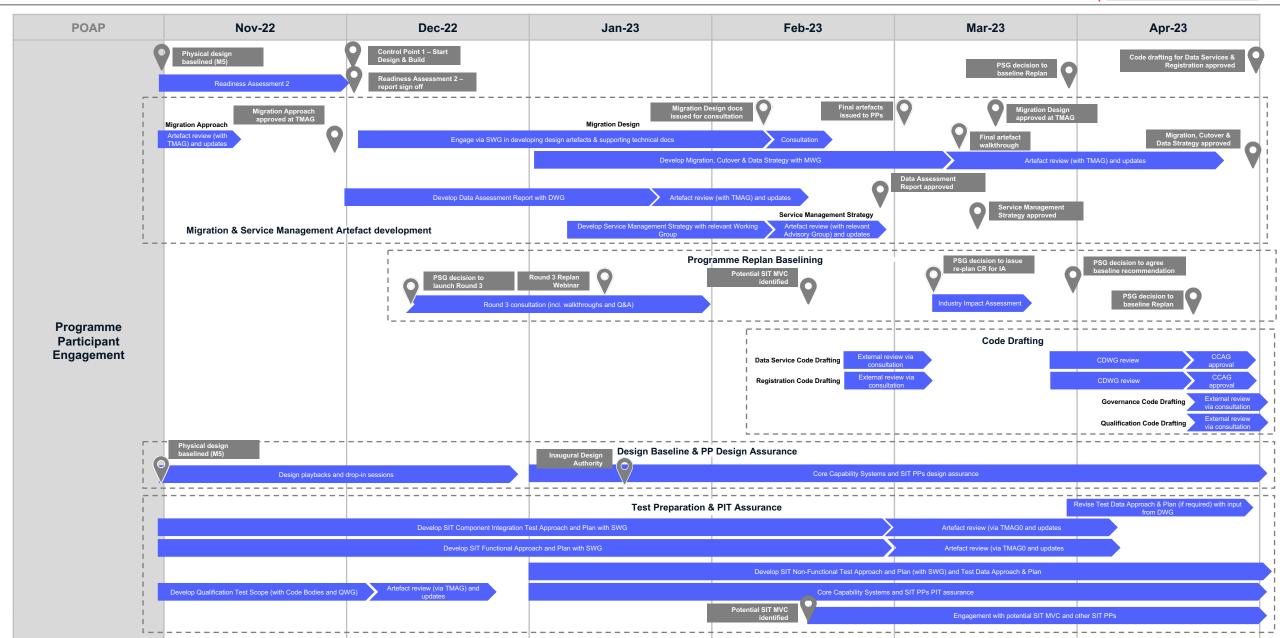
PP Engagement with MHHSP

Artefact approval / development will inform
Replan drafting & help refine / validate key
planning assumptions



MHHS Interim Plan (PP Engagement Overview)





Replan status

• The plan for use in the Round 3 consultation is being developed and refined in advance of Round 3 start:

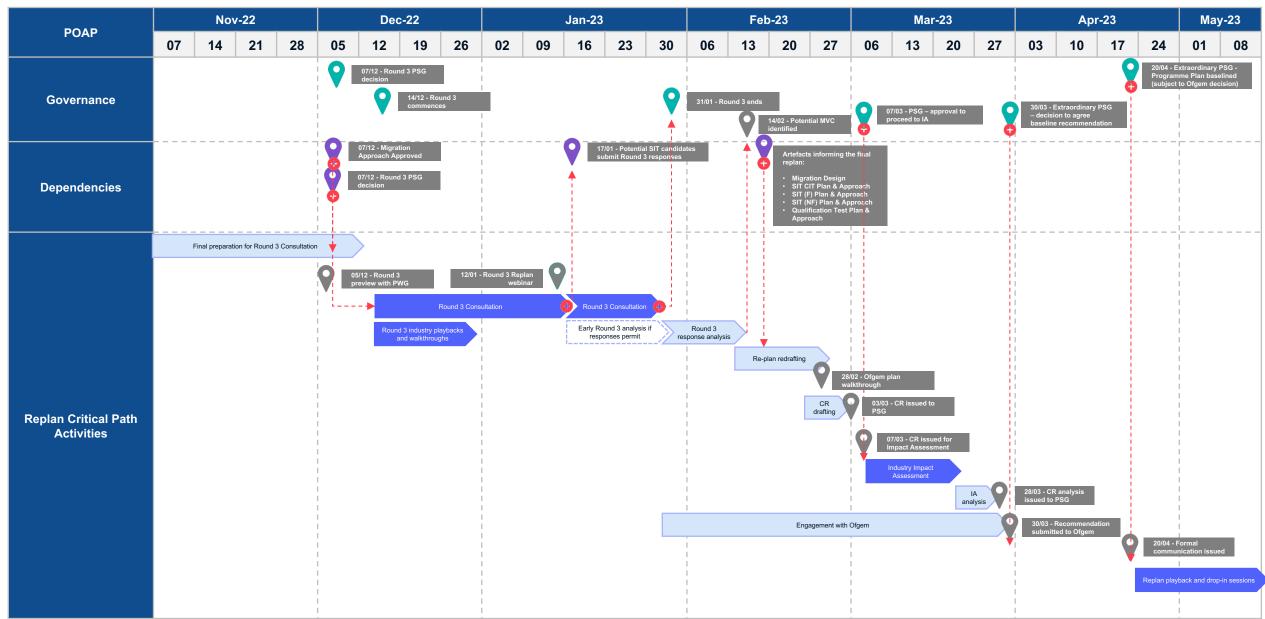
Round 3 Planning Artefacts	Commentary
Implementation Approach	Not provided in Round 2.
(PowerPoint)	High-level view of the overall programme plan and phase-by-phase articulation of the intended delivery approach, objectives and expected outcome, roles and responsibilities, basis for estimation of key activity durations and major dependencies together with an associated plan-on-a-page (PoaP) for each phase and for the overall programme
Programme Schedule, Milestone Dependencies	Fuller exposition of tasks and milestones than in the Round 2 artefact, with clearer technical dependencies
(Microsoft Project Plan format and Excel version)	
Milestone Register	Full declaration of milestones, party RACI mappings to milestones, RACI information on governance treatment of key
(Excel)	(Tier 1) milestones, and milestone-to-milestone (technical) dependencies
Planning RAID	Coverage of all risks, assumptions, issues and wider dependencies that are relevant in setting context around the plan
(PowerPoint)	and providing visibility of areas of current uncertainty and how these are being addressed
Consultation Questions	Similar treatment to that given in Round 2 – except that Participants will be asked to input to an online form, and also
(Microsoft Forms)	noting that there will some questions / requests for evidence relating to the programme's need to better support an unconditional approval of milestone M3 at the end of the process
	Consultation questions will be more targeted than in previous rounds
Artefact Catalogue and Change Control Log	Continuously available as associated artefacts, and not being explicitly referenced in the Round 3 artefacts

- The IPA has been extensively engaged as the Round 3 plan has been developed and will form their independent view on the artefacts ahead of Round 3 start
- The Participant volunteer PMs group (Planning Working Group) convenes on 5th December 2022 to discuss key elements of the approach intended in the Round 3 plan
- Plan is still to commence Round 3 on 14th December 2022, subject to PSG agreement and to complete Round 3 with final responses by 31st January 2022
- We will invite Participants who wish to be considered for SIT participation, to respond to Round 3 by 16th January 2022 although responses by 31st January do not preclude those (later) responders from consideration for SIT



Programme re-plan POAP





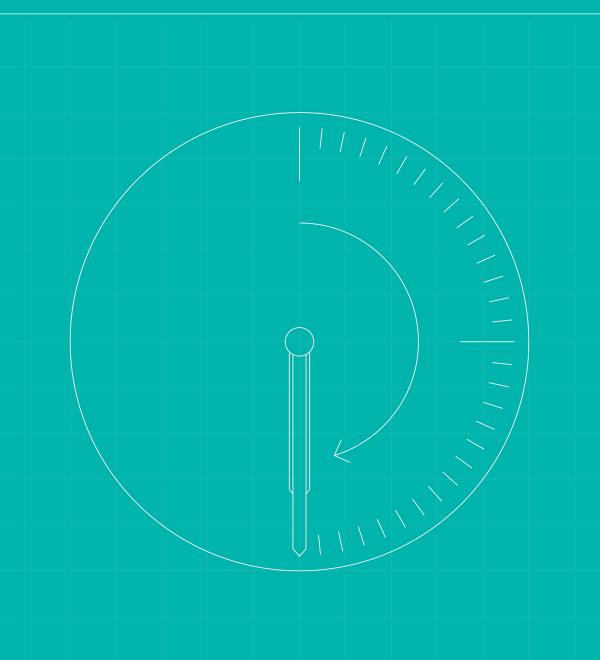
Change Control: CR012 and CR013

DECISION:

- Review the outputs of CR012 (code drafting scope CR) Impact Assessments and make a decision whether to accept or reject the Change Request
- Review CR013 (commercial impacts CR) and make a decision whether to raise the Change Request to Impact Assessment

Programme (Jason Brogden), I&C Supplier Representative (Gareth Evans), Chair





CR012 – Impact Assessment Summary

Objective of this session:

Please see appendix for full detail on CR012 Impact Assessment

PSG to review the outputs of CR012 Impact Assessment and SRO to make decision.

If CR012 is approved, the Programme recommends that: delivery of M6 would be rescheduled in the round 3 replan (subject to Ofgem approval) according to the Programme's impact assessment and a small wording change is made to the CCAG terms of reference proposed in CR012 as below.

Headlines:

- A significant majority of respondents supported the request to increase the scope of the Programme code drafting activities to include drafting of consequential change. To deliver the change, the Cross-Code Advisory Group (CCAG) Terms of Reference, including Objectives, Purpose & Duties and Scope, Deliverables, Roles and Responsibilities sections need to be updated. Programme planning assumptions will be required to include consequential code changes that are not directly from approved Design Artefacts.
- Respondents did not provide quantifiable benefits to counter the Programme's estimate of increased cost, but responses generally stated that there was a case for this change on the basis of industry-wide cost efficiency. The analysis therefore relies upon empirical evidence obtained via qualitative information in responses.
- The overall response rate for CR012 (12%). In total, 19 respondents supported the change, 2 respondents rejected the change and 3 respondents abstained.
- Specifically, 13 respondents agreed with the change with unqualified support.
 - A single set of code drafting that encompasses all the change required to deliver MHHS will be a more robust and efficient process than progressing 'core' and 'consequential' change through separate
 mechanisms. This will enable Programme Parties to see all MHHS related code changes in one place, increasing the likelihood of successful implementation and supporting the achievement of the benefits
 associated with MHHS.
 - The change will reduce the likelihood of re-work being required to other changes or MHHS to align a number of changes and it will reduce the likelihood of any changes required not being in place when they are required.
- 6 respondents supported the change, but highlighted the following considerations:
 - CCAG should agree some form of prioritisation if resource is stretched between approval of MHHS design related code and MHHS consequential change related code. This could be considered if the Code drafting was considered likely to delay M6 or be on the critical path.
 - The Programme should confirm with Ofgem (as regulator) it is comfortable with using its code change implementation powers to support the change. Ofgem have confirmed SMAP can and will be extended to designate these changes.
 - o If the change is approved, all code drafting (whether 'core' or 'consequential') will be designated by Ofgem using its Smart Meters Act Powers. As there will be no Change/Modification, the words 'Code change requests and modifications' could/should be replaced with 'Code changes' to avoid the risk of potential misunderstandings. [MHHSP propose this change is made]
 - o The Programme may be required to provide additional support to Code Bodies to support the smooth progression of CPs that sit outside the programme. [MHHSP will support this activity]
- · 2 respondents rejected the change:
 - o Whilst the proposed concept could have worked, it comes too late as the Code Drafting Plan commences January 2023 and lacks both the quantitative and qualitative facts and details to, a) persuade us of the benefits and b) for it to be implemented as a live process before January 2023.
 - Unclear whether CR012 brings any benefit that is not already allowed for in the current CCAG Terms of Reference.



CR012 – Submitted Impact Assessments

Programme Parties	CR012 Recommendations						
	Yes	No	Abstained	Not Replied			
Large Suppliers	3	-	-	3			
Medium Suppliers	1	-	-	6			
Small Suppliers	-	-	-	33			
I&C	2	-	-	39			
DNOs	7	-	-	-			
iDNOs	1	-	-	12			
Ind. Agents	-	2	1	45			
Supplier Agents	-	-	-	5			
S/W Providers	-	-	-	25			
Electralink (DCUSA)	1	-	-	-			
REC Code Manager	1	-	-	-			
National Grid	1	-	-	-			
Consumer	-	-	-	1			
Elexon (Helix)	1	-	-	-			
DCC	1	-	-	-			
SRO / IM & LDP	-	-	1	-			
IPA	-	-	1	-			

Market Share							
Yes	Yes No Abstained N						
59%	-	-	41%				
24%	-	-	76%				
-	-	-	100%				
30%	-	-	70%				
100%	-	-	-				

- Market Share information is according to the latest Meter Point Administration Number (MPAN) data held by the Programme as at November 2022. Market Share has not been provided for constituencies where MPAN data is not currently available.
- The classification of Independent and Supplier Agents is maintained by the Programme Party Coordinator and is subject to change.

