

Decision

Decision on Market-wide Half-Hourly Settlement Change Request CR022 ('MHHS Programme Replan')

Publication date: 12 June 2023

Contact: Melissa Giordano, Deputy Director Retail Systems and Processes

Team: Retail Directorate

Email: half-hourlysettlement@ofgem.gov.uk

On 12 May 2023, the MHHS Senior Responsible Owner (SRO) conditionally approved Change Request CR022 'MHHS Programme Replan'. CR022 proposes changes to the delivery plan and to the published MHHS Implementation Timetable. It included a series of changes to 'Level 1' milestones in the MHHS Implementation Timetable of 3 months or more. Such changes require the approval of Ofgem as Programme Sponsor.

On 15 May, the SRO submitted a formal recommendation to Ofgem in respect of these Level 1 milestones. On 16 May, we received a report on the MHHS Programme Replan from the Independent Programme Assurance provider. We have considered these documents and have taken into account information provided by parties about the impact of the Change Request. We also sought some additional information from MHHS Programme, particularly about the proposed approach to migrating meter points to the new settlement arrangements.

This decision document sets out that, as recommended by the SRO, Ofgem has decided to approve the changes to the Level 1 milestones. We expect that MHHS Programme will, as soon as possible after the MHHS Programme Steering Group meeting on 8 June 2023, publish a new baselined MHHS Implementation Timetable in accordance with this decision and ensure that all MHHS Participants are aware of the changes. We also expect that all MHHS Programme Participants will ensure they can operate in accordance with the revised MHHS Implementation Timetable and so ensure the earliest possible delivery of MHHS-related benefits to consumers.

© Crown copyright 2023

The text of this document may be reproduced (excluding logos) under and in accordance with the terms of the [Open Government Licence](#).

Without prejudice to the generality of the terms of the Open Government Licence the material that is reproduced must be acknowledged as Crown copyright and the document title of this document must be specified in that acknowledgement.

Any enquiries related to the text of this publication should be sent to Ofgem at:

10 South Colonnade, Canary Wharf, London, E14 4PU.

This publication is available at www.ofgem.gov.uk. Any enquiries regarding the use and re-use of this information resource should be sent to: psi@nationalarchives.gsi.gov.uk.

Contents

Executive Summary	4
Introduction.....	4
Code drafting (milestone M6).....	4
Qualification (milestone M14)	4
Migration (milestones M11 and M15).....	4
New settlement timetable (milestones M16 and M16*)	5
Impact assessment and recommendation by the SRO	5
Report by the Independent Programme Assurance provider (IPA)	5
Sponsor's decisions and reflections	5
Next steps.....	5
1. Introduction	6
Context.....	6
2. Recommendation by the MHHS Senior Responsible Owner	8
Overall recommendation and rationale	8
Description of and reasons for the Level 1 milestone changes	9
Code drafting (milestone M6)	10
Qualification (milestone M14)	10
Migration (milestones M11 and M15)	12
New settlement timetable (milestones M16 and M16*)	14
Closing remarks	15
3. Report by the Independent Programme Assurance provider	16
The IPA's role in the replan	16
The IPA's report, recommendations and conclusions.....	16
Overall recommendation.....	16
Other IPA recommendations.....	17
Conclusions on the duration of the plan.....	18
Other IPA conclusions	19
Benefits realisation	20
4. Sponsor's decisions and reflections.....	21
Decisions on the Level 1 milestones.....	21
Code drafting (milestone M6)	21
Qualification (milestone M14)	22
Migration (milestones M11 and M15)	22
New settlement timetable (milestones M16 and M16*)	24
Reflections.....	25
5. Next steps	27
Publication of the re-baselined MHHS Implementation Timetable	27

Executive Summary

Introduction

Ofgem's MHHS Decision¹ of April 2021 included a Transition Timeline with a number of 'Level 1' milestones. Changes to Level 1 milestones of 3 months or more can only be made with the approval of Ofgem as Programme Sponsor. In August 2021, we stated that the Transition Timeline should be reviewed once the design architecture had been finalised.² MHHS Programme has now carried out this review and has proposed a Change Request, CR022, including the following Level 1 milestone changes of 3 months or more.

Code drafting (milestone M6)

Extensive changes to several industry codes will have to be made to introduce the new settlement arrangements. CR022 proposed that the deadline for baselining these code changes should be moved from July 2023 to August 2024. This is a 16 month delay to a Level 1 milestone and Ofgem's approval is therefore required.

Qualification (milestone M14)

Programme Participants must qualify to operate under the new settlement arrangements. To incentivise timely qualification, Ofgem decided in 2021 that if suppliers had not qualified for the new settlement arrangements by a certain date, they should be prohibited from taking on new customers. Under CR022, the deadline by which suppliers must be able to accept Meter Point Administration Numbers (MPANs) under the new Target Operating Model (the 'one-way gate') should move from February 2025 to March 2026. This is a 13 month delay to a Level 1 milestone and Ofgem's approval is required.

Migration (milestones M11 and M15)

A key phase in delivering MHHS is to migrate all MPANs from the existing non-half hourly to the new MHHS arrangements. This will involve 33 million MPANs. CR022 proposed to move the start date for migrating UMS/Advanced MPANs (milestone M11) from October 2024 to April 2025 and to move the migration completion date (milestone M15) from October 2025 to October 2026. The proposed new dates delay these Level 1 milestones by 6 months and 12 months respectively and so the changes require Ofgem approval.

¹ Ofgem, [MHHS Decision, Full Business Case and Final Impact Assessment](#), April 2021. The timetable was revised after Ofgem approved Change Requests [CR001](#), [CR003](#) and [CR009](#).

² Ofgem, [Decision on MHHS implementation arrangements](#), August 2021.

