Report Phase Consultation

P432 'Half Hourly Settlement for CT Advanced Metering Systems'

This Modification will amend the BSC requirements for CT Advanced Meters to align with the Electricity Supply Standard Licence Conditions and to require Half Hourly (HH) Settlement for all CT Meters by October 2023. It will also require all new connections for CT Advanced Meters to settle HH from October 2022. It will deliver Recommendation 3 by the CCDG as set out in its Consultation on the Transition Approach For Market Wide Half Hourly Settlement (MHHS).

This Report Phase Consultation for P432 closes:

5pm on **Friday 1 July 2022**

The Panel may not be able to consider late responses.

The BSC Panel initially recommends **rejection** of P432

The BSC Panel **does not** believe P432 impacts the European Electricity Balancing Guideline (EBGL) Article 18 terms and conditions held within the BSC

This Modification is expected to impact:

- Suppliers
- SVA Meter Operator Agents (MOAs)
- Half Hourly Data Collectors (HHDCs)
- Non-Half Hourly Data Collectors (NHHDCs)
- Non-Half Hourly Data Aggregators (NHHDAs)
- Half Hourly Data Aggregators (HHDAs)
- Licensed Distribution System Operators (LDSOs)
- Generators

ELEXON

Phase

- Initial Written Assessment
- Definition Procedure
- Assessment Procedure
- Report Phase
- Implementation

© ELEXON Limited 2022

Contents

1	Summary	3
2	Why Change?	5
3	Solution	10
4	Impacts & Costs	15
5	Implementation	25
6	Workgroup's Discussions	27
7	Workgroup's Conclusions	37
8	Panel's Initial Discussions	40
9	Recommendations	42
Appendix 1: Workgroup Details		43

About This Document

Not sure where to start? We suggest reading the following sections:

- Have 5 mins? Read section 1
- Have 15 mins? Read sections 1, 7 and 8
- Have 30 mins? Read all except section 6
- Have longer? Read all sections and the annexes and attachments
- *You can find the definitions of the terms and acronyms used in this document in the BSC Glossary*

This is the P432 Draft Modification Report, which Elexon is issuing for industry consultation on the BSC Panel's behalf. It contains the Panel's provisional recommendations on P432. The Panel will consider all consultation responses at its meeting on 14 July 2022, when it will agree a final recommendation to the Authority on whether or not the change should be made.

There are four parts to this document:

- This is the main document. It provides details of the solution, impacts, costs, benefits/drawbacks and proposed implementation approach. It also summarises the Workgroup's key views on the areas set by the Panel in its Terms of Reference, and contains details of the Workgroup's Membership and full Terms of Reference.
- Attachment A contains the draft redlined changes to the BSC and its subsidiary documents for P432.
- Attachment B contains the cost analysis exercises conducted by a Workgroup Member and the Proposer's views on the costs.
- Attachment C contains the full responses received to the Workgroup's Assessment Procedure Consultation.
- Attachment D contains the specific questions on which the Panel seeks your views. Please use this form to provide your responses to these questions, and to record any further views/comments you wish the Panel to consider.

Contact

Insert name

020 7380 4064

BSC.change@elexon.co.uk

Aylin.ocak@elexon.co.uk

© Elexon Limited 2022

1 Summary

Why Change?

Market-wide Half-Hourly Settlement (MHHS) requires that all Metering System Identifiers (MSIDs) are settled on a Half Hourly (HH) basis and moved to the MHHS Target Operating Model (TOM). The Code Change and Development Group (CCDG)[1] has recommended moving Current Transformer (CT) Advanced Meters to settle HH by October 2023 in its consultation on the Transition Approach for MHHS.[2] This recommendation was endorsed by Ofgem.[3] If this recommendation is not implemented, the risk that there will be insufficient time for Customers, Suppliers and their Agents to address issues that may arise will be increased especially against the backdrop of the larger MHHS migration activities that will be needed for smart Meters.

This Modification seeks to address the following issues related to CT Advanced Meters:

- Inconsistent definitions of Advanced meter in the BSC versus Electricity Supply Standard Licence Conditions (SLC)[4]; and
- The risk of not meeting MHHS Transition Timetable.

Solution

This Modification seeks to align the BSC definition of an Advanced Meter with that in the SLC and to set explicit HH Settlement obligations for CT Advanced Meters ahead of the migration to the MHHS TOM. Existing CT Advanced Meters settling NHH are required to move using the Change of Measurement Class (CoMC) process to settle HH by October 2023 and all new connections for CT Advanced Meters will be required to settle HH from October 2022. Any opt-out/in rights for customers under the SLC are reflected in the P432 solution.

Impacts & Costs

This Modification is expected to impact **Suppliers**, **SVA MOAs**, **NHHDCs**, **HHDCs**, **Generators** and **Distributors** and have a minor impact on **NHHDAs, HHDAs**. They may be required to amend systems and processes but implementation and on-going costs are expected to be low. This Modification will require changes to four BSC Sections and one BSC Procedure (BSCP). No BSC System changes are required. The central implementation costs are therefore expected to be low (<£1k). On-going costs are expected to be low as no new requirements are proposed for Elexon and the Performance Assurance Board (PAB) for the CoMC activities, however Elexon will monitor the CoMCs.

P432 will impact consumers directly, as the use of HH data will result in more accurate Settlement than the NHH profiling arrangements, however it may also result to consumers being exposed to an uncompetitive market 18 months before the MHHS transition deadline. Impacts on consumers are detailed in section 4.

[1] https://www.elexon.co.uk/group/code-change-and-development-group-ccdg/
[2] CCDG Consultation on Transition Approach For MHHS - Elexon BSC
[3] https://www.ofgem.gov.uk/sites/default/files/2021-10/Ofgem%20response%20to%20CCDG%20recommendations%20on%20the%20MHHS%20Transition%20Approach.pdf
[4] https://www.ofgem.gov.uk/industry-licensing/licences-and-licence-conditions

© Elexon Limited 2022

Costs Estimates			
Organisation	Implementation (£k)	On-going (£k)	Impacts
Elexon	<1	0.25 to 0.5 FTE until CoMC activity is complete, ~2k to 4k per month	Costs associated with drafting and implementing Sections X-1, L, S, Z and BSCP516. There may be on-going costs for Elexon for monitoring the CoMC activities as part of its existing operations.
NGESO	0	0	No impacts identified.
Industry	Low to medium	Low	The majority of consultation responses indicated that costs for industry are expected to be low (<£100k) to medium (<£100-£1000k). It is understood that the bulk of the implementation costs are expected to be for the CoMC activity and extra resources required for customer engagement. Ongoing costs are expected to be low.
Total	Low to medium	Low	

Benefits

The main benefit of P432 is to de-risk the migration to the MHHS TOM and improve Settlement accuracy.