Rationale for being marked down as 'abstained'

- One respondent cautioned that despite the quantity of work required from the change, the M6 Milestone not moving renders delivery untenable. [note that the Programme has proposed additional activities for Code drafting that would move M6 later]
- The Programme stated the industry should agree this change and the Programme should abstain from the decision making.
- The IPA highlighted the change is not expected to have an impact on our activities and has no specific objections to the request.



CR013 overview

Objective: Agree to raise CR013 for impact assessment

Determining scope of Examination of Settlement Impacts resulting from MHHS Programme

CR013 was raised to the Change Control process and validated by Change Board on 29-Nov-22

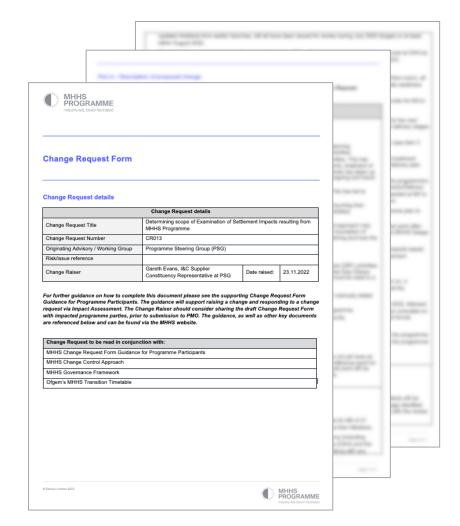
Issue Statement:

- The MHHS programme will result in a significant change to how settlement processes work in the retail electricity sector
 as it moves from a predominately NHH settlement regime using estimation algorithms to the use of actual consumption
 reads for the majority of sites.
- The system and operational processes to deliver this change are well understood and has been the subject of significant
 development. By contrast, comparatively little work has been done as to what the impact will be on settlement from this
 move from majority estimated to majority actual consumption. The magnitude of change to settlement that will occur as
 sites migrate is therefore poorly understood, but could potentially impact a large number of areas of the settlement regime,
 including Group Correction Factors, Line Losses, etc.
- Description of change:
- It is proposed that a piece of work is undertaken to understand what areas the MHHS programme should look at when
 assessing the impact that moving HH settlement will have on the balancing regime and settlement. The scoping will
 potentially need to look at all areas of the balancing and settlement regime, though the focus will need to be on those
 processes directly related to SVA consumption.
- The expectation is that the MHHS programme will create a report setting out the areas it believes require detailed assessment. The work on assessing settlement impact would be progressed through another Change Request.

Justification for change:

- Significant time and effort is expended by the industry in attempting to ensure that the current settlement regime is as accurate as possible, but ultimately is reliant on estimates to derive a NHH site's consumption. Movement of a site from NHH to HH settlement status will mean a corresponding change to its settlement profile, even if the site's behaviour does not change. This will change the settlement dynamics of the market as energy is reallocated from one settlement profile to another and is likely to have knock-on impacts on other areas such as Line Losses, etc.
- Without understanding the nature and scope of the changes to the market there is a risk that the market will experience
 unwarranted volatility as expected and actual settlement positions diverge. This will potentially increase balancing costs as
 imbalances positions widen.

Target date by which a decision is required: 11-Jan-23 at PSG. The timelines for an impact assessment and reporting require PSG consideration.



MHHS-DEL792 CR013



Public

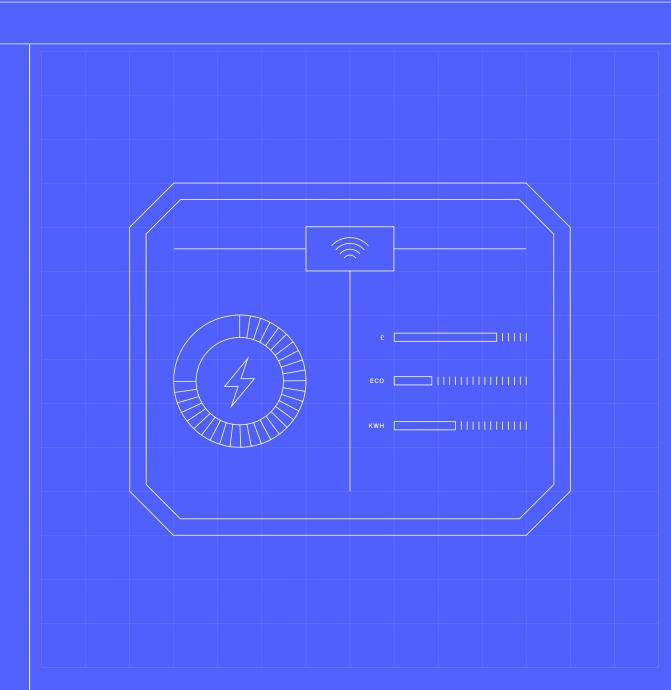
Control Point 1

INFORMATION: Provide a summary of the outputs of the Programme Control Point 1 review

Programme (Keith Clark), IPA

10 mins





Control Point 1 - Executive Summary

Control Point 1 Decision Recommendation

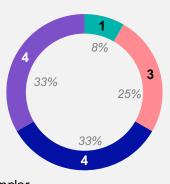
Continue

(not conditional – improvement recommendations do not require the programme to be paused or stopped)

Overall Programme Health Rating

Satisfactory

Health Indicator Assessment Ratings



- Exemplar
- Good
- Satisfactory
- Requires improvement

Programme Health summary

The Programme has decided to Continue into the Design, Build and Test (DBT) phase with a 'Satisfactory' Programme Health rating. Actions proposed as part of the Control Point review do not require the programme to be paused or stopped, although are important for setting the Programme up, and continuing to be, in the best position going into and delivering the DBT phase.

The bottom-up assessment of the 12 Programme Health Indicators found a spread of ratings across *Good* (3), *Satisfactory* (4) and *Requires improvement* (4). One Indicator (Outcomes) was rated as *Exemplar*. The need to establish Programme baselines and ability to manage Programme and Participants' delivery against those baselines were themes throughout. The Indicators rated as *Requires improvement* focus primarily on Programme and Participants' readiness for delivery in the DBT phase. Overall, we feel that none of the individual assessments nor the aggregated view of all assessments are enough to warrant a Conditional Continue/Pause decision.

Seven strategic themes and strategic action areas emerged as a result of the Control Point 1 review. The Programme will use these, together with an action list built from Health Indicator Assessments, as a basis for managing and tracking improvement against the 'Satisfactory' Health Rating across the DBT phase.

Seven strategic themes

- **1. Delivery:** Continue to build confidence in: our ability to deliver the Programme plan; Participants' ability to deliver their plans; and having robust monitoring and escalation in place to ensure both
- **2. Rhythm:** Move the programme fast enough to enable delivery of customer benefits as early as possible whilst ensuring we don't lose industry (and ourselves) as we go
- **3. MHHSP People:** Ensure individuals feel valued, we continue to monitor our resourcing, and that SRO and LDP teams work together to deliver our common outcomes
- **4. Industry commitment:** Demonstrate delivery leadership while building a programme that the whole 'industry ecosystem' believes in and is committed to
- **5. Delivery Strategies and Continuous Improvement:** Make continuous improvement an intrinsic part of our culture and deliver on our promise of an innovative industry programme model
- **6. Change and Risk:** Ensure we have the capacity and capability to deliver the inevitable future programme change and to proactively manage RAID
- **7. Outcomes:** Build on successful early benefits tracking with additional measures established and monitored, with an outcomes-focused mindset

	Health Indicator	Health Rating	
	Delivery in previous phase	Satisfactory	
	Delivery to Control Point 2	Requires improvement	
2	Programme plan	Requires improvement	
Delivery	Change	Requires improvement	
ă	Risk	Satisfactory	
	Outcomes	Exemplar	
·	Financial outlook	Good	
of Jg	Strategies and approaches	Good	
Ways of working	Delivery rhythm	Good	
>	Continuous improvement	Requires improvement	
People	MHHSP view of Programme Participants and industry	Satisfactory	
Pe	MHHSP people	Satisfactory	



MHHS IPA

"Control Point 1 PSG Report" Review



Background and scope of IPA review

The Programme has drafted the "Control Point 1 - PSG Report" to make a decision on whether or not to progress to the next phase of the Programme using a detailed review of Programme health. At Control Point 1, the Programme is looking to close the Mobilisation and E2E Design phase and move into the Design, Build and Test phase.

The scope of our assurance activity was to review the draft Control Point 1 report, as shared on the 22 November 2022, and provide feedback and comments on its content based on our understanding of the programme's status formed through our assurance activities to date. We have not performed any additional assurance activities specifically to validate or assess the content of this report or reviewed the underlying assessment and process followed to create this report.

Executive Summary:

- Overall, the Programme's draft Control Point 1 report has identified the majority of the observations
 and recommendations/next steps we would expect to be included. We have identified a small number
 of additional observations and recommendations, which have been provided to the Programme to be
 incorporated into the final version. These are primarily related to learnings from the Programme so far,
 and actions to support completion of immediate priorities for the Programme.
- Our view aligns with the Programme's assessment for 8 individual Health Indicator ratings and we
 have a difference of view for 3 indicators (2 downgraded and 1 upgraded). The differences are either
 due to interpretation of the health indicator or the rating based on our view of the underlying points
 raised in the assessment summary within the report. There is 1 Indicator where we are unable to form
 a view on the rating as we have not performed associated assurance activities to date.
- We agree with the Programme's overall Health Rating assessment as "Satisfactory" based on the underlying rating and associated assessment summary for each Health Indicator.
- We agree with the overall programme decision to "Continue", although the design and plan should be fully baselined before the programme formally moves out of the *Mobilisation and E2E Design* phase.
- We have set out in the table to the right the IPA view of key priorities for the end-to-end Programme as
 we move through Control Point 1. We note that a number of related recommendations/next steps have
 already been included in the Control Point 1 Report in and we have included a reference to the
 associated Health Indicator where this are captured.

IPA	IPA view of current priorities for the end-to-end Programme							
Prio	rity	Associated Health Indicator						
1	Deliver the baseline plan in line with the re-plan timetable. This should aim to achieve the shortest delivery timescale feasible whilst being robust and credible	Programme Plan						
2	Improvement of the decision making framework/process around key milestones. Specifically, clarity of acceptance criteria and advanced communications of the decision steps and timeline.	Delivery in previous phase						
3	Programme Participants continue to fully mobilise and progress with their Design and Build activity in line with the interim plan	Delivery to Control Point 2						
4	Central parties to continue to work with MHHSP to agree the SIT commencement timeline and deliver design and build activities in line with this timeline	Programme Plan						
5	Finalisation of the remaining design items following M5 approval (completion of the work-off plan and migration design)	Delivery in previous phase						

This document has been prepared by PwC for Ofgem only, and solely for the purpose and on the terms agreed with Ofgem in PwC's Order Form (Con/Spec 2021-086), as part of PwC's call-offs under the Economic, Financial and Other Consultancy framework. PwC accept no liability (including for negligence) to anyone else in connection with our work or this document.