New settlement timetable (milestones M16 and M16*)

In our April 2021 decision on MHHS, we decided to make the settlement process more efficient by shortening the timeframes. Under CR022, the date for cutting over to the new settlement timetable moves from November 2025 to December 2026. This is a 13 month delay to a Level 1 milestone and Ofgem's approval is therefore required. MHHS Programme proposes a new milestone introducing a six-month range for cutover. This could delay cutover by up to 19 months to May 2027, so Ofgem's approval is required.

Impact assessment and recommendation by the SRO

MHHS Participants were invited to assess the impact of CR022 in April 2023. Most respondents supported the Change Request. At an extraordinary meeting of the MHHS Programme Steering Group on 12 May, the SRO conditionally approved CR022 subject to Ofgem's decision on the Level 1 milestone changes outlined above. On 15 May, the SRO submitted a recommendation that Ofgem approve those Level 1 milestone changes.

Report by the Independent Programme Assurance provider (IPA)

On 16 May, the IPA reported to Ofgem that the revised Transition Timetable should be baselined now. The IPA added that known risks should be managed through the programme's risk management process and that further detail should be added as the programme develops. The IPA stated that proceeding beyond June 2023 without a baselined plan would present a significant risk to System Integration Testing.

Sponsor's decisions and reflections

We have considered the SRO's recommendations and the IPA's report. We have also considered the information set out in individual impact assessments and sought follow-up information where appropriate, for example in relation to the migration approach. We have decided to approve all the Level 1 milestone changes proposed above. Introduction of MHHS on the fastest practical timescale remains a high priority. Given this, we expect all MHHS Participants to ensure that they can comply with the revised Timetable and so ensure the earliest possible delivery of MHHS-related benefits to consumers.

Next steps

We agree with the IPA that it is now essential to baseline the revised Transition Timetable. We expect MHHS Programme will, as soon as possible after the Programme Steering Group meeting on 8 June 2023, publish a new baselined MHHS Implementation Timetable and ensure that all MHHS Participants are aware of the changes.

1. Introduction

Section summary

Market-wide half-hourly settlement (MHHS) is a key enabler for the cost-effective decarbonisation of the energy sector. It is vital that the industry implements MHHS in a robust and timely manner so that its benefits can start to be delivered as soon as possible. MHHS Programme has carried out a timetable replan exercise and proposed, via Change Request CR022, a series of changes to the MHHS Implementation Timetable. The MHHS SRO conditionally approved those changes on 12 May, subject to Ofgem's decision in respect of the Level 1 milestones that would move by 3 or more months.

Context

- 1.1 Ofgem is committed to paving the way for the energy sector to decarbonise at the lowest cost to consumers. Market-wide half-hourly settlement (MHHS) will enable this by ensuring that electricity suppliers and other retailers face the true costs of serving their customers. This will incentivise the development of new tariffs and services. MHHS is a key building block for our Decarbonisation Programme Action Plan³ and the Ofgem/HMG Smart Systems and Flexibility Plan.⁴
- 1.2 With other reforms, such as those to the access and charging arrangements, and network tendering for flexibility services, MHHS will enable system-wide benefits by incentivising more efficient use of existing and future electricity infrastructure. This will, for example, help integrate intermittent renewable generation and reduce the need for expensive new investment. We estimated in 2021 that MHHS will save consumers £1.6 billion to £4.5 billion by 2045.⁵

MHHS Implementation Timetable

- 1.3 In April 2021, Ofgem published its MHHS Decision.⁶ As part of the Decision we published a Transition Timeline for MHHS. This initial implementation

³ Ofgem, [Decarbonisation Programme Action Plan](#), February 2020.

⁴ Ofgem/BEIS, [Transitioning to a net zero energy system - Smart Systems and Flexibility Plan 2021](#), July 2021.

⁵ Ofgem, [MHHS Final Impact Assessment](#), April 2021.

⁶ Ofgem, [MHHS Decision](#), April 2021.

Decision – Decision on Market-wide Half-Hourly Settlement (MHHS) Change Request CR022 ('MHHS Programme Replan')

timetable was based on a high level Target Operating Model of the new arrangements.⁷

- 1.4 The Balancing and Settlement Code (BSC) sets out that MHHS Programme Participants shall “deliver the new and modified IT Systems and business processes required of it as part of MHHS Implementation, including the mobilisation, design, building and testing of such IT Systems and business processes and their integration with those of other MHHS Participants (and shall do so in accordance with the MHHS Implementation Timetable)”.
- 1.5 The MHHS Implementation Timetable is defined in the BSC as “the timetable for MHHS Implementation, as established under (and subject to change in accordance with) the MHHS Governance Framework”. The timetable includes a number of ‘Level 1’ milestones. As set out in the governance arrangements, changes to Level 1 milestones of 3 months or more can only be made with the approval of Ofgem as Programme Sponsor.⁸ All other changes may be made with the approval of the MHHS Senior Responsible Owner.
- 1.6 In August 2021, Ofgem decided that MHHS Programme should review the Transition Timeline once the detailed design architecture for MHHS had been finalised.⁹ Following delays to the baselining of the detailed design, MHHS Programme has - after three rounds of consultation with industry since the summer of 2022 - now completed its review of the timeline and has proposed a Change Request, CR022, that would revise and baseline the MHHS Implementation Timetable in line with the conclusions of the replan consultation.
- 1.7 The Change Request was issued on 3 April 2023 for impact assessment by all Programme Participants. On 12 May, the MHHS Programme Steering Group discussed the responses to the impact assessment and, in light of those discussions, the MHHS Senior Responsible Owner (SRO) conditionally approved CR022, subject to Ofgem’s decision on the Level 1 milestones moving by 3 or more months. This document sets out Ofgem’s decision in relation to those milestone changes.

⁷ The April 2021 transition timetable was later revised after Ofgem approved Change Requests [CR001](#), [CR003](#) and [CR009](#).

⁸ Ofgem, [MHHS Governance Framework](#), November 2021.