Implementation

The Panel and the Workgroup has recommended this Modification is implemented as soon as possible to give Suppliers the maximum possible time to ensure that all CT Advanced Meters are settled HH by October 2023. To ensure this deadline is met, the Workgroup proposes P432 is **implemented via a special release, five Working Days (WD) after the final Authority decision is made**, so long as a decision is made by 26 August 2022.

Recommendation

The **majority** of the Panel recommend that P432 be **rejected**, as they do not believe it better facilitates the Applicable BSC Objectives. This is contrary to the Workgroup who agreed by majority that the P432 should be approved. The Panel do not believe P432 will impact the EBGL provisions in the BSC. They believe P432 should be submitted to Ofgem for decision (not a Self-Governance Modification).

© Elexon Limited 2022

2 Why Change?

What is the issue?

As a result of P272 'Mandatory Half Hourly Settlement for Profile Classes 5-8'[5], P300 'Introduction of new Measurement Classes to support Half Hourly DCUSA Tariff Changes (DCP179)'[6] and P322 'Revised Implementation Arrangements for Mandatory Half Hourly Settlement for Profile Classes 5-8'[7] the BSC introduced the definition of an Advanced Meter and required former PC 5-8 Metering Systems to be settled on a HH basis. At the time, this definition was deliberately constrained to only condition 12.18 of the SLC. The SLC later required Advanced Meters to be fitted to all CT connections by the end of 2021. This constraint is no longer necessary or appropriate, rather it is inconsistent.

This Modification seeks to align the BSC and SLC requirements for consistency across the two documents. Currently, there are sites where a Meter capable of recording HH data has been fitted under an SLC other than SLC 12.18 but there is no automatic obligation under the BSC to use that data in Settlement.

There is therefore an opportunity to maximise the benefits of these HH capable Meters by requiring them to be settled HH. Moreover, the primary benefit of this Modification is to mitigate the risk of not meeting the MHHS Transition Timetable[8] by moving NHH CT Advanced Meters to HH via CoMC earlier, as these have the potential to have a disproportionate number of issues.

CCDG recommendation to obligate early HH settlement in the Advanced segment

The CCDG believes that a key enabler of an effective migration for Advanced Metering Systems to the MHHS Target Operating Model (TOM) will be to align the BSC definition of an Advanced Meter with that in the Electricity Supply Licence and to set explicit HH Settlement obligations for CT Advanced Meters ahead of the migration to MHHS.

This will result in an estimated 50,000 CT Meters accounting for approximately 800 – 1,500 GWh[9] per year [1-2% of the total SVA import volume] moving to HH Settlement via the existing CoMC process, such that CT Advanced Meters will be settled HH before migration for the Advanced segment to MHHS starts in **October 2024**. In addition, any new CT connections from **1 October 2022** should be HH settled to ensure that subsequent CoMC activity is not required.

The intent of this approach will be to spread work, which would otherwise have to be carried out alongside MHHS migration over a longer period, making it more manageable and reducing the risk of missed MHHS TOM transition deadlines. This will maximise the time to resolve 'problem' sites where issues would otherwise delay migration, and allow for extra time to correctly identify CT sites. It will be significantly less risky to migrate, to MHHS TOM, Advanced Meters that are already settling NHH where the Meter has working communications, rather than try to switch from NHH to HH at the point of MHHS migration. Further, CT Advanced sites are also the larger consuming sites, so early HH Settlement additionally will provide benefits to Settlement accuracy.

What is a Profile Class?

A Profile Class is a classification of profiles which represents an exclusive category of customers whose Consumption can be reasonably approximated to a common profile for Settlement purposes. There are eight generic Profile Classes, chosen as they represent large populations of similar customers. Profile Classes 1 and 2 are for domestic premises and Profile Classes 3 to 8 are for non-domestic premises.

SLC 12.18

If paragraph 12.17 applies, the Electricity Meter installed at the relevant premises must be an Advanced Meter.

Paragraph 12.17: This paragraph has effect on and after 6 April 2009 and applies where the licensee installs or arranges for the installation of an Electricity Meter at Non-Domestic Premises where the metering point falls within profile class 5, 6, 7 or 8 as defined in the Balancing and Settlement Code (for this condition only, "relevant premises").

[5] https://www.elexon.co.uk/mod-proposal/p272-mandatory-half-hourly-settlement-for-profile-classes-5-8/
[6] https://www.elexon.co.uk/mod-proposal/p300/
[7] https://www.elexon.co.uk/mod-proposal/p322/
[8] https://www.ofgem.gov.uk/publications/electricity-retail-market-wide-half-hourly-settlement-decision-and-full-business-case
[9] Based on Gross Supplier Market Share Data reports.

© Elexon Limited 2022

Background

CCDG Recommendations

The Ofgem Significant Code Review (SCR) considering Settlement Reform[10], also known as MHHS was launched in July 2017. Under the SCR, the CCDG was convened to develop the MHHS TOM recommended by the Design Working Group (DWG).

The CCDG has recommended that a number of enabling changes are progressed before the full MHHS Design is baselined, to allow the required lead time to implement and comply.

They are to give effect to the CCDG's recommendations 1, 3 and 8.

- **Recommendation 1** will require changes to the BSC and Retail Energy Code (REC) to introduce new SMRS registration data items and supporting processes to be implemented between November 2022 and February 2023.

  BSC Change Proposal CP1558[11] and REC Change Proposal R0032[12] were raised in February 2022 to progress Recommendation 1.

- **Recommendation 3** will require the introduction as soon as possible of an obligation on Suppliers to ensure that all MSIDs with NHH settled CT Advanced Meters are moved to settle HH via the CoMC process by October 2023.

  The CCDG recommended that where possible, WC Advanced Meters settling NHH are moved to settle HH via CoMC by 2024. However, they noted that this should not be mandated.

  The CCDG initially considered whether there may need to be a consequential change under the REC and Connection and Use of System Code (CUSC), however this is no longer the case because the Modification does not have a direct impact on the REC, but a complimentary REC Change has been raised (R0015 ''Remote communication obligations for Advanced Meters'')[13]. Also due to the timing of the CoMC activity a CUSC Change is no longer required.

  This Modification is in support of Recommendation 3.

- **Recommendation 8** will require the introduction as soon as possible of an obligation on Suppliers to ensure that all Unmetered MSIDs are settled HH by October 2024. This will require changes to the BSC. The CCDG initially considered whether there may need to be a consequential change under the CUSC to prevent NHH UMS MSIDs being double charged during the year in which they are migrated, however this is no longer the case due to the timing of the CoMC activity.