41

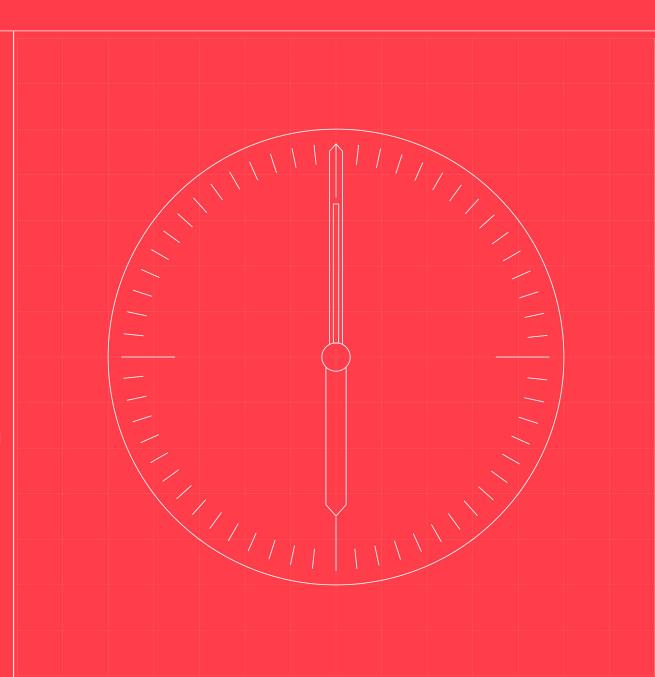
DIP enduring mod

INFORMATION: Provide an overview of Data Integration Platform (DIP) enduring modification

BSCCo (James Stokes)

10 mins

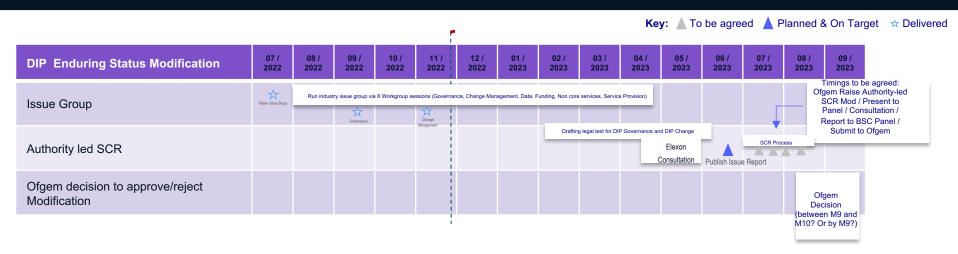




ELEXON BSC MODIFICATION - ONGOING FUNDING AND OPERATION OF THE DIP

THE PLAN FOR THE MODIFICATION, LATEST POSITION, KEY RISKS AND ASSUMPTIONS

Elexon BSC Modification - Ongoing funding and operation of the DIP (as at November 2022)



Latest position:

- The Issue 101 for DIP Ongoing Governance, Funding and Operation was raised in July
- Two workgroup meetings have taken place covering Governance and Change Management
- The second workgroup meeting was delayed due to Elexon resource working on Urgent Modifications (P446 and P448)
- Topics still to be covered through the workgroup: Data, Funding, Service Provision, non-core services and Qualification & Assurance
- SCR Process timings to be agreed with Ofgem and the DIP Working Group and the Programme

Assumptions & Risks:

- Assumptions are being made the approval decision for the modification can take place after the baselined Milestone 9 date (August'23) and will not have an
 impact on the starting of the SIT phase.
- The previous timeline provided to Ofgem detailed the final Issue report would be published in April 2023 following a formal written consultation with industry, this is now planned for June'23. The timeline has been impacted by urgent mods, and a need to ensure Elexon BSC adequately cover Qualification and Assurance.
- There needs to be a clear consistent understanding for the MHHS Programme and DIP on the capability to query data provided by DIP within the DIP infrastructure. The assumption is that the DIP solution only holds data to provide replay functionality and is not designed to be holding data for queries.



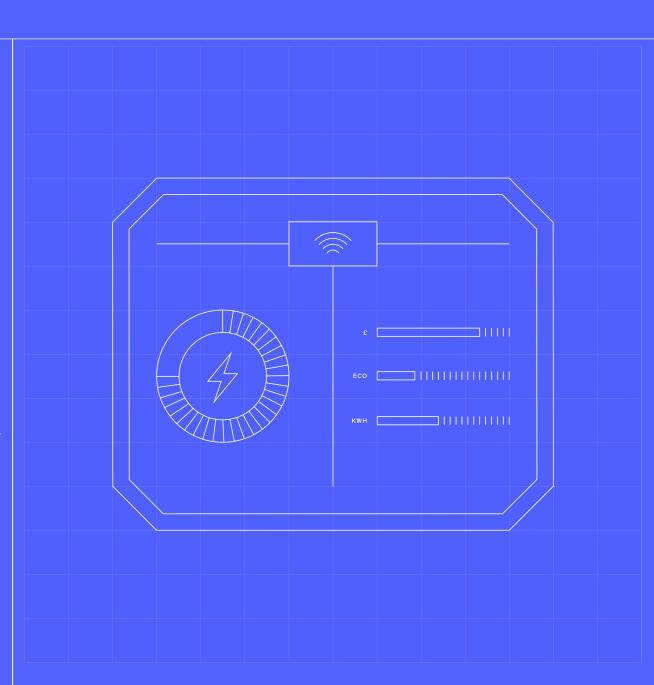
Design progress

INFORMATION: Update on progress of the M5 Work-Off Plan and the migration design

Programme (Warren Fulton)

5 mins





Overall Status

Core Design

- · DAG unanimously agreed to baseline the core design on 31 Oct 2022, subject to the work-off list being delivered within 3 months
- The delivery of the work-off items has been marked as amber until we conclude all sub-working meetings, this is because we have allowed limited time to manage potential dissensus / recurring discussions for the work-off items.
- Delivery of the work-off items is progressing according to plan. 36% of the work-off items has been completed and the relevant Artefacts are awaiting the Assurance review, 16% are scheduled to commence in the next week and the remaining 48% are in various stages of subworking group progress. The first of the fortnightly progress reports was published via the Design newsletter on 24 Nov 2022
- The plan is to complete all the work-off items and publish all updated artefacts (redlined) by 16 Dec 2022 and receive Assurance comments from industry until 13 Jan 2023. The Assurance meeting is scheduled for 25 Jan 2023 and the DAG meeting to re-baseline the Artefacts is scheduled for 31 Jan 2023

Migration Design

- The Migration Design has been marked as amber until we obtain feedback from Participants in the initial sub-working group meetings regarding the proposed migration design (i.e. we do not yet know if participants will have polarized views regarding the migration design)
- The Migration Design sub-working group commences on 30 Nov 2022 and will run weekly until the Migration Design artefacts are ready to be issued for industry Assurance review circa 15 Feb 2023. The intention is to baseline the Migration Design by mid- March 2023 (Note these timelines cater for designing the reverse migration, should that be the approved migration approach)

Milestones	Baseline	Forecast date	Status
Tranche 1 - Conditional approval	N/A	N/A	Complete
Tranche 2 - Conditional approval	N/A	N/A	Complete
Tranche 3 - Conditional approval	N/A	N/A	Complete
Tranche 4 - Approval	29/07/22	08/08/22	Complete
M5 – Design Baselined	31/10/22	31/10/22	Complete
Deliver Work-Off items	31/01/23	31/01/23	Amber
Migration design approval	31/03/23	31/03/23	Amber
<u> </u>			<u> </u>

Upcoming deliverables

- Complete all the M5 work-off items and publish the updated Core Design artefacts for Assurance review 16 Dec 2022
- Commence the Migration Design sub-working group 30 Nov 2022

_	Ś
$\frac{8}{8}$	e
is	SSI
œ	

	#	Risk or Issue (specific items or themes)	Mitigation	RAG
senes	R323	We have allowed limited time to manage potential dissensus / recurring discussions for the work-off items	As agreed with DAG, we are placing a greater emphasis on reaching decisions in the sub-working group meetings and the importance of participation from constituencies in these meetings is crucial, as we will not be inviting any new comments when the Artefacts are sent for review and will only be inviting assurance comments. If we cannot achieve consensus in the sub-working group meetings then the positions will be noted and taken to DAG for resolution.	Medium risk
<u>ssl</u>				



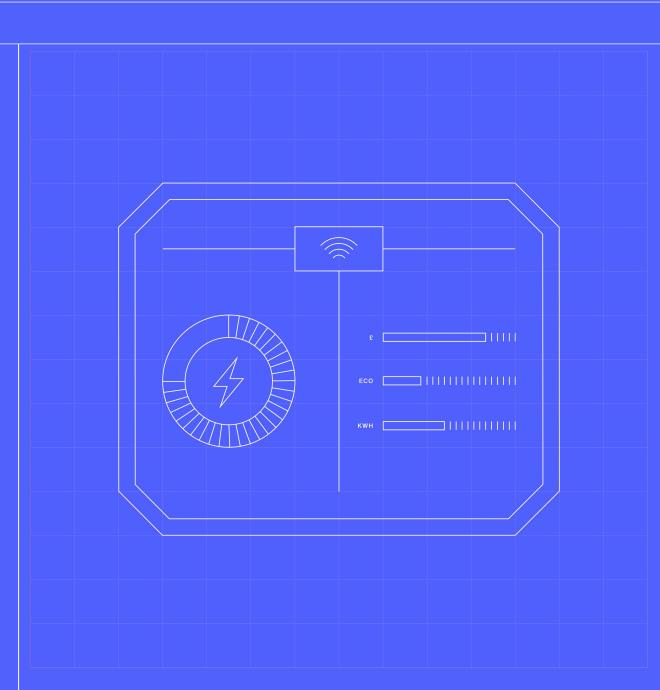
Delivery dashboards

INFORMATION: Take questions from PSG members on delivery dashboard content

Chair

10 mins





Delivery dashboards - contents

Area	Title	Purpose	Page
	MHHS Milestone Status	Provide an overview of progress against Programme milestones	49
_	Interim Plan status report	Provide an overview of progress against the Programme interim plan	50
MHHSP Programme	Risk themes	Provide a high-level view of Programme Risks	51
level	Finance	Provide high-level forecast and actual Central Programme expenditure	55
	Change Control	Update on the status of any Change Requests (highlighting any change to the baselined design)	56
	Design work-off and transition design	Please refer to the agenda item on Design for this month's content	N/A
MHHSP	Level 3 Advisory Group updates	 Update on key discussion items and outcomes from recent Level 3 Advisory Groups Provide a forward look to future Level 3 Advisory Groups 	56
workstream level	PPC overview	Provide information on PPC activity and participant engagement – includes a summary from the recent open day	59
	Data Integration Platform (DIP)	Dashboard on hold until DIP provider onboarded	N/A
Assurance	Independent Programme Assurance (IPA)	Provide a progress update on in-flight and future planned assurance activities	60
	Central Party delivery plans	Provide an overview of Helix and DCC delivery plans and progress against them	62
Industry	Central Party finances	Provide high level Central Party forecast of expenditure against plan	64
,	Industry change	 Summarise activity at the Consequential Change Impact Assessment Group (CCIAG) Summarise items raised to the Programme horizon scanning process 	65



MHHS Milestone Status

Date has not been met or is expected not to be met

Amber Date may not be met and/or new date not yet agreed

Green Date expected to be met

Milestone Status Updated to 29/11/2022

Level	el .	Milestone	Milesto	ne Date	Status		Path to Green – Actions (& related impacts)	Previous RAG Nov PSG	Current RAG Dec PSG	Forecast RAG Jan PSG
			Baseline	Forecast						
1	М5	Physical baseline design delivered	29-Apr-22	31-Oct-22	DAG approved M5		Work-off plan to be delivered Migration design to be delivered	Met	Met	Met
	M3	Design, Build Start (Elexon)	31-Aug-21	Complete				Met	Met	Met
	М3	Design, Build Start (DCC)	28-Feb-22	Complete				Met	Met	Met
	М3	Design, Build Start (DNOs)	31-May-22		Readiness Assessment 2 does not support M3 The stand beginning and the standard section	•	Unconditional M3 approval will be sought based on new criteria to			
	М3	Design, Build Start (iDNOs)	31-May-22		 milestone being met M3 was conditionally approved at PSG in Nov- 22 		be agreed at PSG Dec-22, and expected to be met as a result of requests made during the Round 3 planning consultation		Met	Met
	M3	Design, Build Start (Agents)	31-May-22	31-Oct-22	22				conditionally	conditionally
	М3	Design, Build Start (Suppliers)	31-May-22							
	M5 + 3	Industry re-plan	29-Jul-22	20-Apr-22	 Round 3 plan requires a decision on the migration / go live approach Therefore, agreed by PSG to defer Round 3 start to December MHHSP confirmed 'plan for the plan' and updated / extended the interim plan 		Agree to start Round 3 consultation on 14-Dec-22 to complete end of January 23 per the 'plan for the plan' December PSG agree timeline to reach decision (outlined in updated interim plan)	Red	Amber	Green
1	M9	System Integration Testing Start	31-Aug-23	TBD	 Date to be determined during the programme re-planning activity Round 3 proposed M9 date is 30-Oct-23 	•	This status will remain Amber until validated by programme rebaselined plan	Amber	Amber	Amber
1	M6	Code changes baselined	29-Apr-22	31-Jul-23	 CR012 proposes a change to the date that will be stated in the Round 3 re-plan 	•	Agree new dates as part of re-baselining the plan, and those new dates are not expected to be on the programme's critical path	Red	Red	Red
	M7	Smart Meters Act powers enabled	31-May-22	31-Aug-23	Date to be reviewed during re-plan consultation	•	Agree new dates as part of re-baselining the plan, and those new dates are not expected to be on the programme's critical path	Red	Red	Red
	M8	Code changes delivered	30-Nov-22	TBD	Date to be reviewed during re-plan consultation	•	Agree new dates as part of re-baselining the plan, and those new dates are not expected to be on the programme's critical path	Red	Red	Red



Progress against the Interim Programme Plan

Executive Summary

- Interim Programme Plan: Current RAG reflects the outstanding decision on the Migration Approach (previously referred to as the Migration Design) and postponement of initiating Round 3 consultation on the replan until that decision is made. Considering the decision to postpone the launch of Round 3 consultation to mid-December which will delay the rebaselining of the Programme Replan, an updated and extended interim plan has been produced. The revised plan was presented to PSG on 07-Dec-22.
- Design Delivery: The Design Advisory Group (DAG) voted to baseline the MHHS Design on 31-Oct-22 subject to a work-off item list to be delivered within three months. A decision on the Migration Approach was presented to PSG for decision on 07-Dec-22. Migration Design plan was communicated at DAG.
- **Programme Re-Plan Consultation:** Further work to develop the detail in the programme replan and supporting artefacts, such as the Milestone Register and RAID summary pack, is ongoing following the decision at November PSG to postpone the launch of Round 3 consultation to mid-December, once a decision on the Migration/Go-Live approach is made. The replan workstream continues to keep the IPA abreast of progress against the agreed plan-for-a-plan (PFAP) via Weekly Status Update meetings. Progress against the PFAP is broadly on track.
- Readiness Assessment 2 (RA2): The Readiness Assessment 2 (RA2) Overall Report and 94 Individual Reports have been drafted, finalised and shared with participants. Industry webinar to present back the RA2 findings took place on 29-Nov-22.
- Top Delivery Challenges: (1) working with core capability providers to align their DBT plans with the intended programme plan to best manage critical path risks, (2) reaching a conclusion on the migration approach in PSG and delivering the Migration Design, and (3) reaching agreement with all stakeholders on the timeline in any re-baselined plan.