⁹ Ofgem, [Decision on MHHS implementation arrangements](#), August 2021.

2. Recommendation by the MHHS Senior Responsible

Owner

Section summary

On 3 April 2023, MHHS Programme raised CR022 following an extensive replan consultation process. Programme Participants were invited to assess the impact of the Change Request in accordance with the Change Control process for the Programme. Most respondents supported the proposals. After discussion at the MHHS Programme Steering Group on 12 May, the MHHS SRO conditionally approved CR022 and on 15 May submitted a formal recommendation that Ofgem should approve the Level 1 milestones moving by 3 or more months (that is, M6, M11, M14, M15 and M16 and the new M16*).

Overall recommendation and rationale

- 2.1 On 15 May 2023, the MHHS SRO submitted a formal recommendation, with supporting documentation, that Ofgem should approve
 - the changes proposed in Change Request CR022 to the Level 1 milestones M6, M11, M14, M15 and M16 and
 - the creation of a new Level milestone M16*.
- 2.2 The recommendation followed discussion on CR022 at the Extraordinary Programme Steering Group (PSG) on 12 May 2022, after which the SRO conditionally approved CR022 subject to Ofgem's subsequent decision in relation to these Level 1 milestones.
- 2.3 The background and rationale for the Change Request had been discussed through the PSG since April 2023.
- 2.4 The Change Request raised by MHHS Programme in April 2023 states that the current Transition Timetable has been viewed as "unrealistic and unachievable since mid-2022 and lacks widespread buy-in across Programme Participants. Challenging industry conditions, particularly in the light of the energy crisis in 2022, have impacted the market and the pace at which the

Decision – Decision on Market-wide Half-Hourly Settlement (MHHS) Change Request CR022 ('MHHS Programme Replan')

programme has been able to move forward since the original timetable was set out".¹⁰

- 2.5 The programme has been operating under an interim plan since late 2022. MHHS Programme considers "the need for a revised plan to be baselined with industry support is now urgent following repeated short-term updates to the interim plan. With an increasing number of Programme Participants progressing into Design, Build and Test – particularly those targeting System Integration Testing (SIT) later this year, there is a clear need to set out a credible approach up to and including the introduction of the new settlement timetable. Adopting a credible plan is critical to the success of a programme of this size and complexity. The plan is fundamental to the effective governance and control needed to manage delivery within any agreed timescales".
- 2.6 MHHS Programme concludes that "there is a clear case to proceed with the Change Request at this point and avoid further delay, despite known risks. This Change Request is submitted in the full knowledge that further [ones] may be required, potentially in quick succession after the plan is baselined. Any further delay in agreeing a revised Programme Plan will introduce additional risk to the timely delivery of consumer benefits and the achievement of wider net zero objectives".

Description of and reasons for the Level 1 milestone changes

- 2.7 The Change Request sets out that the proposed plan effectively extends the Programme completion date at M16 from October 2025 to December 2026, which is also associated with a contingent date range of up to 6 months (the new M16* milestone). The Go Live date at M11 (start of migration to MHHS) moves from November 2024 to April 2025. The Change Request also notes that the M11 date may also be subject to a contingent date range, of 3 months, should various risks materialise that affect SIT timescales.
- 2.8 The following paragraphs outline the proposed changes to those Level 1 milestones and the reasons for them. For more details see the Change

¹⁰ The quotes in this section are from page 1 of the Change Request Form, April 2023.

Decision – Decision on Market-wide Half-Hourly Settlement (MHHS) Change Request CR022 ('MHHS Programme Replan')

Request Form and associated documentation on the MHHS Programme website.¹¹

Code drafting (milestone M6)

- 2.9 Extensive changes to several industry codes will have to be made to introduce the new settlement arrangements. CR022 proposed that the deadline for baselining these code changes should be moved from July 2023 to August 2024. This is a 16 month delay to a Level 1 milestone and Ofgem's approval is therefore required.
- 2.10 The Change Request stated that the code drafting timeline needed to be extended to allow sufficient time for code drafting, consultation on the draft legal text and dealing with consultation comments. A better understanding of the design baseline and future Programme deliverables had prompted amendments to the topics and content for code drafting. Responding to consultation feedback about the experience of early code drafting activity, CR022 stated that consultation periods for Code Artefacts should be extended to 3 weeks. In addition, given the volume of items in the baselined log, it was felt that more time should be allocated for the consideration of consequential code changes.
- 2.11 The Change Request document also referred to the use of Ofgem's legal powers to implement code and licence changes, and noted the need to add a degree of contingency. All these factors have been reflected in the proposed revisions to the code drafting plan. Code drafting activities are not, however, on the critical path and have not impacted the end-to-end plan.

Qualification (milestone M14)

- 2.12 Qualification is the process for assuring that systems and processes (developed outside BSC Central Systems) that may interact with BSC Systems and other participants' systems will not introduce significant risks or issues to settlement. There is a similar qualification and performance assurance process for RECCo. Given the importance of these processes, a Level 1 milestone is associated with their completion (the M14 milestone).

¹¹ MHHS Programme [Change Request CR022 MHHS Programme Replan](#), May 2023.