  P434[14] was raised on 3 February 2022 to progress Recommendation 8.

The CCDG sought direction from Ofgem on how to progress their recommendations. In response[3], Ofgem requested that these enabling changes are progressed through the existing code governance framework, with oversight by the MHHS Programme. The

MHHS Transition Timetable

Ofgem's decision is that the transition to MHHS should take place over 4 years and 6 months, with the transition beginning on the publication of its Full Business Case in April 2021 and ending in October 2025.

[10] https://www.ofgem.gov.uk/energy-policy-and-regulation/policy-and-regulatory-programmes/electricity-settlement-reform
[11] https://www.elexon.co.uk/change-proposal/cp1558/
[12] https://recportal.co.uk/group/guest/-/new-registration-data-items-and-processes-to-support-the-transition-to-market-wide-half-hourly-settlement-mhhs-
[13] https://recmanagerb2c.b2clogin.com/recmanagerb2c.onmicrosoft.com/B2C_1A_signup_signin_saml/samlp/sso/login
[14] https://www.elexon.co.uk/mod-proposal/p434/

© Elexon Limited 2022

Programme and Ofgem fully endorse the progression of this Modification and the early move of CT Advanced Meters to HH via CoMC.

NHH CT Meters

The SLC allows exceptions under condition 12.29 where a Supplier has taken "all reasonable steps". These conditions were introduced in 2009, allowing stakeholders over ten years notice to comply. Information from Distributors provided through the Distribution Charging Methodologies Development Group (DCMDG)[15] indicates that about 50,000 CT Metering Systems are being settled NHH yet at the time of this Modification being raised should have an HH capable Advanced Meter already installed. It is likely that the pandemic has delayed the installation of Advanced Meters for some CT Metering.

The Association of Meter Operators (AMO) has produced guidance, Advanced Metering for CT Metering Systems[16], on the issues surrounding the application of CT Metering.

P272 'Mandatory Half Hourly Settlement for Profile Classes 5-8'

P272 mandated Half Hourly Settlement for all SVA Metering Systems within PC 5-8, in order to enable a Supplier's volume allocation to accurately reflect their customers' consumption and avoid the smearing effects of profiling NHH meter data. P272 was implemented on 1 April 2017.

P300 'Introduction of new Measurement Classes to support Half Hourly DCUSA Tariff Changes (DCP179)'

P300 introduced new Measurement Classes for aggregated Half Hourly-settled customers (for current transformer and Whole Current (WC) metered domestic; and WC non-domestic markets). P300 was implemented on 5 November 2015.

P322 'Revised Implementation Arrangements for Mandatory Half Hourly Settlement for Profile Classes 5-8'

P322 proposed new arrangements to migrate sites, classed as PC 5-8 with Advanced Meters installed, to HH Settlement under the P272 obligations. P322 had the following features:

- Required start and end dates to facilitate a phased approach to implementation;
- Performance Monitoring, most likely through the existing Performance Assurance Framework; and
- An implementation approach, which considers approved Modification P272 and possible amendment to the P272 Implementation Date by the Authority.

P322 was implemented on 3 August 2015.

[15] https://www.dcusa.co.uk/group/dcmdg/
[16] https://meteroperators.org.uk/stakeholder-information/technical-information/

© Elexon Limited 2022

MHHS Target Operating Model (TOM)

The Elexon-led Design Working Group (DWG)[17] has designed the TOM for MHHS as well as the approach for transitioning from the current Settlement arrangements to the TOM. The TOM is a key output of Ofgem's SCR on Electricity Settlement Reform.

The MHHS TOM is a set of Services required to deliver Settlement Period (SP) level data (currently a Half Hour period) from a Meter to a central Settlement body, to enable the calculation of the amount of energy a Supplier's customers have consumed (or exported) in each SP for each Settlement Day. This calculation is then used in the Imbalance Settlement process which compares the Supplier's contracted purchases of energy to the amounts deemed to have been consumed (sales) by each of the Supplier's customers (and recognises any amounts of energy contracted by National Grid under the Balancing Mechanism).

The DWG's TOM was presented in full detail in its preferred TOM report for Stage 2 of the SCR.[18]

CCDG

The CCDG is a working group that developed detailed design areas of the DWG's TOM, following the initial work done by the DWG. The group also further developed the transition approach, also accounting for run-off of the existing NHH arrangements. CCDG was initially responsible for the code changes (including subsidiary documents), however this is now the responsibility of the MHHS Programme's Cross Code Advisory Group.[19]

Advanced Meters, Current Transformer Meters and Whole Current Meters

An Advanced Meter is defined in the SLC as an electricity Meter, either on its own or with an ancillary device, and in compliance with the requirements of any relevant Industry Code:

- provides measured electricity consumption data for multiple time periods, and is able to provide such data for at least half-hourly time periods; and
- is able to provide the licensee with remote access to such data.

A CT Meter is an electricity Meter which uses a current transformer as part of the mechanism for measuring the electric current. A WC Meter is an electricity Meter where the electricity supply passes through the Meter itself.

Desired outcomes

The CCDG has made the following recommendations in respect of Advanced Meters, which this Modification seeks to implement:

- For CT Advanced Meters settling NHH, CoMC process carried out from 1 April 2023 to October 2023; and

[17] https://www.elexon.co.uk/group/design-working-group/
[18] https://www.ofgem.gov.uk/publications/design-working-group-preferred-tom-report
[19] https://www.mhhsprogramme.co.uk/governance/

© Elexon Limited 2022

- New CT Advanced Meters from 1 October 2022 should be HH settled to ensure that subsequent CoMC activity is not required.

© Elexon Limited 2022

3 Solution

Proposed solution

The existing definition of an Advanced Meter in the BSC differs from that in the SLC. This Modification seeks to align the definitions to expand the existing requirements to settle PC 5-8 sites HH to include all CT Advanced Metering Systems.

The current definition of Advanced Meter in Annex X-1 of the BSC was constrained by the scope of P272 to refer only to SLC 12.18 as follows:

"Advanced Meter": means Metering Equipment installed in accordance with the obligation set out in condition 12.18 of the Standard Conditions of each Supply Licence;

This made sense at the time of P272 because that Modification was focused on MSIDs in PC 5-8, but this prevented the future expansion of the HH Settlement obligation to include Advanced Meters installed under other SLCs where these Meters are capable of providing HH data into Settlement.

It is proposed to remove this limitation so that the BSC definition of an Advanced Meter is in accordance of SLC 12.19. In practice, changing the definition will include within scope an estimated additional 50,000 CT Metering Systems[20].

As the existing SLC requirements require all CT Metering Systems to have Advanced Meters fitted, it follows that there is a similar rationale for these to be settled on a HH basis.