Plan RAG Status					
Previous RAG	Amber				
Current RAG	Amber				
Next period RAG	Green				

Task	Workstream	Baseline date	Forecast date	RAG
Consult PPs on Migration Design, Update Migration Design (Design Artefacts)	E2E Design Delivery	30-11-22	15-03-23	Amber
Industry consultation Round 3 (end) – ** subject to October PSG decision	Replan development and baselining	11-11-22	14-12-22	Red
Post-M5 preparation and planning for code drafting (end)	Baselining MHHS Code Changes	30-11-22	02-02-23	Amber
DIP – MSA Legals	DIP Procurement & Delivery	11-11-22	09-12-22	Red
Control Point 1 preparation (end), Control Point 1 review & publish	Milestones, Check Points & Readiness Assessments	30-11-22	30-11-22	Complete
Develop Pre-Qualification Guidance	SI Testing & Data	30-11-22	09-12-22	Amber
Review & sign off RA2 Reports	Enduring PMO / PPC Activity	30-11-22	30-11-22	Complete

Task	Workstream	Baseline date	Forecast date	RAG
Ofgem determination and decision on re-plan	Replan development and baselining	31-12-22	20-04-23	Red
Schedule re-plan playbacks and prepare content	Replan development and baselining	31-12-22	20-04-23	Red
Draft Qualification Testing Approach & Plan (**Responsibility for this document sits with the code bodies**)	SI Testing & Data	31-12-22	TBC	Red
Agree approach to monitoring and reporting migration-related PAB activities (e.g. monitor & report data cleanse and other progress)	SI Testing & Data	31-12-22	31-12-22	Green
Lessons learned, define scope & objectives for next Readiness Assessment	Enduring PMO / PPC Activity	31-12-22	31-12-22	ТВС

RAID ID	RAID Description	Mitigation / Resolution	Resolution Date	Owner(s)	RAG
1036	The existing migration approach is currently not achievable.	 Present paper to PSG to agree Migration option Migration Design underway and planned for delivery by end March 2023 (not part of baseline design at M5) 	07-Dec-22	Chris Harden Keith Clark Ofgem	Amber
1041	SEC Change Board has recommended Ofgem reject the currently proposed solution for SEC Mod MP162.	 Ofgem has now approved MP162 to implement the new MDR role in the June 2023 release and the Programme continues to work with DCC to plan availability of the MP162 solution in time for SIT. The Programme is supporting DCC in the resolution of the direction from Ofgem to DCC to implement MHHS capacity. DCC conducted a stakeholder briefing event on 24-Nov-22 	30-Oct-22	Jason Brogden	Green



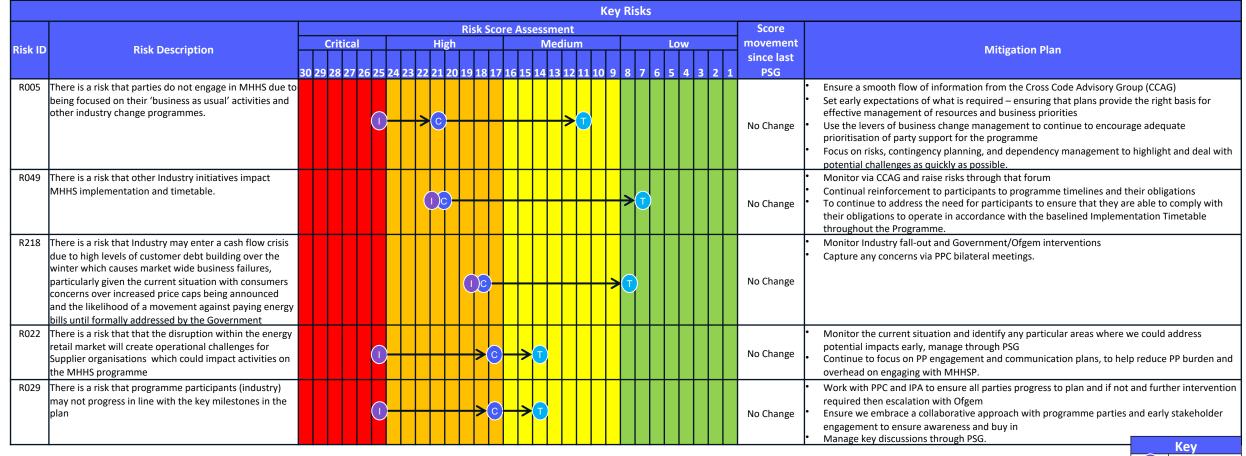
Initial Score

Current Score

Target Score

Risk theme 1: Supplier and Programme Participant engagement and mobilisation

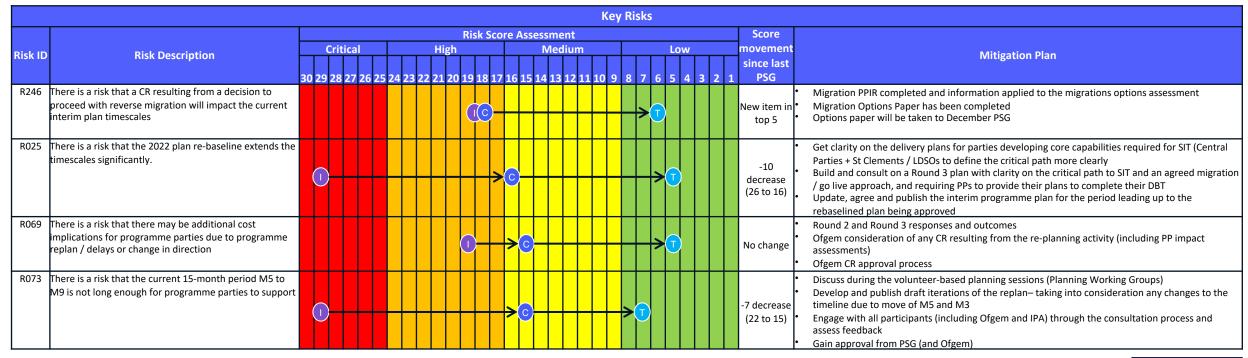
Theme	Summary	Mitigation Approach Overview		Status
Supplier and Programme	Suppliers and Programme participants may not be mobilised early enough to support the	 M5 approved, M3 conditionally approved PPC activities (including Readiness Assessment 2) have been conducted to verify status at M3, with the RA2 findings shared at November 	Previous RAG	Amber (11 Risks)
participant engagement and mobilisation	forward delivery approach and / or market conditions may worsen	PSG. RA3 is proposed to commence on in May 2023 (subject to the outcome of the replan) • Participant engagement has been conducted both via the Design and the ongoing Re-planning activities.	Current RAG	Amber (18 Risks)





Risk theme 2: Completion and outputs of the Programme Re-plan activity

Theme	Summary	Mitigation Approach Overview		Status
Completion and outputs of the Programme Re-	There are risks to the completion of the re-plan as expected, and of the timescales (in the re-plan) being longer than the original Transition	 Seek earliest baselining of the programme plan – this, together with the Design baseline - will help to remove programme ambiguity and bring the programme's management into a more controlled and predictable delivery mode Since the conclusion of consultation Round 2, updates to the Replan artefacts are underway with engagement from senior stakeholders 		Amber (5 Risks)
plan activity	Timetable	and the IPA ahead of Round 3 consultation commencement in December 2022	Cumant	Australia
		 Industry volunteer parties will reconvene via the Planning Working Group (PWG) to discuss how Round 2 responses have been addressed, and to improve awareness of the re-planning process and key elements of the intended plan ahead of Round 3 consultation. 	Current RAG	Amber (6 Risks)



Items can be raised to the Programme RAID log using the RAID input form. Please refer to the Programme Digital PMO (DPMO) to see Programme risks in more detail





Risk theme 3: Management of Industry Change associated with the Programme

Theme	Summary	Mitigation Approach Overview		Status
Management of industry change associated with	Through the CCAG Horizon Scanning log and external facing MHHSP activities, several risks and dependencies have been identified	Comprehensive industry change analysis completed and updated RAID to ensure MHHS Programme is more proactive in the management of the risks of industry change that impacts MHHSP	Previous RAG	Amber (12 Risks)
The Programme	from industry change and initiatives which need to be mitigated or resolved.	 Attendance at relevant industry change Working Groups to ensure MHHSP requirements delivered Proactive discussions with Code Bodies to ensure delivery plans aligned to MHHSP plans Data cleansing activities key to migration and an MHHSP position needs to be agreed to take into discussions with external parties 	Current RAG	Amber (14 Risks)

				Key	Risks		
Risk ID	Risk Description	Critical	Risk Scor High	e Assessment Medium	Low	Score movement	Mitigation Plan
I II JK ID	Hisk Description	30 29 28 27 26 25	24 23 22 21 20 19 18 17 1	16 15 14 13 12 11 10 9	8 7 6 5 4 3 2 1	since last PSG	······basion riam
	There is a risk that the migration approach needs to change if BSC Mod P432 is rejected				>0	No Change	 Discussed with Elexon, seen as reasonable assumption that sites will be migrated in advance of M10. Need to monitor ongoing and discuss with Elexon and Ofgem. Elexon to return to Ofgem 30/11. Dependent on DCUSA Modification Continue to discuss at CCAG
	There is a risk that data cleansing of new MHHS Data is not completed in advance of Migration (including data established through BSC CP1558)				7	No Change	 Internal discussion to establish our proposed way forward Further discussions then required with Code Bodies and St Clements
	There is a risk that the implementation of DCC release (SEC MP162 Mod) in February 2024 does not align with MHHS Programme requirements to be ready for SIT.		© ∢ +			+5 increase (13 to 18)	 Discussions ongoing with DCC - Complete this is subject to the replan activity This may need to be revisited if R182 becomes an issue
	There is a risk that delivery timescale slippage may run into DSP re-procurement timescales, impacting DCC costs and delivery timescales for Mod P162	5		© 0	> T	New item in top 5	Maintain discussions with DCC
	There is a risk that the migration approach needs to change if BSC Mod P434 is rejected			00	> 0	New item in top 5	Continue to monitor through CCAG

Items can be raised to the Programme RAID log using the RAID input form. Please refer to the Programme Digital PMO (DPMO) to see Programme risks in more detail





Programme Issues

There are currently two key issues for the Programme, each of which have previously been captured, monitored and managed as risks: (1) addressing risks from the Independent Agent escalation to the IPA of the SEC Mod MP162 solution; and (2) reaching a conclusion in principle, on how the programme will handle the migration approach.

We propose to take the MP162 Programme Issue from this headline list next month and to continue to support and monitor DCC delivery of the capacity solution and MP162 through Programme RAID

These risks have now developed into critical issues which will require the inputs from a number of groups to resolve. Further details for each issue are outlined below.