- 2.13 To incentivise timely qualification, Ofgem decided in 2021 that if suppliers had not qualified for the new settlement arrangements by the M14 milestone, they should be prohibited from taking on new customers. Under CR022, the deadline by which suppliers must be able to accept Meter Point Administration Numbers (MPANs) under the new Target Operating Model (the 'one-way gate') should move from February 2025 to March 2026. This is a 13 month delay to a Level 1 milestone and Ofgem's approval is therefore required.
- 2.14 The Change Request Form sets out that the Qualification phase will comprise 7 overlapping tranches of testing, each commencing a month apart. Each tranche will be up to 6 months in duration based on the complexity of testing expected for qualification, which in turn is derived from the approach and scope of SIT. Programme Participants will be able to progress at a pace of their choosing and enter Qualification on successful completion of their Pre-Integration Testing (PIT), provided they qualify by M14 (otherwise they cannot take on new customers). The Change Request Form states that these Programme Participants will have an incentive to progress into and through qualification at pace to minimise being at a competitive disadvantage against those Participants who have qualified sooner through SIT or earlier Qualification tranches.
- 2.15 A key facet of CR022 is that Programme Participants undergoing SIT will not have to perform Qualification Testing other than completing a Qualification Assessment Document under the equivalence principle.¹² For their part, non-SIT Programme Participants may be able to avoid some elements of Qualification Testing by placing reliance on MHHS industry-wide testing already successfully undertaken by another Programme Participant. To do this, MHHS Programme must be satisfied, on a case-by-case basis, that the system, service and/or configuration on which reliance is being placed is sufficiently similar to that already tested.¹³ In any event, the phasing of Qualification is intended to incentivise Programme Participants to progress as quickly as possible into the Migration phase.

¹² The principle under which SIT exit evidence will be considered equivalent to that required for MHHS Qualification Testing and part of what will be required for BSC and REC Qualification.

¹³ For details see MHHS Programme, [Placing Reliance](#), April 2023.

Migration (milestones M11 and M15)

- 2.16 A key phase in delivering MHHS is to migrate all MPANs, in phases, from the existing non-half hourly to the new MHHS arrangements. This will involve 33 million MPANs. CR022 proposed to move the start date for migration (milestone M11) from October 2024 to April 2025¹⁴ and to move the migration completion date (milestone M15) from October 2025 to October 2026. The proposed new dates delay these Level 1 milestones by 6 months and 12 months respectively.
- 2.17 Under CR022, the Migration window would increase from 12 to 18 months. This extension is based on Programme modelling of achievable MPAN migration rates. The migration approach will have three stages: first, a ramp up period of 1-4 months from M11 for successful MVC/SIT Programme Participants at a rate of up to 40,000 MPANs per day; second, a period of full-scale migration lasting 5-15 months at a rate of up to 165,000 MPANs per day (aligning with the peak in the Faster Switching Programme), by the end of which SIT and non-SIT parties will have migrated 95% of their MPANs; and finally a ramp down period for migrating the last 5% of MPANs at a rate of up to 40,000 MPANs per day by the M15 milestone. The Programme considers that this approach will enable the earliest practicable delivery of MHHS benefits.
- 2.18 The Programme assumes that the first supplier will pass SIT at the end of January 2025, start migration at the M11 milestone in April 2025 and have up to 18 months to complete it. The Programme also assumes that a supplier in the first Qualification Tranche will qualify on 29 September 2025, so can start migration immediately and take up to 12 months to complete it. This is "deemed sufficient time for a large supplier provided they are in the first tranche". Finally, the Programme assumes that a supplier in the last Qualification Tranche will qualify on 16 March 2026 and can start migration

¹⁴ All the milestones from M11 onwards depend on meeting the M10 deadline for central systems being ready for migration. The Change Request Form states that the "best information at this point suggests that M10 date may need to move by up to 3 months if certain risks materialise into issues. The end of the contingent range is reflected by [new milestone] M10*. With all other planning assumptions remaining the same, subsequent milestones M11 to M15 may need to move by a similar amount. However, it is worth noting the M11 milestone (i.e. the start of Migration and therefore benefits realisation) would remain in mid-2025".

and has 6.5 months to complete it. This time period would, however, be challenging for a large supplier.

- 2.19 The Change Request states that a phased approach to migration will enable the early realisation of benefits. Programme Participants in the MVC or otherwise going through SIT will be able to migrate sooner than the others and therefore could begin to realise benefits from the M11 milestone in April 2025. Other Programme Participants will be unable to realise benefits until they have qualified and begun to migrate their MPANs. Thus, as noted above, suppliers in the first Qualification Tranche could realise benefits from September 2025 and suppliers in the last Tranche could do so from the M14 milestone in March 2026.
- 2.20 It further states that the Programme has taken the opportunity to reduce later migration windows because of the ramp up of migration volumes that phasing will deliver in the period M11-M14. The original MHHS Transition Timetable envisaged 9 months for M14-M15 but in the replan this is less than 7 months.
- 2.21 In addition, MHHS Programme argues that although the revised migration period now spans 18 rather than 12 months, this is not a like-for-like comparison because of the variation in timings driven by phasing. While MVC and SIT participants have an additional 6 months for migration, non-SIT participants will have a 6 to 12 month migration window depending which Qualification Tranche they are in. Moreover, the alternative to phasing would be to take a “big bang” approach to implementation where “we would lose the early realisation of benefits and likely have delays from a slower delivery pace to the Programme”.
- 2.22 The Programme has stated that it will operate a Migration Control Centre which will be responsible for the following activities:
- setting the maximum daily thresholds for the total number of MPANs that can be migrated on a given day by each LDSO and in aggregate;
 - agreeing a Migration Plan with each supplier setting out the daily volumes they must migrate on each given day; and
 - operating a flexible and dynamic planning capability to ensure that capacity is allocated in a non-discriminatory manner that mitigates any issues that could

Decision – Decision on Market-wide Half-Hourly Settlement (MHHS) Change Request CR022 ('MHHS Programme Replan')

affect the completion on migration by M15 (such as changes to the supplier qualification date, underperformance of individual suppliers against agreed plans).