In addition, any new CT connections from 1 October 2022 should be HH settled to ensure that subsequent CoMC activity is not required and HH customers will be prevented to CoMC back to NHH (unless they have data access opt-out rights under the SLC). Existing sites with Metering Systems installed after October 2022 will still be able to CoMC back to NHH up until the compliance date.

This Modification will also facilitate the removal of redundant references to the 'P272 go live date' as well as P272 monitoring, reporting and Supplier Migration Plan requirements as these references are obsolete.

All CT Metering Systems to be settled HH by October 2023

The current BSC obligation requires HH Settlement of:

all over 100kW Metering Systems; and

formerly NHH PC 5-8 Metering Systems.

Ofgem has decided to move all SVA Metering Systems to the MHHS TOM by 2025. This requires two high level steps:

1. CoMC activity to get the Advanced Metering Systems to settle HH; and
2. MHHS migration activity to move the Metering Systems to the MHHS TOM.

P432 will bring forward part of the first step only, requiring all CT Advanced Metering Systems to be settled HH by October 2023. CCDG transitional consultation encouraged

[20] Based on LDSO provided data in 2018.

SLC 12.19

For the purposes of this condition, an advanced meter is an Electricity Meter that, either on its own or with an ancillary device, and in compliance with the requirements of any relevant Industry Code:

(a) provides measured electricity consumption data for multiple time periods, and is able to provide such data for at least half-hourly time periods; and

(b) is able to provide the licensee with remote access to such data.

© Elexon Limited 2022

Suppliers to migrate existing WC Advanced meters to HH between October 2023 and October 2024.

Supplier Charges

Supplier Charges were switched off in March 2020 to alleviate the pressures faced by Suppliers during the Pandemic. They are due to be reinstated from September 2022, so the potential impact of P432 on NHH performance was considered as part of conversations regarding the switch on. However, there is no proposal to change the NHH performance targets as part of P432. The assurance team will consider the performance targets as part of the wider piece of MHHS migrations, working closely with the PAB and the MHHS Programme.

Assurance – monitoring, reporting and enforcement

No new BSC obligations are proposed for assurance. Elexon will monitor the CoMC activity using new data, which will be made available by CP1558 and R0032 (subject to their approval). Once the P432 compliance deadline passes, Elexon and the PAB may take any necessary steps under the existing Performance Assurance Framework (PAF) processes, such as Error and Failure Resolution, for any non-compliance or risk to Settlement.

50,000 NHH CT Advanced Meters

There is a challenge of accurately identifying the number of NHH CT Advanced Meters in the market as it is difficult to determine CT Meters from existing industry data flows. The 50,000 figure was obtained by the AMO from Distributors in 2018. The same request was also made back in 2016 and the number of Meters had not changed significantly, so it is unlikely that the figure has changed considerably since 2018.

The outcome the MHHS Programme is looking for with P432 is to minimise the number of CT Advanced Meters not already Settling HH by the time of migration to the MHHS TOM. If the number of NHH CT Advanced Meters are less than the reported 50,000 by Distributors, this would not change the desired outcome. CT Advanced Meters present a disproportionate risk in migration and that is why they are being drawn out earlier. Other Meters do not present the same complexities.

Non-domestic and microbusiness customers

At the time of writing, domestic consumers' HH consumption data can only be accessed for Settlement if they have given opt-in consent, and Suppliers can only access HH data from microbusinesses for Settlement if they have not opted-out. However, Ofgem are intending to amend SLC 47, which currently gives these customers their opt-in/out rights. Ofgem have proposed[21]:

Microbusiness customers will be mandated to give access to HH data; and

Domestic customers will be able to opt-out of giving access to their HH data, but they will be opted—in to give access by default; and

[21] https://www.ofgem.gov.uk/publications/electricity-retail-market-wide-half-hourly-settlement-decision-and-full-business-case

© Elexon Limited 2022

There will be no opt-out for export energy.

The P432 solution will respect the obligations in the SLC.

Benefits

This change is an enabling step that forms part of the move to MHHS. The Ofgem full business case[22] set out the benefits of implementing MHHS. Ofgem estimates MHHS will save consumers about £300m per year, with anticipated £4bn-£5bn consumer savings in total over the period to 2040.

P272, P300 and P322 were implemented to ensure that where an Advanced Meter was fitted as a result of the SLC for a PC 5-8 site it was then used to provide HH data for Settlement. It was recognised by stakeholders that the use of HH data results in more accurate and consequently more equitable Settlement than the NHH profiling arrangements.

The Ofgem SCR considering Settlement Reform identifies that use of accurate HH Settlement data ensures the correct cost allocation, which in turn encourages energy use to be optimised.

P432 will de-risk the migration to MHHS. CT Advanced Meters present a disproportionate risk in migration, so the early CoMC of these Meters will provide more time for Customers, Suppliers and their Agents to address any issues that may arise during the migration period. This Modification will therefore result in more accurate and equitable Settlement, whilst reducing the MHHS delivery risks for relevant MHHS Participants.

Assessment Procedure Consultation Responses

Do you agree that P432 will decrease the risks associated with transition to the MHHS TOM and to what extent will it decrease the risks?			
Yes	**No**	**Neutral/No Comment**	**Other**
4	5	0	0

The majority (mostly Suppliers) of respondents disagreed that P432 will decrease the risks associated with the migration to the MHHS TOM. One respondent stated that they have yet to see the effort required to move from HH Settled into "Advanced" segment of MHHS, so it is difficult to assess the effectiveness of moving any market sectors to HH prior to the migration to the MHHS TOM. Another respondent stated that they did not think the benefits of P432 outweighed the risks.

Respondents that did believe P432 will de-risk the migration (Supplier Agents, plus one Supplier), highlighted that the early moving of NHH CT Meters to HH via CoMC will allow more time to resolve any issues that may arise during the migration to MHHS.

The MHHS Programme clarified that if P432 is not approved then Suppliers would need to resolve the technical and operation issues during the 12 month migration window. This will increase the risk of Suppliers not completing the migration of these Meters within the 12 month window which will put them in breach of their licence obligation. It would also delay

[22] https://www.ofgem.gov.uk/publications/electricity-retail-market-wide-half-hourly-settlement-decision-and-full-business-case

© Elexon Limited 2022

the benefit of reducing the settlement timetable from 14 months to 4 months and causing an extension of the Programme, the costs of which will be borne by suppliers and ultimately customers. The estimated costs of any Programme extension is about £1M/month.

P432 is intended to mitigate this risk, if it is not approved then the MHHS Programme will have to find another solution, but it would likely be sub-optimal to P432 and impact the MHHS timelines as part of the 12 months allocated to migration to MHHS will need to be allocated to CT MSIDs.