Key Issues	Impact	RAG	Current Actions	Proposed Actions	Owner(s)
1. MP162 SEC Change Board has recommended Ofgem reject the currently proposed solution for SEC Mod MP162.	 Delay to approval of SEC Mod MP162 as defined is likely to cause delay to DCC delivery of MHHS changes and therefore could impact the Programme's readiness to commence SIT, which would impact the overall Programme timelines. This could lead to SEC Mod P162 solution being revisited to address any reasons for rejecting Mod P162 with subsequent redesign, Impact Assessment, Modification Processing and revised implementation date for SEC Release Any change to the SEC Mod MP162 solution will need to be assessed for impact on the MHHS design and could result in further MHHSP change. 	GREEN	 Ofgem has now approved MP162 to implement the new MDR role in the June 2023 release and the Programme continues to work with DCC to plan availability of the MP162 solution in time for SIT. The Programme is supporting DCC in the resolution of the direction from Ofgem to DCC to implement MHHS capacity. DCC conducted a stakeholder briefing event on 24-Nov-22 	Continue to support and monitor DCC delivery of the capacity solution and MP162 through Programme RAID	 MHHS Programme Ofgem SECAS DCC IPA
2. Migration The existing migration approach is currently not achievable.	 This will impact the Programme's ability to utilise early adopters, as there are outstanding questions relating to the Ofgem timetable and the (later) CCDG guidance – which are not fully aligned regarding how migration can happen in the period between M12 and M14 This would also impact the Programme's ability to finalise the rebaselined plan (unless it is agreed that significant assumptions remain in the plan at that point). 	AMBER	 The Programme to present the Migration Options analysis to PSG for decision The Programme has initiated the Migration Design work 	The Programme to action the output from PSG.	MHHS ProgrammeOfgemAll Participants

Items can be raised to the Programme RAID log using the RAID input form. Please refer to the Programme Digital PMO (DPMO) to see Programme risks in more detail

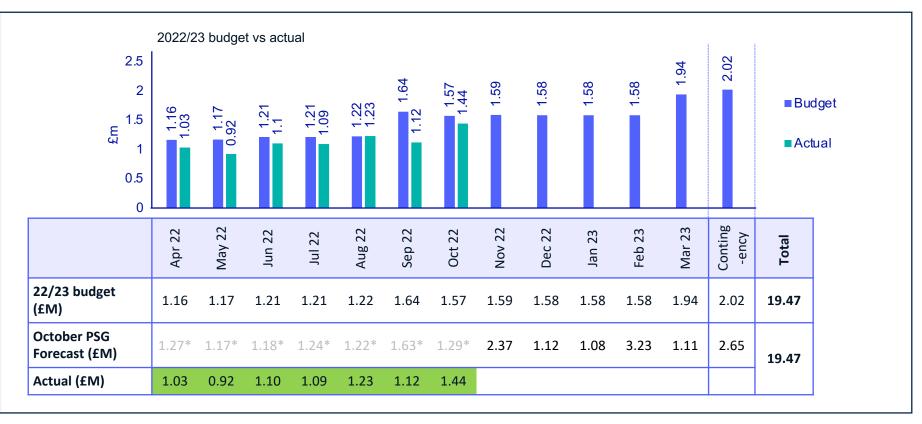


Headline: October actuals slightly below budget due to delays in recruitment.

2022/23 overview

The current year's forecast remains at £19.5M

- The DIP estimate will be validated once the contract is awarded late in Q3. This is the key risk to spend this financial year
- The re-plan presents the biggest risk to the overall Programme budget and will be resolved following completion in Q4 22/23
- Due to the uncertainty mentioned above, the April to August underspend has been added to the contingency.



- *: forecast for historic months is the forecast as presented at the previous month's PSG
- · This dashboard includes MHHSP Central Programme costs only. This includes IPA and LDP resource and the DIP



Change Control – Change Request status

Ref.	Key Detail	Change Raiser(s)	Change Type	Decision	Status	Action If approved	Change Owner(s) If approved
CR001	M5 to July 2022	MHHS Programme (Jason Brogden)	Full Impact Assessment	Ofgem Approved (21/04)	Complete	Updated MHHS Transition Timetable	MHHS Programme (Jason Brogden)
CR002	M5 to November 2022	Emily Wells , Corona Energy	Full Impact Assessment	Ofgem Rejected (21/04)	Closed		
CR003	M6 to 9 months after M5 and M7 to 10 months after M5	Lawrence Jones, Elexon	Full Impact Assessment	Ofgem Approved (18/05)	Complete	Updated MHHS Transition Timetable	MHHS Programme (Jason Brogden)
CR004	Changes to TAG and Governance Framework	MHHS Programme (Jason Brogden)	Housekeeping	Change Board approved (24/03)	Complete	Updated MHHS Governance Framework	MHHS Programme (Jason Brogden)
CR005	Programme Cooperation Principles	MHHS Programme (Jason Brogden)	Full Impact Assessment	PSG approved (04/05)	Complete	Updated MHHS Governance Framework	MHHS Programme (Jason Brogden)
CR006	Changes to DAG and Governance Framework	MHHS Programme (Fraser Mathieson)	Housekeeping	Change Board approved (26/04)	Complete	Updated MHHS Governance Framework	MHHS Programme (Jason Brogden)
CR007	Moving the M3 date to 30 September 2022	MHHS Programme (Jason Brogden)	Full Impact Assessment	PSG rescinded (06/07)	Closed		
CR008	RECCo membership of PSG, DAG, TMAG	Jonathan Hawkins, RECCo	Full Impact Assessment	PSG approved (08/06)	Complete	Updated MHHS Governance Framework	MHHS Programme (Jason Brogden)
CR009	M5 and M3 milestone date changes	MHHS Programme (Jason Brogden)	Full Impact Assessment	Ofgem Approved (01/09)	Complete	Updated MHHS Transition Timetable	MHHS Programme (Jason Brogden)
CR010	Inclusion of the Full Plan Review PM2 activity within Programme Governance	Graham Wood, Large Supplier Constituency	Not applicable	Withdrawn by Change Raiser (28/07)	Closed		
CR011	Update to the Programme Interim PoaP to reflect decisions made at September 2022 PSG	MHHS Programme (Joe Deal)	Housekeeping	Change Board approved (27/09)	Complete	Updated Programme Interi m PoaP	MHHS Programme (Joe Deal)
CR012	Increase in scope of CCAG ToR and code drafting activities to include consequential change	Sarah Jones, RECCo	Full Impact Assessment	PSG to review Impact Assessment report (07/12)	Open		
CR013	Determining scope of Examination of Settlement Impacts resulting from MHHS Programme	Gareth Evans, I&C Supplier Constituency	Full Impact Assessment	Change Board validated change request to go to PSG for decision (29/11)	Open		



Discussion summary from this month's Advisory Groups

Design Advisory Group (DAG)

Update from DAG 09 November 2022

- 1. Decision to Baseline the MHHS Design DAG unanimously approved the MHHS Design Baseline, subject to the completion of an agreed Work-Off Plan. The Work-Off Plan consists of items of minor change/clarification and other items which will require discussion at DAG subgroups. For minor or uncontentious changes to the Design Artefacts arising from work-off items, a Programme Change Request (CR) will not be required however any such items will still be subject to change control and approval by the DAG, to ensure continued industry representation and oversight. For any more substantial change which may be required, a formal Programme CR will be necessary. This decision completes the M5 Programme milestone.
- 2. IPA and SI Assurance Report The MHHS SI Assurance Team and the IPA provider advised DAG there were no assurance observations which prevented baselining of the MHHS design. There were several observations requiring resolution, such as the lack of clarity around transition arrangements. The SI Assurance Team will implement a Post-M5 Design Change Management Process to provide robust governance for management of the design baseline. A webinar will be held to introduce the process.

DAG Headline Report available here.

Cross-Code Advisory Group (CCAG)

Update from CCAG 23 November 2022

- 1. Horizon scanning The CCAG completed a full review of Horizon Scanning log with updates from all code bodies. SEC MP162 was with Ofgem for decision. BSC P432 and P434 were also with Ofgem for decision. The CCAG noted importance of aligning implementation of several related changes across BSC and REC.
- 2. Qualification Code Drafting timeframes and dependencies – The CCAG considered qualification code drafting dependencies and confirmed Code Bodies were comfortable qualification would commence based on qualification legal text being approved by the CCAG, rather than needing to await implementation of text at M8 (M8 and M10 could be aligned).
- 3. CR0012 Impact Assessment update The CCAG discussed the potential impacts of CR012 approval on the code drafting timeline, noting this would add 8-12 weeks to the plan.
- **4. Code Freeze request** the CCAG discussed how to manage potential code change congestion (between BAU code changes and MHHS code changes) when MHHS implementation was due.

The CCAG Headline Reports are available here.

Testing and Migration Advisory Group (TMAG)

Update from TMAG 16 November 2022

- Environments Approach and Plan –The TMAG agreed that a work-in-progress draft version 2.1 of the Plan could be shared with Programme Participants va the Collaboration Base. The final version of the document would be baselined in February 2023
- 2. Migration Options The Programme updated on progress of the Migration options and the PPIR (see Programme updates). A decision would be made on the chosen option at 07 December PSG
- Export MPANs The TMAG reviewed the issue from CCAG and DWG and agreed this should be addressed through the Migration Working Group (MWG)
- **4. SIT Working Group** The programme updated on the plan to mobilise a Systems Integration Testing Working Group (SITWG). The first meeting would be on 01 December
- 5. Qualification The Programme updated that discussions were ongoing with code delivery bodies on responsibilities for qualification and that decisions needed to be progressed here before coming to the Qualification and E2E Sandbox Working Group (QWG)

TMAG Headline Reports are available here.



Level 3 Advisory Groups – Agenda forward look

	Meeting date	09-Nov	14-Dec	11-Jan	08-Feb	08-March
Design Advisory	Agenda items	 CCIAG Update Work-Off Plan Updates Post-M5 Design Change Management 	Work-Off Plan Updates Post-M5 Design Change Management: Process Approval	 Work-Off Plan Updates and decisions Design changes for approval 	 Design changes for approval DAG ToR review Migration design updates 	 Design changes for approval Migration design updates
Group (DAG)	Standing items	 Minutes and actions Summary and next steps Programme updates 	Minutes and actions Summary and next steps Programme updates	 Minutes and actions Summary and next steps Programme updates 	 Minutes and actions Summary and next steps Programme updates 	Minutes and actions Summary and next steps Programme updates
	Meeting date	23-Nov	21-Dec	25-Jan	22-Feb	22-Feb
Cross-Code Advisory Group (CCAG)	Agenda items	 Qualification code drafting timeframes and dependencies CR012 Impact Assessment update Code Freeze request CCAG reporting 	 Code drafting plan as per round 3 replan submission Code draft reporting Prototyping update 	 Code drafting activity Code drafting reporting against plan Code drafting collaboration base 	 Code drafting activity Code drafting reporting against plan Code drafting consultation process 	 Code drafting activity Code drafting reporting against plan Code drafting consultation
	Standing items	Minutes and actionsProgramme updatesHorizon scanning logCDWG update	Minutes and actionsProgramme updatesHorizon scanning logCDWG update	Minutes and actionsProgramme updatesHorizon scanning logCDWG update	Minutes and actionsProgramme updatesHorizon scanning logCDWG update	Minutes and actions Programme updates Horizon scanning log CDWG update
	Meeting date	16-Nov	21-Dec	18-Jan	15-Feb	15-Mar
Testing and Migration Advisory Group (TMAG)	Agenda items	 Environments Approach and Plan Migration Options Analysis Update Export MPANs SIT Working Group Qualification 	Programme re-plan Migration, Cutover & Data Strategy update Qualification update	Test Data Approach and Plan approval	 Data Assessment Report approval Migration, Cutover & Data Strategy approval Environments Approach and Plan review 	Qualification Test Approach and Plan approval Review of E2E Testing & Integration Strategy (schedule after the replan and other documents have been baselined)
Wild Market	Standing items	 Minutes and actions review Programme updates Working group report Next steps and agenda roadmap 	Minutes and actions review Programme updates Working group report Next steps and agenda roadmap	 Minutes and actions review Programme updates Working group report Next steps and agenda roadmap 	 Minutes and actions review Programme updates Working group report Next steps and agenda roadmap 	Minutes and actions review Programme updates Working group report Next steps and agenda roadmap

Key themes of PPC engagement (25 October – 25 November 2022)



DBT Readiness and Mobilisation

- M3 has been conditionally passed, with the condition being that participants provide evidence of their delivery plans in Replan Consultation Round 3. The PPC Team has been briefing participants on this requirement in bilaterals, and this has been positively received by participants to date.
- The Readiness Assessment 2 (RA2) Overall Report and 94 Individual Reports have been drafted and finalised. These will be sent to Programme participants by 29 November at the latest.
- The PPC Team has also worked with the Migration Team to drive engagement with the Migration PPIR. This has resulted in 21 responses, received by the closing date of 18 November.



SIT Readiness

- 52% of RA2 responders indicated that they plan to be a participant in SIT. These were relatively evenly spread
 across all Constituencies, with at least 2 participants planning to take part from each constituency (except
 'Other').
- In terms of the information that Participants wanted before making a decision about SIT, this was mostly around the scope, plan and benefits of SIT. The implications of SIT for qualification was also raised several times.
- Next steps: PPC team to discuss SIT readiness with participants in bilateral meetings.



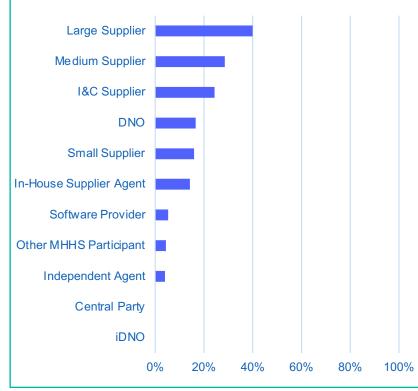
Communications channels

- The PPC team provides ongoing management of the Collaboration Base.
- There are over 751 users of the Collaboration Base and 52% logged in the month of October.
- The PPC team seek feedback from participants in bilateral conversations.
- **Next steps:** Team to analyse results of a survey sent to Participants about the website and Collaboration Base and make changes accordingly.