Evaluation of a 12-month migration window

- 2.23 The detailed MHHS design architecture was baselined in October 2022 and re-baselined in February 2023. In light of these developments, the Programme has evaluated the impact of attempting to complete migration within the 12 month period originally envisaged by Ofgem in April 2021.
- 2.24 The Programme has concluded that the peak volumes required to support migration would double to more than 300,000 MPANs per day, which would be “significantly higher than industry anticipated volumes” (and higher than current Central Switching Services peak volumes of 280,000 MPANs). Meeting such volumes would result in a corresponding doubling of exceptions that would require manual resolution.
- 2.25 The Programme has told us that this would likely cause “backlogs impacting consumers and settlement [that] finite specialist resources would be required to resolve through site visits and back office exception handling”. This would have “corresponding cost impacts on central systems, which would be required to reinforce their services to support the greater throughput”.
- 2.26 Finally, MHHS Programme has pointed out that if a large supplier were to enter Qualification in a late tranche, the daily migration volumes required would need to increase to an even higher peak. This would affect the Programme’s ability to treat all suppliers in a non-discriminatory way. MHHS Programme has told us it would be “very challenging for the Programme and individual suppliers to manage and monitor migration at such high volumes and any slippage from plan would result in an impact to M15 as no contingency would exist”. It would, for example, be difficult to deal with complex, hard-to-migrate MPANs in a timely manner.

New settlement timetable (milestones M16 and M16*)

- 2.27 In our 2021 decision on MHHS, we decided to make the settlement process more efficient by shortening the timeframes. Under CR022, the date for cutting over to the new settlement timetable (M16) moves from November 2025 to December 2026. This is a 13 month delay to a Level 1 milestone. MHHS Programme also proposes a new milestone introducing a six-month

range for cutover (ending with M16*). This could delay cutover by up to 19 months, to May 2027.

- 2.28 The Change Request notes that the proposed six-month range now associated with M16 is in line with responses to the Round 3 consultation and input from Elexon's Performance Assurance team. The rationale for the 6-month range is that, whilst a 2 months' stabilisation period after M15 was the minimum that might be necessary, this might prove insufficient based on operational performance metrics during and after migration. The Change Request Form also notes two additional risks that support the introduction of a range for M16: first, a delay to M10 that affects M15 and therefore also M16; second, that migration needs more time to complete than is currently forecast.
- 2.29 As a result of the proposals in CR022, cutover to the new settlement timetable will take place following stabilisation period 2 months post migration completion and up to 8 months after M15. However, it is "highly likely this range will narrow once migration is underway, when the exact timing of M10/M11 will be known and the rate of migration as a core planning assumption is evident".
- 2.30 Any Change Request proposing to delay M16 beyond 3 months will require Ofgem agreement under the MHHS governance arrangements. However, MHHS Programme "contend that M16 at December 2026 remains a realistic forecast" and MHHS Programme is "committed to ensuring that every effort is made to minimise any movement, ideally to no more than 3 months, if required at all".

Closing remarks

- 2.31 The SRO conditionally approved the revised plan and the changes to the Level 1 milestones within it "on the basis that the totality of risk is both manageable and consistent with a programme of MHHS' size and complexity and cannot be entirely avoided. Given delivery is well underway across many Programme Participants, there is no guarantee that MHHS Programme will find itself in a better overall risk state by delaying the re-baseline further in the near term. In fact, proceeding further without a plan could lead to increased rather than decreased risk".

3. Report by the Independent Programme Assurance provider

Section summary

The Independent Programme Assurance provider (the IPA) submitted its 'Plan Re-baseline Assurance Report' to Ofgem on 16 May 2023. The IPA's overall recommendation is that the plan – including the delays to Level 1 milestones of three or more months – should be baselined now. Known risks should be managed through the programme's risk management process and further detail should be added as the programme develops.

The IPA's role in the replan

- 3.1 The IPA performed embedded assurance activities throughout the replan exercise. Its activities included attending 80+ planning meetings (with MHHS Programme alone and with the Programme Team and the Programme Participants) and submitting formal responses and feedback at each planning consultation round.

The IPA's report, recommendations and conclusions

Overall recommendation

- 3.2 In light of discussions at the Extraordinary PSG meeting on 12 May, the IPA finalised its own report and submitted it to Ofgem on 16 May. The IPA's report recommended that the plan should be baselined now, that known risks should be managed through the programme's risk management process, and that further detail should be added as the programme develops.
- 3.3 The IPA stated that "proceeding beyond June 2023 in the absence of a baseline plan will create significant risk to the attainment of SIT entry as Programme Participants will lack certainty on the plan. In addition, the Programme Team will lack a touchstone with which to drive their own and the Programme Participants' delivery activities". In the view of the IPA, "the plan has sufficient detail and logic to guide the programme over the next six to nine months. This is a strong reason to proceed with baselining".
- 3.4 The IPA noted that "while risks exist in the plan, as set out in CR022 and the plan risk register, the programme has embedded contingency and included an explicit go-live range. These contingencies will allow the programme to

accommodate a certain level of future change in the overall timeline”.

Although “it cannot be said with certainty that there is no risk that the programme will suffer a delay that exceeds this capacity...this is not a reason to hold off baselining, as any plan is always based upon assumptions and imperfect information”.

- 3.5 In addition, the IPA took the view that it was “unreasonable to expect the same level of certainty in this plan as was the case for the post Covid Switching Programme plan...because [MHHS] is at a much earlier point in its delivery”. Finally, the IPA noted “broad support” from Programme Participants for adopting the plan; those that disagreed had raised “valid concerns that should be addressed” but these do not “undermine the overall integrity of the plan”.
- 3.6 Given the above, the IPA concludes that “it is better to baseline the plan now and acknowledge the risks within it than to hold off to allow further rounds of planning. The risks identified should be actively managed through the Programme’s risks and issue management process and governance, and the veracity of the plan should be subject to review at each of the proposed Control Points. In addition, further detail should be added to the later stages of the plan at the Control Points or when key decisions, approaches and details are approved through programme governance”.