Alternative solution

No Alternative Modification was formally raised by the Workgroup. However, one Workgroup Member did suggest making changes to the Measurement Class (MC) definitions so that they are based on the capacity and the capability of customer supply rather than based on CT Metering. Generally WC Meters are installed on Supplies up to 69kVA, so the suggestion was that CT Meters that have demand above 70kVA would be more appropriate, effectively realigning the HH threshold from 100kW to circa 70kW.

The Proposer stated that they understood the logic of this suggestion but it goes against all the Targeted Charging Review (TCR) reforms. It would mean undoing all the work undertaken for the TCR reforms.

Furthermore, one element of the MHHS Market Segmentation was to move away from arbitrary boundaries and differentiate based on physical characteristics of the Meter and connection – hence CT vs WC differentiation. Making changes to MC definitions would cause issues with Distribution Charging. Also, MCs are due to disappear once the market migrations to the MHHS TOM.

Assessment Procedure Consultation Responses

Do you agree with the Workgroup that there are no other potential Alternative Modifications within the scope of P432 which would better facilitate the Applicable BSC Objectives?			
Yes	**No**	**Neutral/No Comment**	**Other**
8	1	0	0

The majority of the respondents agreed that there are no potential Alternative Modifications within scope of P432 which could better facilitate the Applicable BSC Objectives.

One respondent disagreed and suggested that this time could be better used by Suppliers getting Smart/Advanced Meters installed in readiness for MHHS, however they did not provide an alternative solution.

Legal text

The P432 proposed draft redlined text is available in Attachment A. Further discussions had by the Workgroup on the proposed redlining can be found in section 6.

© Elexon Limited 2022

Assessment Procedure Consultation Responses

Do you agree with the Workgroup that the draft legal text in Attachment A delivers the intention of P432?			
Yes	**No**	**Neutral/No Comment**	**Other**
6	2	0	0

The majority of the respondents agreed the draft legal text in Attachment A delivers the intention of P432. One respondent disagreed with the legal text as they did not agree with the implementation date of October 2023 and suggested the proposed changes are implemented in 2024/25 instead, in line with the MHHS Programme.

Another respondent disagreed with the legal text stating that it should be clear that 'actioning' a CoMC back to NHH should be stopped. However, the Workgroup consensus was that CoMCs back to NHH should not be prevented under P432 to align with the SLC.

Subsidiary Documents

Do you agree with the Workgroup that the amendments to the Code Subsidiary Documents in Attachment A delivers the intention of P432?			
Yes	**No**	**Neutral/No Comment**	**Other**
4	4	0	0

The majority of the respondents agreed that the amendments to the Code Subsidiary Documents deliver the intention of P432. Two of the respondents that disagreed were the same respondents that disagreed with the legal text and included the same responses as above. One respondent stated that the amendments to BSCP516 doesn't explain what the requirements are for CT Meters that don't meet the requirements under SLC12.17. Elexon pointed out that the BSCP516 document does not intend to direct what happens with different types of Meters, the mandate for P432 is set out in BSC Section L.

One respondent stated that BSCP516 is not clear that the deadline to settle HH on 1 October 2022 only applies to new CT connections. BSCP516 has been amended to make this mandate clearer.

Report Phase Consultation Question
Do you agree with the Panel that the redlined changes to the BSC deliver the intention of P432?
The Panel invites you to give your views using the response form in Attachment D

Report Phase Consultation Question
Do you agree with the Panel that the redlined changes to the Code Subsidiary Documents deliver the intention of P432?
The Panel invites you to give your views using the response form in Attachment D

© Elexon Limited 2022

4 Impacts & Costs

We have defined cost impacts as:

- High: >£1 million
- Medium: £100-1000k
- Low: <£100k

Central costs of P432

P432 is a document-only change. We therefore anticipate the central implementation costs to be less than £1K for the proposed solution. For the ongoing costs, it is anticipated that 0.25 FTE of effort will be spent on the monitoring and reporting activities over the 6 month period, and a further (up to 0.25 FTE, so 0.5 FTE in total) effort will be required if follow up actions are needed if CoMC activities are not complete.

Below is a detailed summary of the expected impacts and costs of the Modification for both the implementation phase and on-going.

Estimated implementation costs of P432

Implementation cost estimates			
Organisation	Item	Implementation (£k)	Comment
Elexon	Systems	0	No impact identified. P432 is a Document only change.
	Documents	<1	Costs associated with drafting and implementing Sections X-1, L, S, Z and BSCP516.
	Other	0	No impact identified
NGESO	Systems	0	No impact identified
	Other	0	No impact identified
Industry	Systems & processes	Low to medium	Majority of the consultation responses indicated that costs are expected to be low (<£100k) to medium (£100-1000k) for industry. Majority of the implementation costs are expected to be for the CoMC activity and the extra resources required for customer engagement.
	Total	Low to medium	

© Elexon Limited 2022

Estimated on-going costs of P432

On-going cost estimates		
Elexon	0.25 to 0.5 FTE until CoMC activity is complete (~2k to 4k per month)	There may be on-going costs for Elexon for monitoring the CoMC activities as part of its existing operations.
NGESO	0	No impact identified.
Industry	Low	Consultation responses indicated that on-going costs are expected to be low (<£100k) and confined to BAU HH servicing and resolution of any errors found post CoMC.
Total	Low	
Elexon	0.25 to 0.5 FTE until CoMC activity is complete (~2k to 4k per month)	There may be on-going costs for Elexon for monitoring the CoMC activities as part of its existing operations.

P432 impacts

Impact on BSC Parties and Party Agents		
Party/Party Agent	Potential Impact	Potential cost
Suppliers	The SLC already required the installation and maintenance of Advanced Meters by the end of 2021 so any additional costs for HH Settlement are expected to be limited to the cost of carrying out the existing CoMC process. Suppliers may need to modify their billing arrangements for CT metered customers currently settled NHH.	Low to Medium
LDSOs	LDSOs may need to review the distribution of their charges as their customer base will change. For that reason, the impact on LDSOs has been highlighted but are expected to be minimal.	Medium to High
Generators	SVA connected Generators may be exposed to higher MOA costs at mixed use sites.	Low
SVA Meter Operators	The increase in the number of HH Metering Systems is expected to impact MOAs, who may need to support the CoMC plans of Suppliers. MOAs will need to engage in Change of Measurement Class activities. Meters will need reconfiguring for HH demand channels as opposed to NHH cumulative channels.	Low