Participant Engagement by Constituency

The PPC team held **24** bilateral meetings with Participants this month. The chart below shows the percentage of these Participants in each Constituency that were met.

% Participants met, by Constituency





MHHS IPA

Monthly Assurance Dashboard – December PSG



Dashboard Objective: To provide PSG with a progress update on in-flight and future planned assurance activities. Assurance themes and agreed actions will be shared with PSG on a quarterly basis with specific Work Package (WP) assurance reports shared in the lead up to key milestones.



Assurance Activities in Progress / Completed during month

Theme-Based Assurance

- Ongoing Embedded Assurance Activities (WP1) Monthly cadence of interactions with MHHSP to support embedded assurance - In Progress - Control Point 1 review in progress, IPA view and recommendations included in 7 December PSG
- MHHS Programme Plan (WP3) Embedded assurance in programme re-plan activity In
 Progress IPA interim report to be completed as part of the Round 3 Plan Consultation
- Design Documentation (WP4) Embedded assurance in design activity Complete IPA report presented in 31 October DAG and 2 November PSG

Stage-Based Assurance

Market Participants' Readiness for D&B (WP8) - Assurance review of Readiness Assessment 2
 Complete - IPA report presented in 2 November PSG



Upcoming Assurance Activities

Theme-Based Assurance

- Assure Readiness for PIT (WP9), SIT (WP10), System Proving (WP11) & Completion of Migration (WP13) -Assurance activities to commence in 2023 in line with replan
- Revision of the Independent Programme Assurance
 Framework and assurance plan To be updated
 following completion of Programme Re-plan



Assurance Action Status

 IPA Actions / Recommendations are being logged and tracked on a weekly basis through the MHHSP Quality Manager

ELEXON

Helix Programme Update

Helix Programme Objectives: To deliver the Market-wide Half Hourly Settlement (MHHS) changes to Elexon's systems and processes ready for MHHS go-live in October 2024.

Overall Status



Helix is 7 months into the DBT phase where re-work & new requirements from the baselined MHHS designs has resulted in significant additional effort.

MHHS re-plan will also impact the Helix timeline and budget.



Milestone	Baseline Date	Status
Programme mobilised	17/01/2022	Complete
Discovery & Design phase	22/04/2022	Complete
Delivery phase start	20/04/2022	Complete
Delivery phase ends	28/04/2023	Impacted
Industry testing phase starts	01/05/2023	Impacted
Industry testing phase ends	27/09/2024	Impacted
Helix changes go-live	30/09/2024	Impacted
Transition phase starts	30/09/2024	Impacted
Transition phase ends	26/09/2025	Impacted

- Helix is 7 months into the Delivery phase (DBT) where we are iteratively building & testing the changes for the new MHHS services
- Helix DBT was originally planned to be complete by end April 2023, but this has been impacted by the re-work and new requirements within the baselined MHHS requirements & designs which now requires a significant amount of additional effort. This will impact the Helix timeline and budget. The re-work has resulted from where Helix has already built functionality to the approved designs from Tranches 1-3 and these have changed in the baselined designs
- The risk of further re-work will continue until the work-off items, Migration design and Transition design are complete
- Integration testing of the new service features continues at a consistent pace
- The MHHS re-plan will also impact the Helix timeline and budget. We await the final round of the re-plan to complete the impact assessment
- The MHHS environment plan requires participants to have 4 environments to link to each of the 4 MHHSP environments. This will also drive additional unexpected costs for Elexon (Helix)
- Elexon (Helix) continue to work with MHHSP to clarify the scope and responsibilities for MHHS changes to the Performance Assurance Framework and Qualification



Suppliers

MHHS - Monthly Delivery Report [DCC]

Report Date: 23-11-22

Stakeholders

RAGs	Overall	Approach	Plan	Resources		Bud	get			Risk	
Outlook .	PIA (CR#) received from S SEC Parties updated on M	for MP162 submitted to OFGEM for final SPs providing ROM cost for MHHS capac MHHS capacity ROM costs & scope (24/1 HHS capacity (CR4879) inclusive of encry	decision (28/10) city requirement	Progress expected in Ofgem letter confirm Host capacity model Are there any deliver	ing decision	on MP16 p with SP	s to con	firm inp		A due in	Jan 2
cisions	required	From whom?		By when?	June	'24 SEC	Releas	e E2E F	PoaP		
ne		n/a		n/a		2022					2023
k or Is:	sue & RAG	Mitigating or resolving action required	Date for action to be resolved	Action owner		Q4 Dec Ja	Q1	Mar	Ann	Q2 May	Jun
ceipt of 162 dec	Ofgem Letter confirming cision	Unable to process SPs to commence until decision confirmed delaying DBT Start	01-12-22	Ofgem			T FED	Mar	Apr	◇ Post PIT	ГРАМАУ
	Spec from R0044 is not he start of MDR DB-PIT ng.	Monitor, closely, the Landmark and Netcompany delivery of interface spec to ensure agreed milestones are met.	15-01-23	DCC	ase	Commercials in pla Nov 2022	Draft TAD FEB'23	TAG Review TAD FEB'23 Consult	TAG A	pprove PR'23	
sumptio	on & RAG	Action required to remove assumption	Date for action to be resolved	Action Owner	SEC Release E POAP			23 - S1SP CR4813 23 - SM2 CR4813 I			PIT TAB JUN'23
162/MF	ramme baselines against HHS Programme nts and go-live	Programme changes to be checked back against DSP Programme Assumptions	31-10-23	MHHSP	24 E2	NOV/JAN CR4813 Des	en en		φq	DA Gate 1 TBC	DCC
penden	ncy & RAG	Managing action required	Date for action to be resolved	Action Owner	June				ľ		Z
w MDR ing	Party available for UIT	Liaise with MHHS Programme on upcoming parties	01-07-23	MHHSP			Engagement/MDR	-	SEC Accession P	•	→ MDR U
itching I nplete	RECMOD R0044 is	DCC Internal programme liaises with REC Manager for delivery into MHHS	31-01-23	DCC/REC Manager		CAP/LAND Cle timings into MP16 CSS Design FEB	er dependency on 2 - EXACT timings	CSS Build FEE			JUN'23 SI
gistratio	on data design	DCC need visibility and greater clarity on how MDR and SDS registrations will be modelled	15-12-22	MHHSP		R0044	Y	V R0044	IE 24 Scope MP162 (CR481		2 Service P

Party Milestones & Deliverables	Original or Baseline Date	Forecast date & RAG
Ofgem approval	25-10-22	28-11-22
MP162 DBT complete	15-05-23	15-05-23
MP162 SIT complete	15-09-23	15-09-23
MP162 MDR UIT Start	17-07-23	17-07-23
MP162 Go-LIVE	20-06-24	20-06-24

2022				2023	3							20	24		
Q4	Q1		Q2			Q3		Q4			Q1			Q2	
Dec	Jan Feb	Mar A	pr May	Jun	Jul	Aug Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
June 24 SEC Release E2E POAP E2E POAP Séquence	I JAN2 JAN2 Staggment MOR Staggment MOR Staggment MOR AND Clear dependency on to M9122 – EVACT strings		♦ ODEG G TAG Approve TAD APR'23	PIT TAB JUN 23 DC MORI JUN 23 S JUN 23 S CSS SIT	Test Heat Map (for assurance) JULY23 C. PAT & D.C. SIT ev. SIT ev. CFDA Gate 2 TBC	SIT e	MHHSP CT/SIT Melix 6 DIP) It TAB OCT/23?	HHSP PIT	<u></u>	TAG (TBC)	MHHSP SI	LSC	APR24 APR24 M SIT Exit OPSG - MAY'2 CDM Gate Ops G	JUIT B JUIT MAY'24 STA AY'24 STA TAB MAY'24 S 44 S GOUP MAY'24 G GOUP MAY'24 C COde JUNE GOUP JUNE GOUP JUNE GOUP JUNE CODE JUNE GOUP JUNE CODE JUNE COD JUNE	JUN'24 UIT MAY'24 DCC Ops MAY C'24

MHHS - Monthly Delivery Report [RECCo]

Report Date: 15-11-22

RAGs	Overall	Overall Approach Plan		Resources Budget Risk			Stakeholders		Suppliers	
EES Requirements drafted, and CR submitted to C&C for IA on EES MHHS			Progress expected in the coming month: • Ongoing engagement with programme on Migration / Qualification / Design work-off			Party Milestones & Deliverables	Original or Baseline Date	Forecast date & RAG		
utlo	changes • Significant engagement wi	th design review / dissensus p	process to reach M5	plan • Further input to Replan co	nsultation #3		DBT Start	01/03/2023	01/03/2023	

decision CR12 raised to address issues with Code Drafting scope to include consequential

REC Code Manager engagement for MHHS formalised

Status & Ou

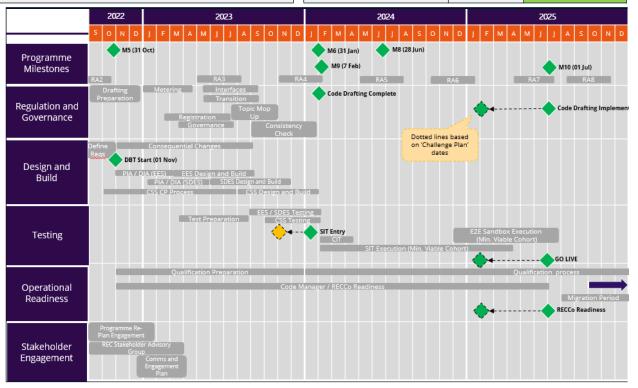
- Further input to Replan consultation #3
- 2023/2024 RECCo budget submission for MHHS
- Code Drafting Prototype Sprint 2 (traceability)
- EES preliminary Impact Assessment completion
- Analysis on Supply Number / Switch Meter reading requirements

Party Milestones & Deliverables	Original or Baseline Date	Forecast date & RAG
DBT Start	01/03/2023	01/03/2023
Code Drafting Complete	31/01/2024	31/01/2024
SIT Entry	07/02/2024	07/02/2024
Code Drafting Implemented	01/07/2025	01/07/2025
RECCo Readiness	01/07/2025	01/07/2025
GO LIVE	01/07/2025	01/07/2025
<u> </u>		

Decisions required	From whom?	By when?
Decision on RECCo role in Qualification	MHHS Programme	?
Decision on CR12 for Code Drafting scope	MHHS Programme	07/12/2022
Decision on allocation of Market Role codes in ISD for new and existing services to complete detailed impact assessment.	MHHS Programme	31/01/2022

Risk or Issue & RAG	Mitigating or resolving action required	Date for action to be resolved	Action owner
[Issue] No consistent understanding between the programme, Elexon and RECCo on the roles and responsibilities for UIT and Qualification. The prog. has made assumptions that code bodies will be fully responsible for the operation and delivery of the MHHS UIT test phase	Programme to establish a schedule of tri-partite meetings to agree roles and responsibilities	January '23	Programme
[Risk] Limited visibility of programme testing requirements may impact REC Service Provider impact assessments and delivery	Include Service Providers in Testing WGs – Await Re-plan	December '22	Jon Hawkins

Dependency & RAG	Managing action required	Date for action to be resolved	Action Owner
Transition Approach and associated design artefacts		December '22	Programme
Re-baselining of Programme Plan		January '23	Programme
Changes to REC services not in scope of MHHS design		February '23	RECCo



Central Party budgets

Overarching Costs for MHHS Central Parties FY 22/23

£M	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
MHHS Budget	1.16	1.17	1.21	1.21	1.22	1.64	1.57	1.59	1.58	1.58	1.58	3.96*	19.47
MHHS Actual/Forecast	1.03	0.92	1.10	1.09	1.23	1.12	1.44	2.37	1.12	1.08	3.23	3.76*	19.49
DCC Budget	0	0	0	0	0	0	0	0	0	0	0.52	0.52	1.04
DCC Actual/Forecast	0	0	0	0	0	0	0	0	0	0	0.52	0.52	1.04
Helix Budget	1.02	2.01	1.75	1.94	2.13	2.12	2.07	2.21	1.74		2.81		19.80
Helix Actual/Forecast	0.96	1.98	1.82	1.52	1.95	1.85	2.07	2.21	1.74		2.95		19.05
RECCo Budget	0.06	0.06	0.06	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.45
RECCo Actual/Forecast	0	0	0.01	0.01	0.03	0.02	0.01	0.03	0.03	0.03	0.03	0.03	0.23
Total Budget	2.24	3.24	3.02	3.18	3.38	3.79	3.67	3.83	3.35		11.06		40.76
Total Forecast/Actual	1.99	2.90	2.93	2.62	3.21	2.99	3.52	4.61	2.89		12.15		39.81

Please note:

- *: Includes contingency
- RECCo and DCC costs include only 3rd party costs (do not include internal resources)
- Helix actuals shared to September and budget is approved to mid-March to the end of PI5. Total Budget for specifically Helix costs for the year amounts to £16.2m, with £3.6m specifically for SVAA re-development.
- DCC data shared to August and subject change alongside MP162 progression.