Other IPA recommendations

- 3.7 The IPA made a series of other recommendations in its report. These are as follows:
- before adopting the baseline, the Programme Team should define the programme reporting structure and templates and rehearse at least one round of reporting.
 - the Programme Team should set out how Control Points will be conducted, and this should be tabled to the PSG in advance of the October 2023 Control Point
 - the Programme Team should be clear when and what additional detail will be added to the plan.
 - data cleanse activities have yet to be determined and should be put into the plan as soon as possible.
 - the Programme Team should identify potential single points of failure outside the core capability providers and develop appropriate mitigation plans.

Decision – Decision on Market-wide Half-Hourly Settlement (MHHS) Change Request CR022 ('MHHS Programme Replan')

- when adopting the new plan as a baseline, the Programme Team should make clear the distinction between the programme's and Ofgem's baselines.

3.8 These recommendations and actions have been shared and agreed with MHHS Programme and will be tracked to completion.

Conclusions on the duration of the plan

3.9 The IPA has considered a series of 'Assurance Exam Questions' about the plan. One of them was whether the MHHS Implementation Timetable proposed under CR022 was realistic and achievable and likely to deliver the earliest possible end of migration. As noted above, the IPA states that "there remain a number of risks and uncertainties to the plan" but considers that this is "not unreasonable given the complex nature of the programme and the stage it is at". Despite these uncertainties and risks, up to 85% of respondents to the third and final round of consultation on the replan indicated agreement (qualified or otherwise) to the timescales proposed for individual phases of the transition to MHHS. Since then, the Programme has provided more details about testing and qualification via the recently issued 'Placing Reliance' and SIT Scoping documents.

3.10 On that basis, the IPA has concluded that "the timescales are reasonable for individual activities" but "the risk lies in the volume of work that needs to be undertaken and the parallel execution of activities", for example during SIT. As noted above, the plan includes explicit contingency in the form of a go-live range and embedded contingency as set out in the Change Request. Nevertheless, the IPA acknowledges the programme could suffer a delay that exceeds this capacity. After all, it notes, "many later areas of the plan still hold uncertainty, the programme is complex, and the plan includes parallelism which creates risk".

3.11 The IPA has also considered whether the Programme Team has taken an approach to balancing risk versus implementation timescales that was neither too conservative nor too aggressive. The IPA notes that the Programme has sought to balance these factors by providing two tracks to qualification (one via SIT participation for early adopters and one via Qualification Testing (which is itself divided into 7 tranches). The IPA further notes that this allows participants to move at different paces through to their own go-live and represents a major shift from the Switching Programme and Nexus where

there was a single go-live event for all participants. It allows participants to choose their own timetable - within the constraints of the SIT and Qualification Testing windows - which "prevents participants from being compelled to meet dates which for them may be too aggressive". The IPA also looked at whether the planned timelines for migration were reasonable given the known risks and uncertainties. As the result of feedback from participants, the plan proposed to extend the migration window from 12 to 18 months. The IPA believes "this is reasonable at this stage, though it should be noted that migration execution is yet to be planned in detail".

Other IPA conclusions¹⁵

- 3.12 The IPA has considered several other questions and its conclusions include the following matters. The IPA has considered whether the plan contains sufficient detail so that programme participants are clear on what is expected of them and when. Taken with documentation presented to the Working Groups, the IPA considers that "the plan provides sufficient detail for near term tasks (up to SIT commencement) to allow participants to proceed. As with all plans, detail will need to be added to fill out later stages as it becomes available. Areas such as qualification, for instance, remain at a high-level".
- 3.13 The IPA has considered whether the assumptions underpinning the plan about the sequencing and duration of activities are reasonable for the current stage of the programme. The IPA notes that up to the completion of Component Integration Testing, the plan is based on significant participant input, especially from the core capability providers, as to their design, build and test activities. Beyond this there is - not unexpectedly, according to the IPA - less detail as to the assumptions and basis for durations in the plan. The IPA states that the Programme Team "needs to ensure that as understanding increases the assumptions log is kept current".
- 3.14 The IPA has considered whether the Programme Team has appropriately considered the risks to the plan and made appropriate accommodations in the plan to minimise their impact/likelihood. The IPA agreed with the key risks so

¹⁵ We focus here on the matters rated 'amber' by the IPA. An amber rating means the IPA is "Confident in the plan re-baseline.[There are] risks and/or improvement points. However, the risks and/or improvement points are not unreasonable for a programme of this size and complexity."

Decision – Decision on Market-wide Half-Hourly Settlement (MHHS) Change Request CR022 ('MHHS Programme Replan')

far identified in the CR022 paperwork but noted four more risks in the following areas:

1. Environments
2. Parallelism and complexity
3. Balance between Minimum Viable Cohort (MVC)¹⁶ and non-MVC
4. SIT Management.

- 3.15 The IPA concludes that the Programme Team should review these risks and ensure that they are represented in the Programme's risk and issues log.

Benefits realisation

- 3.16 The IPA also considered the impact of CR022 on MHHS benefits realisation. Clearly, the benefits will be delayed as compared with the original MHHS Implementation Timetable. However, the IPA shares the view articulated in the Change Request that the original timetable is no longer credible.

- 3.17 The IPA notes that it is for Ofgem ultimately to determine whether the delay to the programme affects the original Full Business Case (FBC). While costs are likely to increase and benefits will be delayed because of the extended timeline, the IPA concludes that "this will be unlikely to undermine the FBC due to the magnitude of the identified benefits".

¹⁶ The MHHS Programme glossary defines the Minimum Viable Cohort as consisting of "central systems and sufficient early adopters to enable the solution to go live". Early adopters must have the right functional elements to allow the market to function, so the MVC will include the central systems, (i)DNOs, suppliers and service providers.

4. Sponsor's decisions and reflections

Decisions

We have considered the SRO's recommendations and those contained in the IPA report. We have also considered the information set out in individual impact assessments and sought follow-up information where appropriate. Considering this, Ofgem has decided to approve the proposed changes to the Level 1 milestones M6, M11, M14, M15 and M16. Ofgem has also decided to approve the introduction of a new Level 1 milestone M16*. Ofgem also endorses the IPA's recommendations in relation to this Change Request.