© Elexon Limited 2022

Impact on BSC Parties and Party Agents		
Party/Party Agent	Potential Impact	Potential cost
HHDCs	The increase in the number of HH Metering Systems is expected to impact HHDCs. HHDCs will need to engage in Change of Measurement Class activities.	Low
NHHDCs	NHHDCs will need to engage in Change of Measurement Class activities.	Low
HHDAs	HHDAs will need to engage in Change of Measurement Class activities.	Low
NHHDAs	NHHDAs will need to engage in Change of Measurement Class activities.	Low

Impact on the NETSO	
Impact	Estimated cost
None identified	None

Impact on BSCCo		
Area of Elexon	Impact	Estimated cost
Assurance	Assurance will need to monitor the CoMC activities in the first instance and work with the PAB in response to any increase in Settlement Risk.	Low

© Elexon Limited 2022

Impact on BSC Settlement Risks
P432 impacts a wide range of SVA risks. For the CoMC process the Meter Technical Details (MTDs) will need to be transferred from NHH Agents to the HH Agents. They may not always happen on time or they may potentially be transferred with the incorrect information. This could then potentially lead to Agents not being able to read the Meters or not being able to interpret the readings correctly, resulting in the wrong volumes being entered into Settlement. Furthermore, the CoMC requires a reconfiguration of the Meter to happen on a certain date. There is a risk that the reconfiguration may go wrong, which could result in erroneous data entering Settlement. Where the CoMC technical activity does not happen on the expected date, appointments will need to be backed out, which is another risk that erroneous data enters Settlement (although we plan to mitigate this with the proposed REC Change for retrospective CoMCs). This Modification is expected to impact the following BSC Settlement Risks (H – high impact, M – medium impact, L – low impact), which will be managed under the existing Elexon assurance activities: • 003 SVA Risk: Metering Equipment Installations are incorrect - M • 004 SVA Risk: Metering Equipment changes are not notified - H • 005 SVA Risk: Metering Equipment Faults are not resolved - M • 006 SVA Risk: Incorrect Meter detail transfer on change of agent - M • 007 SVA Risk: Metered Data is not retrieved - H • 008 SVA Risk: Metered Data is not processed or transferred - H • 009 SVA Risk: Data Aggregator Processing incorrect - L • 010 SVA Risk: Transfer of Meter Read History incorrect - L • 012 SVA Risk: Meter System Technical Details inaccurate - M • 015 SVA Risk: Reference Data incorrect - L

Impact on BSC Systems and process	
BSC System/Process	Impact
None	All existing systems are able to accommodate this small change in activity.

Impact on BSC Agent/service provider contractual arrangements	
BSC Agent/service provider contract	Impact
None	None identified

Impact on Code	
Code Section	Impact
Section L 'Metering'	Section L has been updated to add the requirements for CT Advanced Meters to settle HH from 1 October 2023 and new CT connections to be settled HH from 1 October 2022.
Section S 'Supplier Volume Allocation'	The data provision requirements have been updated to include the submission period for HH Advanced Meters.

© Elexon Limited 2022

Impact on Code	
Code Section	Impact
Section X, Annex X-1 'Glossary'	The definition of Advanced Meters in BSC Section X, Annex X-1 was constrained by the scope of P272 to refer only to SLC 12.18, the definition will be expanded by referring back to the definition of Advanced Meter in the SLC, condition 12, so that it captures all HH Metering Systems with remote communications that are not Smart Meters. Deletion of text that referred to the P272 monitoring and reporting requirements and references to Supplier Migration Plans as they are no longer relevant.
BSC Section Z 'Performance Assurance'	Section Z has been amended to delete the P272 monitoring and reporting requirements and references to P272 Supplier Migration Plans as they are no longer relevant.

Impact on EBGL Article 18 terms and conditions
No impact identified

Impact on Code Subsidiary Documents	
CSD	Impact
BSCP516 'Allocation of Profile Classes and SSC's for Non Half Hourly SVA Metering Systems Registered in SMRS'	BSCP516 has been amended to clarify where the profile classes should not be allocated i.e. where this BSCP does not apply.

Impact on other Configurable Items	
Configurable Item	Impact
None	None identified

Impact on Core Industry Documents and other documents	
Document	Impact
Ancillary Services Agreements	None anticipated at this stage.
Connection and Use of System Code	None anticipated. The CCDG initially considered whether there may need to be a consequential change under the CUSC to avoid unwanted double charging of TNUoS for Metering Systems that move from NHH to HH during a charging year. It concluded that because the CoMC activity will only start in early 2023, by this point the critical elements of the Targeted Charging Review will have been implemented and so there will not be any adverse impacts on TNUoS and a CUSC Modification is therefore not needed.

© Elexon Limited 2022

Impact on Core Industry Documents and other documents	
Document	Impact
Data Transfer Services Agreement	None anticipated at this stage.
Distribution Code	Impacts on DUoS charging and cost recovery have been considered as the c.50,000 CT metering systems will move into site specific DUoS charging upon a CoMC into Measurement Class "E". As the excess capacity charging regime will be in effect in the DCUSA, customers need to set an agreed supply capacity via a site-specific connection agreement with their LDSO in advance of moving to HH Settlement, otherwise they will become liable for the penal excess capacity charge. A DCUSA Issue will be raised soon to facilitate engagement with LDSOs regarding the connection agreements.
Grid Code	None anticipated at this stage.
Retail Energy Code	The CCDG initially considered whether there may need to be a consequential change under the REC, however this is no longer the case because this Modification doesn't have a direct impact on the REC. A complimentary REC Change R0015 has been raised in support of this Modification to require remote communications to be fitted and working for all CT Metering Systems prior to CoMC activities starting. A complimentary REC Change Proposal will be raised to allow retrospective CoMCs.
Supplemental Agreements	None anticipated at this stage.
System Operator-Transmission Owner Code	
Transmission Licence	
Use of Interconnector Agreement	

Impact on a Significant Code Review (SCR) or other significant industry change projects
Ofgem directed that this Modification be worked up by the MHHS Programme and be progressed by the BSC in their response to the CCDG Recommendations. It has been raised to facilitate the MHHS migration to give effect to Ofgem's Settlement Reform SCR. Consequently, we requested that Ofgem treat this Modification as a SCR Exempt Modification Proposal on 2 December 2021. Ofgem confirmed that this Modification Proposal was SCR exempt on 9 December 2021.

© Elexon Limited 2022

Assessment Procedure Consultation Responses

Will your organisation incur additional costs as a result of P432 that you would not have incurred under MHHS? Alternatively, would there be any cost savings from moving CT Advanced Meters before MHHS migration?			
Yes	**No**	**Neutral/No Comment**	**Other**
3	4	1	0

Some participants stated they would incur additional costs as a result of P432 and would not see cost savings from moving CT Advanced Meters ahead of MHHS migrations. It was stated that P432 would tie up resources on HH Settlement implementation for a longer period and impact their other projects, and the cost of moving CT Advanced customers ahead of the MHHS migration is all additional for Suppliers.