Public

Industry change

Consequential change: Summarises activity at the Consequential Change Impact Assessment Group (CCIAG)



The latest CCIAG meeting papers and headline reports can be found here.

Summary of latest CCIAG discussions

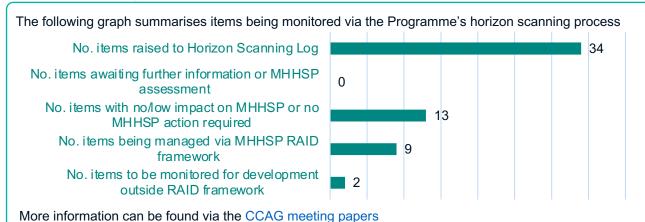
CCIAG conducted a line by line of the <u>Consequential Change Log</u>, confirming the status of each discussion topic according to whether; 1) it has been incorporated into the MHHS Design, 2) it is progressing externally through other industry governance mechanisms, 3) it is deemed to require no further discussion at the CCIAG, and 4) it requires further definition and discussion by the CCIAG. The CCIAG also recorded which items may require incorporation into CCAG-led code drafting subject to approval of CR12.

Magnitude of items

No matters have yet been raised which require significant change to MHHS Design Artefacts. The majority of matters currently under discussion by the CCIAG relate to Retail Energy Code or Supplier processes which may be affected by the removal of data items or introduction of new market roles.

The volume of items now raised to the CCIAG has plateaued, with no new items tabled at the last meeting. The CCIAG will continue to call for discussion items as participant design and build activities commence.

Industry horizon scanning: Summarise items monitored via the Cross-Code Advisory Group (CCAG) horizon scanning process



Horizon Scanning Process

The CCAG collaborate to populate the Horizon Scanning Log and the Programme undertakes impact assessment of each change. Where a change requires actions by the Programme beyond simple monitoring or initial definition, this is entered into the Programme RAID framework with an appropriate action plan and owner put in place.

Industry code changes: 29 – REC: 12, BSC: 8, SEC: 4, DCUSA: 5

Wider industry changes: 5 – HH opt-out, DUoS SCR, code review, microbusiness def

Criticality of horizon scanning items – High: 5, Medium to High: 3, Medium: 2, Low: 13 Top RAID linked items:

- SEC MP162 (R0011, R0083, R0113, R0115, R0116, R051, R0182, R0191, D0076, D0077)
- BSC CP1558 (R0200, D0068) REC R0032 (D0068, D0069) REC R0044 (D0055)



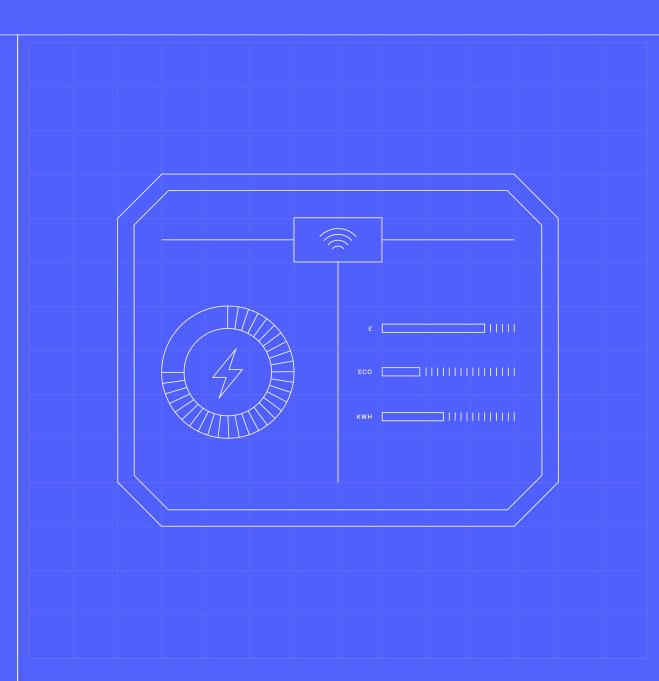
Summary and next steps

INFORMATION: Summarise actions and decisions. Look ahead to January PSG

Chair and Secretariat

5 mins





Summary and next steps

- 1. Confirm actions and decisions from meeting
- 2. Date of next PSG: 11 January 2022 10:00 12:00

This will be a 'PSG light' given the Christmas period

Main agenda items	Standing items
 Programme replan update Design Work-Off Plan and transition design progress update CR013 Commercial Impacts decision 	Minutes and action reviewProgramme dashboardsSponsor updateSummary and next steps

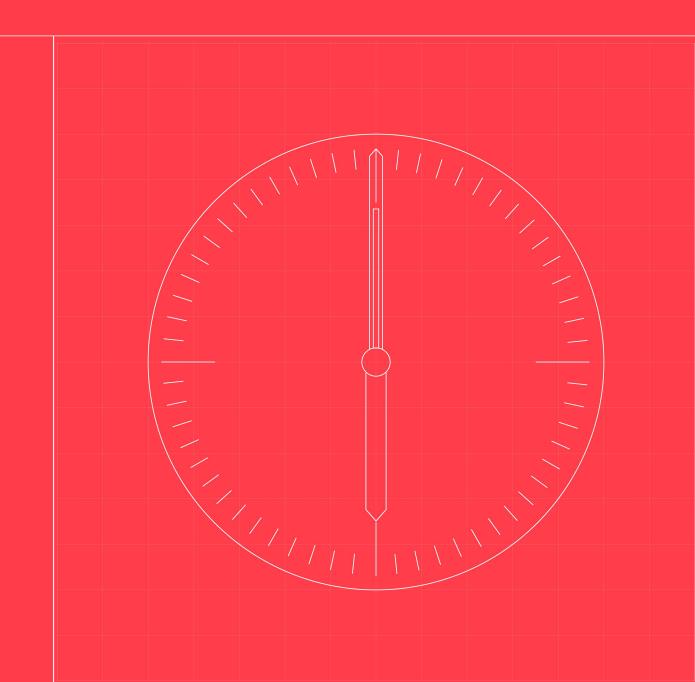
If you would like to propose an agenda item for the PSG, please contact the PMO at PMO@mhhsprogramme.co.uk



Public

Appendix

1. Migration Options Analysis





Building the Programme Timeline comparison

To build a comparison of the timescales associated with each migration option, the Programme executed the following steps1:

- Extracted timescales for activities for SIT, SIT Migration and milestones M9 to M15 from the current plan as a starting point for timeline comparison
- Analysed the PPIR responses and reflected timescales from those responses in a Migration Option 3 version of the timescales
- Analysed the PPIR responses for Options 1 and 2 and reflected the timescales from those responses into a Migration Option 1 & 2 version of the timescales

There were no material variations on timing within the PPIR responses between Option 1 & Option 2, therefore we will consider them under 1 timeline

The current proposal from the Programme is to start SIT on 30/10/2023

- An indicative timeline has been derived below from that start date using the durations and dependencies within the current plan
- The Migration Options have then been impact assessed against this indicative timeline to provide a view of timings for the different options

Indicative Timeline for Current Plan	Start Date	End Date
SIT Component Integration Testing	30/10/2023	15/01/2024
SIT - Minimum Viable Cohort	07/01/2024	15/01/2025
SIT - Other Participants	07/01/2024	30/03/2025
SIT Migration (Minimum Viable Cohort)	10/02/2024	10/07/2024
SIT Migration Execution (Other Participants)	10/02/2024	30/08/2024
Qualification Testing Execution	01/12/2024	30/11/2025
Tranche 5 Execution	20/09/2025	30/11/2025
Central systems ready for migrating MPANs (M10)	28/02/2025	
Start of 1 year migration for UMS / Advanced (M11) (SIT MVC)	31/03/2025	
First Qualified Participants start Migration		
All suppliers must be able to access MPANs under the new TOM (M14)	31/01/2026	
Full transition complete (M15)	31/08/2026	

¹Assumptions: Migration Execution timelines are the same for all options - one PPIR respondent (Agent) noted longer Execution under Option 3 (moving from 3 to 5 months, well within the migration execution window)



Migration Option 3 on the basis of PPIR responses

Input to Option 3 planning from the PPIR responses:

- SIT Migration Testing likely to start 7½ months later than baseline plan reflecting latest delivery plan from the SIT participant on the critical path
- Other likely SIT participants will be ready in time to participate in SIT Migration testing within that timeline

Assumptions for planning:

- SIT Migration can run stand alone and in parallel with other SIT testing and the environments are available to support this
- · SIT Functional Testing is unaffected, therefore Qualification Testing can begin as already planned
- · As SIT Migration is now on the critical path, there is c. 5 weeks contingency in the plan for starting and/or executing the rest of SIT
- · Qualification can run in parallel with SIT Migration and other SIT Testing

Conclusions

- Option 3 is likely to delay the start of migration (M11) for SIT participants by 1 month, but there is still plenty of time for those early movers to complete migration by M15
- Option 3 will not impact the qualification timescales and therefore the migration timescales for non-SIT participants or end date of the Programme
- · Option 3 engenders a programme ethos of pace and momentum that reduces the risk of late delivery
- Reverse migration will be in place for 9 months

			Indicative Plan	
	Start Date	End Date	Start Date	End Date
SIT Component Integration Testing	30/10/2023	15/01/2024	30/10/2023	30/10/2023
SIT - Minimum Viable Cohort	07/01/2024	15/01/2025	07/01/2024	07/01/2024
SIT - Other Participants	07/01/2024	30/03/2025	07/01/2024	07/01/2024
SIT Migration (Minimum Viable Cohort)	30/09/2024	28/02/2025	10/02/2024	10/02/2024
SIT Migration Execution (Other Participants)	30/09/2024	14/04/2025	10/02/2024	10/02/2024
Qualification Testing Execution	01/12/2024	30/11/2025	01/12/2024	01/12/2024
Tranche 5 Execution	20/09/2025	30/11/2025	20/09/2025	20/09/2025
Central systems ready for migrating MPANs (M10)	04/04/2025		28/02/2025	28/02/2025
Start of 1 year migration for UMS / Advanced (M11)	30/04/2025		31/03/2025	31/03/2025
First Qualified Participants start Migration				
All suppliers must be able to access MPANs under the new TOM (M14)	31/01/2026		31/01/2026	31/01/2026
Full transition complete (M15)	31/08/2026		31/08/2026	31/08/2026



Document Classification: Confidential 70

Migration Option 2 on the basis of PPIR responses

Input to Option 2 planning from the PPIR responses:

- SIT Migration Testing likely to start 2½ months later than baseline plan reflecting latest delivery plan from the SIT participant on the critical path
- Other likely SIT participants will be ready in time to participate in SIT Migration testing within that timeline

Assumptions for planning:

- SIT Migration can run stand alone and in parallel with other SIT Testing and the environments are available to support this
- · SIT Functional Testing is unaffected, therefore Qualification Testing can begin as already planned
- SIT Migration is not on the critical path, therefore there is no impact on later milestones
- Qualification can run in parallel with SIT Migration and other SIT Testing

Conclusions

- Option 2 will reduce the timelines for SIT Migration, but this will have no impact on major milestones as SIT Migration is not on the critical path
- Option 2 is likely to constrain c.118K customers at the vanguard of the programme from switching from MHHS suppliers for 10 months

			Indicative Plan	
	Start Date	End Date	Start Date	End Date
SIT Component Integration Testing	30/10/2023	15/01/2024	30/10/2023	15/01/2024
SIT - Minimum Viable Cohort	07/01/2024	15/01/2025	07/01/2024	15/01/2025
SIT - Other Participants	07/01/2024	30/03/2025	07/01/2024	30/03/2025
SIT Migration (Minimum Viable Cohort)	24/04/2024	08/08/2024	10/02/2024	10/07/2024
SIT Migration Execution (Other Participants)	24/04/2024	23/09/2024	10/02/2024	30/08/2024
Qualification Testing Execution	01/12/2024	30/11/2025	01/12/2024	30/11/2025
Tranche 5 Execution	20/09/2025	30/11/2025	20/09/2025	30/11/2025
Central systems ready for migrating MPANs (M10)	28/02/2025		28/02/2025	
Start of 1 year migration for UMS / Advanced (M11)	31/03/2025		31/03/2025	
First Qualified Participants Start Migration				
All suppliers must be able to access MPANs under the new TOM (M14)	31/01/2026		31/01/2026	
Full transition complete (M15)	31/08/2026		31/08/2026	

Impact on Migration Timescale of M14 of Option 2

• Under Option 2, there is the opportunity for early migration for participants who could be ready at M11 allowing migration to start on an as and when ready basis.