Reflections

Ofgem welcomes the engagement of Programme Participants with MHHS Programme in the replan consultations and in developing Change Request CR022. The timetable review has been vital for agreeing a challenging and achievable plan to deliver MHHS. MHHS remains a high priority for Ofgem and Government as a means of enabling the lowest cost decarbonisation of the energy sector. Indeed, the persistence of historically high energy prices makes the roll-out of MHHS even more urgent. We therefore expect all Programme Participants to comply with the revised MHHS Implementation Timetable and so ensure the earliest possible delivery of MHHS-related benefits to consumers.

Decisions on the Level 1 milestones

Code drafting (milestone M6)

- 4.1 Extensive changes to several industry codes will have to be made to introduce the new settlement arrangements. CR022 proposed that the deadline for baselining these code changes should be moved from July 2023 to August 2024. This is a 16 month delay to a Level 1 milestone and Ofgem's approval is therefore required.
- 4.2 Ofgem acknowledges the need to ensure that all parties have sufficient time to draft, comment and refine the legal text associated with MHHS design-related code modifications and the consequential code modifications arising from them. Ofgem therefore approves the proposed revision to the M6 milestone.
- 4.3 Code drafting activities are not presently on the critical path for the programme. Ofgem notes that in due course MHHS Programme may need to

Decision – Decision on Market-wide Half-Hourly Settlement (MHHS) Change Request CR022 ('MHHS Programme Replan')

modify the plan to provide for consideration of whether any licence changes will be needed to implement MHHS. We do not consider that this activity need impinge on the critical path. Ofgem will discuss the matter with MHHS Programme.

Qualification (milestone M14)

- 4.4 Under CR022, the deadline for completing qualification (and, therefore, the date by which suppliers must be able to accept MPANs under the new Target Operating Model) would move from February 2025 to March 2026.
- 4.5 Ofgem notes that Programme Participants undergoing SIT will have to perform only limited Qualification Testing compared with those going through subsequent Qualification Tranches. Ofgem further notes that the intention is to incentivise as rapid a progression as possible for all parties to the migration phase, given that late movers may suffer competitive disadvantage under the new settlement arrangements. On that basis, we approve the proposed change to milestone M14.
- 4.6 MHHS Programme and the IPA will have important and complementary roles to provide ongoing assurance that Programme Participants are progressing satisfactorily, whether they are going through SIT or the Qualification Tranches. Close attention must be paid to the identification, monitoring and effective mitigation of risks to the M14 milestone.
- 4.7 To further incentivise timely qualification, Ofgem decided in 2021 that if suppliers had not qualified for the new settlement arrangements by the M14 milestone, they should be prohibited from taking on new customers. The 'one-way gate' remains an important part of our thinking and we see it as a key incentive on Programme Participants to qualify in a timely manner.

Migration (milestones M11 and M15)

- 4.8 33 million MPANs will have to be migrated, in phases, from the existing non-half hourly settlement arrangements to the new MHHS arrangements. CR022 would move the start date for migration (milestone M11) from October 2024

Decision – Decision on Market-wide Half-Hourly Settlement (MHHS) Change Request CR022 ('MHHS Programme Replan')

to April 2025¹⁷ and move the migration completion date (milestone M15) from October 2025 to October 2026. The proposed new dates delay these Level 1 milestones by 6 months and 12 months respectively.

4.9 Under CR022, the Migration window would increase from the 12 months envisaged in the original MHHS Implementation Timetable to 18 months in the revised plan. We have sought clarity on why a six-month extension is necessary. MHHS Programme has advised us that:

- the duration of the migration window is based on a modelling exercise of the MPAN migration rates that are realistically achievable by the industry.
- the migration process is inherently complex, since it involves a variety of different systems processing data, including overnight.
- data flows between the old and new settlement systems are required to ensure that consumer consumption reads are accurate.
- the successful migration of an individual MPAN can take up to 2 days and
- the migration of traditional (dumb) meters can take longer as they necessitate additional, sometimes manual, validation of consumption and technical data.

4.10 We acknowledge the technical complexity of the migration process and the large number of MPANs that must go through it. We support a phased approach that allows early movers to begin migrating their MPANs from April 2025, thereby enabling benefits to be realised from that date. We note the importance of the ramping up phase and expect that MHHS Programme and the IPA will monitor the progress of MVC/SIT participants to make sure, firstly, that they are in a position to start migrating MPANs promptly in April 2025 and, secondly, that they do so in a manner consistent with the rates envisaged in MHHS Programme's modelling. Failure to do so could put pressure on the migration window for later movers.

¹⁷ All the milestones from M11 onwards depend on first meeting the M10 deadline for central systems being ready for migration. The Change Request Form states that the "best information at this point suggests that M10 date may need to move by up to 3 months if certain risks materialise into issues. The end of the contingent range is reflected by [new milestone] M10*. With all other planning assumptions remaining the same, subsequent milestones M11 to M15 may need to move by a similar amount. However, it is worth noting that the M11 milestone (i.e. the start of Migration and therefore benefits realisation) would remain in mid-2025". To be clear, M10 is not a Level 1 milestone, so Ofgem approval is not required in order to change it under CR022.

Decision – Decision on Market-wide Half-Hourly Settlement (MHHS) Change Request CR022 ('MHHS Programme Replan')

- 4.11 MHHS Programme and the IPA will similarly need to monitor the progress of Programme Participants going through the Qualification Tranches, to ensure that they are well placed to start migrating their MPANs immediately after qualification and at the rates envisaged in the modelling exercise. This is likely to be especially important in relation to large suppliers, given the volume of MPANs they have to migrate. It will of course be important for all parties to identify, monitor and manage risks effectively to ensure that migration completes by M15. Good, prompt communication between Programme Participants, the IPA and MHHS Programme's Migration Control Centre on risk identification and management will be essential.
- 4.12 On the basis that MHHS Programme's approach to migration control mitigates for unforeseen defects and has a built in resolution approach, Ofgem approves the proposed changes to milestones M11 and M15.