Four stated that they don't expect additional costs that they would not have incurred under MHHS, with one stating that should sites migrate early and to an agreed plan with Suppliers, then there should be fewer issues. Therefore, if less things go wrong, there will be less cost to fix. Another respondent stated that the costs will remain the same, however they will be spread over a longer period of time.

Do you agree with the Workgroup's assessment of the impact on the BSC Settlement Risks?			
Yes	**No**	**Neutral/No Comment**	**Other**
6	2	0	0

Majority of the respondents agreed with the Workgroup's assessment of the impact on the BSC Settlement Risks.

One respondent was concerned that there would be a significant risk to the NHH 97% Performance targets. Elexon stated that there is no proposal to change the NHH performance targets as part of P432. However, the Assurance team will consider the performance targets around the wider piece of MHHS migrations and P432 will feed into that. Once the CoMC activities start, the Elexon assurance team and the PAB can make a decision on how they assess against the 97% target based off of that.

Do you agree with the Workgroup's assessment that P432 does not impact the European Electricity Balancing Guideline (EBGL) Article 18 terms and conditions held within the BSC?			
Yes	**No**	**Neutral/No Comment**	**Other**
7	0	1	0

Majority of the respondents agreed (and one did not provide a comment on this point) that this Modification will have no impact on the EBGL Article 18 terms and conditions held within the BSC.

© Elexon Limited 2022

Will P432 impact your organisation?			
Yes	**No**	**Neutral/No Comment**	**Other**
6	1	0	0

One respondent did not believe that P432 would impact their organisation while the other respondents all responded they would be impacted. Majority of the respondents stated that they will be impacted by the CoMCs they will need to carry out and P432 will result in higher customer engagement.

Report Phase Consultation Question
Do you agree with the Panel's initial consideration that P432 does not impact the European Electricity Balancing Guideline (EBGL) Article 18 terms and conditions held within the BSC?
The Panel invites you to give your views using the response form in Attachment D

© Elexon Limited 2022

Consumer impacts

Impact of the Modification on the environment and consumer benefit areas:	
Consumer benefit area	Identified impact
1) Improved safety and reliability The Workgroup did not identify any impact on this consumer benefit from P432.	Neutral
2) Lower bills than would otherwise be the case A Workgroup Member held the view that this Modification will have a negative impact on this benefit area as they thought P432 would lead to higher bills for consumers, driven by increased costs to serve (higher Supplier Agent costs) and network charging costs. The majority Workgroup view, supported by the Proposer, is that the impact is neutral because charges will change but the costs may not necessarily increase. Some bills may be higher but some may decrease as a result of DUoS changes, so overall the costs will be neutral.	Neutral
3) Reduced environmental damage The overall consensus was that the impact is neutral, however the Modification does have indirect links to supporting Net Zero. One Workgroup Member suggested that a negative consequence could be that consumers could change their Meters so they are out of scope of P432 to avoid increased costs. They had the view that many sites with CT Meters did not need to be CT Metered as the capacity had been overestimated. The Workgroup noted the current Meter shortage issues in the market. However, the majority were of the view that exchanging Meters would be impractical because the Meters would have to change from CT to WC to become out of scope of P432. In doing so, this would require a downgrade of LDSO equipment.	Neutral
4) Improved quality of service The use of HH data results in more accurate Settlement than the NHH profiling arrangements. This allows for better cost reflectivity and reduces cross-subsidies in Settlement. One Workgroup Member did argue that P432 does not improve quality of service as they believed that PC 1-4 CT customers will struggle to get engagement from Suppliers for HH Settlement, as shown by the second cost exercise that they carried out. Please see section 6 for further details.	**Positive**
5) Benefits for society as a whole The overall consensus from the Workgroup was that the impact is neutral as there were some positive and some detrimental impacts. One Workgroup Member mentioned there may be a knock on effect on businesses who may be subject to higher costs to serve HH settled Meters, which may result in costs being passed on to their customers. Another Workgroup Member had the view that the benefit is positive as MHHS is positive for society as a whole (see Ofgem's MHHS Full Business Case) and P432 is a part of MHHS, supporting a path to net-zero.	Neutral

What are the consumer benefit areas?

1) Will this change mean that the energy system can operate more safely and reliably now and in the future in a way that benefits end consumers?

2) Will this change lower consumers' bills by controlling, reducing, and optimising spend, for example on balancing and operating the system?

3) Will this proposal support:

i) new providers and technologies?

ii) a move to hydrogen or lower greenhouse gases?

iii) the journey toward statutory net-zero targets?

iv) decarbonisation?

4) Will this change improve the quality of service for some or all end consumers. Improved service quality ultimately benefits the end consumer due to interactions in the value chains across the industry being more seamless, efficient and effective.

5) Are there any other identified changes to society, such as jobs or the economy.

© Elexon Limited 2022

P432 end to end consumer journey impacts

A Member was concerned that if P432 is implemented customers will struggle to get competitive Supplier contracts and effectively be charged more for the new contracts. This would mean that customers with CT Advanced Meters would be exposed to an uncompetitive market 18 months before the MHHS transition deadline. The Member conducted two exercises to investigate the possible impacts on the end consumers to support this assertion. See section 6 for details.

The opt-in/out rights for microbusinesses and domestic customers will be reflected in P432. The customer will have a choice whether to move to a time of use tariff or not. Engagement with customers, by Suppliers and their Agents (particularly where the customer contracts directly with the Agents) will be critical (although this isn't directly an issue for the BSC as it does not relate to Settlement).

A Workgroup Member argued that additional site visits may be required if Meters at the impacted sites do not record maximum demand data, and that this will result in a detrimental environmental impact and an additional cost that would be passed through to customers.

However, other Workgroup Members have argued that this will only have an impact if the site visits are over and above the routine site visits that will be required during the six month preparatory period. Where Meters are not communicating remotely, there should be a need for NHHDCs to visit those sites to collect readings and maximum demand data can be collected alongside the billing reads. Where Meters are faulty, there is a requirement (under the REC Metering Operation Schedule) for SVA MOAs to respond to fault resolution requests.

Assessment Procedure Consultation Responses

Do you agree with the Workgroup's assessment of the impact on the consumer benefit areas?			
Yes	**No**	**Neutral/No Comment**	**Other**
4	3	1	0

Many respondents stated that the main benefit for customers will be the accurate billing as a result of settling HH. One respondent highlighted that by moving these customers to HH settlement via CoMC early advantages of MHHS could be exploited sooner, similar to those that are possible through the elective HH route.