Migration Option 1 on the basis of PPIR responses and Programme Delivery Risk Assessment

Input & Assumptions for Option 1 planning from the PPIR responses:

- The same input and assumptions apply to Option 1 as did for Option 2
- M10, M11 and M14 are all aligned at the date for M14 that is derived in the plan for Option 3

Programme Delivery Risk for Option 1:

• The Programme Delivery Risk for Option 1 is set out in the slide above

Impact on Migration Timescale of M14 of Option 1

• Under Option 1, there is no opportunity for early migration for participants who could be ready before M14 and therefore it is a reasonable assumption that migration will take longer.

Conclusions

• If we draw the conclusion that there is a 3-6 month delay on Option 1, then the dates in Option 2 will all be moved back by that amount and we should assume that SIT Migration can start without delays wating for participant development



Migration Options: Programme Participant Information Request (PPIR) Takeaways

Key Takeaways

In the context of their PPIR responses, participants highlighted a lack of certainty in regard to:

- The High-Level Migration Design Process Map, and the outstanding questions
- SIT and Test execution
- Qualification
- The cost figures that were provided as part of the PPIR

Option 3 Takeaways

Participants raised concerns in relation to:

- The fact that Option 3 would likely take longer to deliver and cost more, with a preference of Option 1 implied (as per close qualitative scoring)
- The significant additional impact on DBT, SIT and Qualification phases anticipated to come as a result of proceeding with reverse migration

As highlighted above, this does not take into account the impact on overall programme delivery

- The likelihood of increased costs for additional testing environments, and the uncertainty as to how many of these environments will be required
- Additional costs to develop the reverse migration capability, reemphasising that the capability may not be fully utilised, and costs would be ultimately passed onto consumers

St Clements noted that:

- Reverse migration would delay delivery and cause increased risk to functional DBT / reduce consumer benefits
- They anticipated a 50% increase in the level of their testing for reverse migration

Helix noted that:

 Reverse migration would require an additional four sprints (8 weeks) of effort based on their current understanding; this would still be within Programme timelines

As highlighted above, this does not take into account the impact on overall programme delivery

They did not provide any cost information within the PPIR

Some participants acknowledged the value of Option 3:

- Large Supplier: "We agree in principle with the qualitative position set out in the PPIR, that option 3 would be a preferred migration option as it would enable those parties that are ready to go-live and deliver consumer benefits to do so while enabling customers to continue to change suppliers without undue hindrance."
- **I&C Supplier:** "Whilst option 3 would allow us to migrate customers early, we would be under no obligation to do so and may only start at M14 anyway" and that "a commercial decision will be taken further on down the line of the benefits of early adoption against the costs of delivering MHHS functionality ahead of M14.



Programme Participant Information Request: Response Summary (1 of 2)

The MHHS Programme had 38 PPIR responses¹, but with 1 response with no commentary or evidence provided, therefore **37 PPIR responses with content.** Of those responses, **22 PPIRs** included quantitative evidence (e.g. cost evidence, time evidence or both).

Respondents by Programme Category are as below:

Programme	Category
-----------	----------

Central Parties (2)

DNOs (6)

iDNOs (2)

Large Suppliers (5)

Medium Suppliers (1)

Small Suppliers (2)

Programme Category

I&C Suppliers (8)

In-House Supplier Agents (1)

Independent Agents (7)

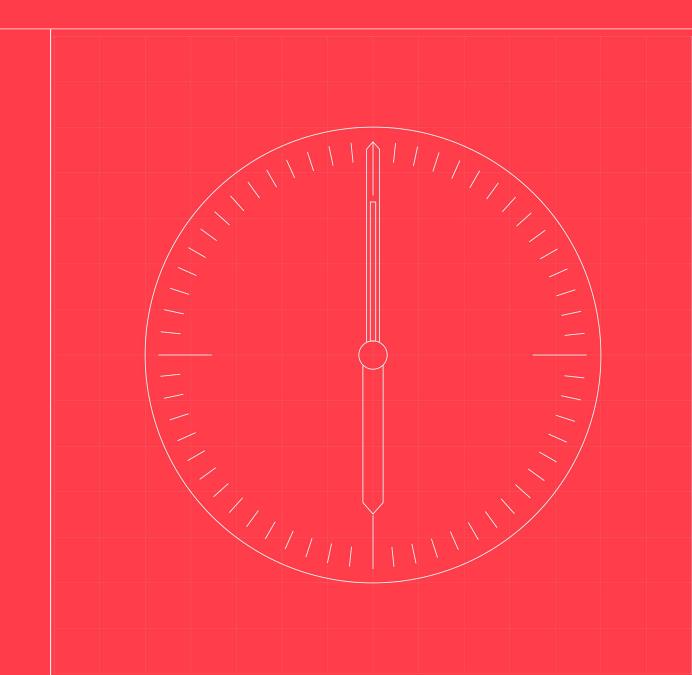
Software Suppliers (3)

Other MHHS Participant (1)



Appendix

2. CR012 Impact Assessment outputs





CR012 Impacts – Views on the proposed approach (Page 1)

Programme Parties	Range of respondents' views on benefits and concerns (related to the approach in CR012)
Large Suppliers	+ Respondents unanimously supported the overall recommendation to approve the change
	+ A single set of code drafting that encompasses all the change required to deliver MHHS will be a more robust and efficient process than progressing 'core' and 'consequential' change through separate mechanisms.
	+ The proposed approach will also support the achievement of the wider benefits of MHHS, by industry and by consumers. Consumers will only achieve the benefits of MHHS if industry parties successfully implement not only the changes to settlement processes set out in the MHHS design, but the consequential changes that ensure that design supports other, non-settlement processes such as switching.
	+ Enable parties to see all MHHS related code changes in one place, increasing the likelihood of successful implementation and supporting the achievement of the benefits associated with MHHS.
	+ The 'core' and 'consequential' elements of the changes required to deliver Faster Switching were developed independently of each other, leaving individual parties to try and pull all of that together into an end-to-end design, which in some cases led to misunderstanding or misinterpretation. While most of these issues were identified in end-to-end testing before go-live, many of them could and should have been avoided through the sort of joined up, end-to-end approach that is being proposed here.
	+ The change will ensure duplication of effort (driving increase Code Body and participant resourcing) or gaps in the scope between MHHS and consequential change (leading to Code drafting issues and sign off problems) are reduced.
	 The potential for cost / resource reduction is not guaranteed as parties will need to plan for the same amount of work
	 Clarification is needed regarding how the consequential change scope is to be validated and how this will be managed by CCAG.
	 One respondent was unsure whether the change covers only REC consequential changes or whether it goes further and covers SEC and DCUSA.
Medium Suppliers	+ Addresses issues already experienced with consequential change being progressed outside of the programme scope, even in instances where this has significant impact on programme design and priorities i.e MP162.
	+ Overdue change that is necessary and will have a positive impact in terms of mitigating risk and providing improved clarity for programme change.
Small Suppliers	■ Did not respond to Impact Assessment
I&C	+ Respondents unanimously supported the overall recommendation to approve the change
	+ MHHS code and wider consequential changes managed centrally will provide control, oversight and transparency for all stakeholders.
	+ A centralised industry group reviewing all change is a more efficient and consistent way of delivering and implementing code changes across the industry and therefore should reduce the risks on the E2E solution not working effectively.
Agents	- Whilst the concept being proposed could have worked, it comes too late (as the Code Drafting Plan commences January 23) and lacks both the quantitative and qualitative
	facts and details to, a) persuade us of the benefits and b) for it to be implemented as a live process before January 2023.
	 Unclear whether CR012 brings any benefit that is not already allowed for in the current CCAG Terms of Reference. A more attainable milestone date should be applied for M6. The milestone is a pre-requisite of the Performance testing in Qualification (which will require consequential).
	 A more attainable milestone date should be applied for M6. The milestone is a pre-requisite of the Performance testing in Qualification (which will require consequential changes to have been made) so not only is the M6 milestone date in question but also subsequent activities.
Z IVII II IO	

CR012 Impacts – Views on the proposed approach (Page 2)

Programme Parties	Range of respondents' views on benefits and concerns (related to the approach in CR012)
DNOs	+ The efficiency of the CCAG undertaking these additional code changes may well make Code consultation review more straightforward, thereby reducing the timescales that parties may require for this activity.
iDNOs	 Respondents unanimously supported the overall recommendation to approve the change. Improve transparency of consequential changes to codes impacted by the new MHHS arrangements and the more effective co-ordination between the Code Managers regarding such changes. Enable final planning for code drafting to be completed ahead of drafting commencement in January 2023. Bring cohesion and transparency across code changes which can only benefit industry and the MHHS programme overall.
S/W Providers	■ Did not respond to Impact Assessment
Electralink (DCUSA)	 Code governance is impacted negatively by the Programme approving the changes rather than the relevant code. In DCUSA code changes are agreed by Parties and the votes reflected in the change report. This part of the process is lost with it coming under the governance of the Programme. Additional costs may be incurred across the industry if it is approved subject to the revised Programme plan to deliver the changes e.g. these may increase if a fixed time for delivery approach is agreed whereas under the code developed approach, the end date is known, and all proposed changes can be delivered within that timeline. Additional reviews are likely, and more meetings anticipated by the CDWG. The change would mitigate the Critical programme dependencies in part, but it is still reliant on the codes and code bodies identifying the changes and developing the solution before moving them into the programme. A process for monitoring these is required which we expect to be the CCIAG. The current process is via the Horizon Scanning log and discussion at the CCAG. The CCAG has agreed the code drafting plan for delivering MHHS code change in early 2024. RECCo's assumption was that all changes to the REC required to deliver the MHHS arrangements would be delivered as part of this plan e.g. changes to the supplier exception processes would be captured within the registration workstream and changes to the performance assurance requirements would be captured within the governance and qualification workstream. Therefore, this CR will not amend RECCo's drafting assumptions or impact the overall RECCo schedule. If the change is not approved a revised timeline will need to be developed by RECCo outside the MHHSP to include the progression of REC change proposals outside the scope of programme governance. Other code bodies would need to impact assess this change and confirm if there is an impact on their schedule.
REC Code Manager	 The REC Code Manager has received repeated feedback through impact assessments and consultations on MHHS related CPs that progression outside the programme makes it difficult for REC stakeholders to make fully informed assessments and plans. Furthermore, the Code Manager is supportive that CR012 would alleviate these concerns by avoiding additional change in a piecemeal approach. Changes to the codes should be progressed under arrangements that remove as much risk as possible to Consumer outcomes. Delivering the benefits and removing the risks set out in this CR gives the best opportunity to protect Consumers interests. Assumption of joined up delivery of the MHHS arrangements is aligned to that of RECCo and resource planning supports this. A separate workstream of code drafting activity and governance will require additional, sometimes duplicated activity, which therefore means additional effort and demands on the REC Code Manager's capacity in the same timeframes. If this CR is not approved, code drafting and approval will be subject to the standard REC Change Management process. Alignment of consultations for the consequential drafting to the existing consultation cycles set out in the programme code drafting plan may not be possible.

CR012 Impacts – Views on the proposed approach (Page 3)

Programme Parties	Range of respondents' views on benefits and concerns (related to the approach in CR012)
r regramme r annoe	+ Failure to implement the proposed change would result in further revised timelines which could lead to delays across other project milestones.
National Grid	+ Whilst not impacted by this change to REC, should be delivered along with other codes in early 2024 (subject to adjustments within the current MHHS Re-plan, where all milestone dates could move)
Consumer	■ Did not respond to Impact Assessment
	+ Provide clarity and efficiency to ensure that industry participants understand the route that all the changes required to deliver MHHS will take.
Elexon (Helix)	+ Reduce the likelihood of re-work being required to other changes or MHHS to align a number of changes and it will reduce the likelihood of any changes required not being in place when they are required.
	 All code drafting (whether 'core' or 'consequential') will be designated by Ofgem using its Smart Meters Act Powers. As there will be no Change/Modification Respondent suggests that the words 'Code change requests and modifications' could/should therefore be replaced with 'Code changes' to avoid the risk of potential
DCC	 CCAG should agree some form of prioritisation if resource is stretched between approval of MHHS design related code and MHHS consequential change related code. The Programme should confirm with Ofgem (as regulator) it is comfortable with using its code change implementation powers to support the change.
	• Response is based on the evidence presented at the time of drafting, which is prior to receipt of Impact Assessment responses from Programme Participants. Our view on
SRO / IM & LDP	the impact on consumers and cost efficiency is therefore subject to change following review of Impact Assessments responses and consideration of feedback. Response is based on assumption that Code drafting is facilitated by Smart Meter Act Powers and designated by Ofgem.
	 Response is based on assumption that code draiting is facilitated by Smart Meter Act Fowers and designated by Orgent. CR012 approval could lead to a precedent to keep opening-up the Programme scope. Especially as the scope was directed by Ofgem more than a year ago.
	 Whilst the centralisation of Code drafting is likely to be more efficient for industry, it introduces additional cost and time to Code drafting activities within the MHHS Programme and introduces a risk that Code drafting activities end up on the Critical Path of the MHHS Programme.
IPA	 Comfortable that the change request is not expected to have an impact on our activities and has no specific objections to CR012.