New settlement timetable (milestones M16 and M16*)

- 4.13 Under CR022, the date for cutting over to the new settlement timetable (M16) would move from November 2025 to December 2026. Under CR022, MHHS Programme proposes a new milestone introducing a six-month range for cutover (ending with M16*). This could delay cutover by up to 19 months, to May 2027, and so Ofgem's approval is required.
- 4.14 As a result of the proposals in CR022, cutover to the new settlement timetable would take place following a stabilisation period of between 2 and 8 months after migration has been completed. Ofgem has always recognised that a period of stabilisation is necessary. We noted in our April 2021 MHHS decision that "the decision on when the settlement timetable should be reduced should be taken nearer the time and [taking into account] market monitoring against trigger points". However, we made clear that it should be "introduced as soon as practicable...[and] if this is longer than 4 months after the end of migration then this decision should be brought to Ofgem".¹⁸
- 4.15 Improving the efficiency of the settlement process by shortening the timeframes involved is an important part of the new arrangements. The new settlement timetable should reduce suppliers' financial exposure and the

¹⁸ Ofgem, MHHS Decision, pages 106-107.

Decision – Decision on Market-wide Half-Hourly Settlement (MHHS) Change Request CR022 ('MHHS Programme Replan')

amount of collateral needed to cover it. Reducing settlement collateral requirements should also reduce entry barriers. It is therefore important that the industry should cutover to the new settlement timetable at the earliest practicable point. On this basis, Ofgem approves the proposed change to milestone M16 and the introduction of the new milestone M16*.

Reflections

- 4.16 Ofgem welcomes the engagement of Programme Participants with MHHS Programme in the replan consultations and in developing Change Request CR022. We thank the IPA for its assurance activities throughout the replan process and for its report, which contains a series of recommendations for the Programme Team (see paragraphs 4.7-4.8 above), all of which we strongly endorse and expect to see put into practice in a timely and robust way.
- 4.17 Ofgem has always recognised that the original plan, based on a high-level design, would need to be thoroughly reviewed once the detailed design had been baselined. Given that it took much longer than expected to finalise the detailed design, it is not surprising that the revised plan proposed to move several Level 1 milestones by three months or more. We are, however, satisfied that the revised plan represents the fastest realistically achievable timetable for industry.
- 4.18 We accept that – as MHHS Programme, the PSG and the IPA have said - there is a clear case to proceed with the Change Request at this point and avoid further delay, despite known risks. We are concerned, however, that MHHS Programme is submitting the plan “in the full knowledge that further Change Requests may be required, potentially in quick succession after the plan is baselined”. We would especially be concerned if, after such an extensive replanning process, it were felt necessary to move a Level 1 milestone soon after this plan is baselined. Ofgem would expect to see a clear and detailed explanation of why such a change was necessary and why it was not evident sooner that it was needed. Clearly, if any Change Request comes to Ofgem for approval, we would consider, for example, whether any further delay to the programme was in the interests of consumers.
- 4.19 Whilst the delay to plan completion relative to the original Timetable increases industry implementation costs and delays the onset of benefits

realisation, this will have only a marginal effect on the benefits case for MHHS. This is because - as set out in our Final Impact Assessment of April 2021 - the expected net quantified benefits for British energy consumers are orders of magnitude greater than the variations likely to be caused by this delay.¹⁹ That said, MHHS remains a high priority for Ofgem and Government as a means of enabling the lowest cost decarbonisation of the energy sector. Indeed, the persistence of historically high energy prices makes it all the more important to adhere to the revised plan and so deliver MHHS at the earliest practicable time.

- 4.20 As set out in the BSC, the MHHS SRO is responsible for delivery of MHHS Implementation in accordance with the MHHS Implementation Timetable and the Programme Management Office is responsible for tracking and reporting on progress against the MHHS Implementation Timetable to the Authority, the MHHS SRO and the MHHS Programme Steering Group. In addition, the IPA is responsible for providing assurance services for Programme Participants, the SRO and Ofgem. Their activities will be crucial for maintaining confidence in the plan.
- 4.21 Equally, MHHS Programme Participants are required to comply with the MHHS Implementation Timetable. Consequently, we expect that all MHHS Programme Participants will ensure that they have the resources necessary to do so. We expect that, by working collaboratively together under Elexon's leadership, the industry will adhere to this revised Implementation Timetable and so ensure the earliest possible delivery of MHHS-related benefits to consumers.

¹⁹ The Final Impact Assessment estimated quantified net benefits from MHHS of £1.6 billion to £4.5 billion by 2045. Moreover, this estimate does not include the significant benefits we could not quantify that are expected to arise from greater competition, innovation and consumer choice.

5. Next steps

Section summary

We expect MHHS Programme to publish a new baselined Implementation Timetable as soon as possible after the MHHS Programme Steering Group meeting on 8 June 2023.

Publication of the re-baselined MHHS Implementation Timetable

- 5.1 We expect that MHHS Programme will publish a new baselined MHHS Implementation Timetable in accordance with our decision.
- 5.2 Publication should take place as soon as possible after the Programme Steering Group meeting on 8 June 2023 (and no later than the deadline of 30 June 2023 recommended by the IPA). MHHS Programme should seek to ensure that all MHHS Participants are aware of the changes.
- 5.3 Programme Participants should continue their Pre-Integration Testing activities and ensure their readiness for the next stage of testing.



Melissa Giordano
Deputy Director Retail

Signed on behalf of the Authority and authorised for that purpose.