Respondents that disagreed, highlighted that customers will be negatively impacted by the higher costs to serve HH supplies, which is driven by increased Supplier charges (costs that include Supplier imposed Meter Operator charges).

© Elexon Limited 2022

5 Implementation

Recommended Implementation Date

The Panel and the Workgroup recommends an Implementation Date for P432 of:

- **5 WDs** after the Authority's decision is received if the Authority's decision is received by 26 August 2022.

The CCDG has recommended this change to be implemented as soon as possible to ensure that all MSIDs with NHH settled CT Advanced Meters are moved to settle HH via the CoMC process by October 2023 and new connections from October 2022. The Proposer and Workgroup agrees and therefore recommend this Modification is implemented via a special release, five WDs after Authority approval. This will provide the maximum lead time to meet the migration timescales that will be set by this Modification.

A decision from Ofgem is required by 26 August 2022, this Modification can be implemented before 1 October 2022 to give industry enough time to prepare for the obligation to settle all new CT Advanced Meter connections HH from 1 October 2022.

Assessment Procedure Consultation Responses

Do you agree with the Workgroup's recommended Implementation Date?			
Yes	**No**	**Neutral/No Comment**	**Other**
4	4	0	0

Many of the respondents did not agree with the Implementation Date. These respondents were made up of Suppliers, except one. The respondents that did agree were mostly DCs/DAs and SVA MOAs.

One respondent stated that the timescales for the movement of CT Advanced Meters between April and October 2023 should provide sufficient time for the CoMC activities. Another respondent highlighted that the proposed Implementation Date and approach were recommended by the CCDG on the basis that CT Metering Systems will need to move HH Settlement under the existing CoMC process to allow for time to resolve issues which may arise prior to the MHHS TOM go live and migration.

Respondents that disagreed suggested that the proposed changes are done as part of the MHHS Programme.

Although disagreeing with the proposed Implementation Date, one Supplier did highlight that CT Metered customers constitute a disproportionately large risk as compared to other customer segments, so it is right to look at moving them to HH Settlement via CoMC as early as possible. However they suggested delaying the implementation date to 2024 so there is sufficient time to deliver system and process changes to support the changes, as well as give time to explain the rationale and benefits to customers in order for them to understand and engage with this change.

© Elexon Limited 2022

Assessment Procedure Consultation Responses

How long (from the point of approval) would you need to implement P432?			
0-6 months	**6 – 12 months**	**>12 months**	**Other**
2	3	0	3

The majority of the respondents stated that they will need less than a year to implement P432, with some respondents stating that the proposed timelines are sufficient.

Report Phase Consultation Question
Do you agree with the Panel's recommended Implementation Date?
The Panel invites you to give your views using the response form in Attachment D

© Elexon Limited 2022

6 Workgroup's Discussions

Key dates for P432

The Proposer presented his key dates for P432, which the Workgroup accepted.

Key milestones:

- October 2022: New CT connections beyond this date should be HH settled to ensure that subsequent Change of Measurement Class (CoMC) activity is not required;
- February 2023: CP1558 (subject to its approval) implemented providing improved visibility of CT metering systems;
- October 2022 to March 2023: Planning and preparatory CoMC activities to be undertaken during this period to allow new TCR arrangements to come into effect and therefore avoid network charging impacts on customers;
- April 2023 to October 2023: CoMC process to begin for CT Advanced Meters settling Non-Half Hourly (NHH); and
- By October 2023: All CT Advanced Meters to be Settled HH.

The Proposer explained that the proposed timeline for P432 is driven by the MHHS timeline. The reason this proposal calls for implementation for all CT Advanced Meters to be Settled HH by October 2023 is because it de-risks to migration to MHHS, which is due to start in October 2024. If any issues were to arise during the migration of CT Advanced Meters, it would be better that they surfaced during the April 2023 to October 2023 period, as it would be more difficult to resolve any issues under duress during the MHHS migration. Six months to CoMC ~50,000 CT Advanced Meters should allow Parties to proceed more cautiously.

The dates are there to facilitate the movement to the MHHS TOM, therefore the Workgroup agreed that the October 2023 date should be hardcoded in the legal text drafting, however it was pointed out that we should keep in mind that things may change within the MHHS Programme.

Clarification of BSCP516 and CP1549 requirements

A Workgroup Member asked for clarification on the process for moving a Meter from HH back to NHH Settlement (which is detailed in BSCP516) and was recently amended by CP1549[23] 'Amendment of BSCP516 to clarify the criteria for Non-Domestic SVA Metering Systems to be allocated to Profile Classes 3 or 4' permitted. Elexon confirmed that CP1549 allows Non-Domestic customers with an Advanced Meter migrated from Profile Class (PC) 5-8 to HH Settlement (as part of the P272 process) back to NHH Settlement if validly reclassified as PC3-4.

Where a Metering System is still classified by the Supplier as falling under the definition of what would have been PC5-8 pre P272 then it is not in scope to be reversed to NHH Settlement. Furthermore, PC5-8 apply where Maximum Demand is required to be

[23] https://www.elexon.co.uk/change-proposal/cp1549/

© Elexon Limited 2022

recorded, not just where it happens to be recorded, this was clarified by CP1433 'Clarification of which Metering Systems are captured by the P272 requirements'.[24]

Elexon highlighted that these requirements should not have any implications on P432. P272 is already largely complete, the interest here is that some HH Meters are reverting back to NHH and to what extent, if any, this should be permitted for CT Advanced Meters under P432.

Exceptions to the rules

Domestic and microbusiness customers

Currently under the SLC47 requirements domestic consumers' HH consumption data can only be accessed for Settlement if they have given opt-in consent, and Suppliers can only access HH data from microbusinesses for Settlement if they have not opted-out.

However, as part of their work on market-wide Settlement reform, Ofgem has been considering amending the SLC47 in order to make access to HH data mandatory for microbusinesses, and Suppliers will have access to HH data from Domestic sites unless the consumer opts out, Ofgem's decision was set out in its access to half-hourly electricity data for settlement purposes paper[25] in 2019.

Assuming SLC47 changes are progressed in line with Ofgem's previous decision (which is expected by Workgroup Members), the new data access framework would only apply from the point the customer changes supply contract. Ofgem do not expect this to include situations where new terms and conditions apply by default, for example where a customer moves on to a default tariff following expiration of a fixed term contract. Whilst retail market issues have held up Ofgem's work, it's very likely that the SLC change will be implemented before the proposed April 2023 start date for CoMC activities.

As the decision for the data access requirements is likely to be made after P432 is submitted for Ofgem decision, Elexon asked the Workgroup whether domestic and microbusiness customers should be excluded from the P432 solution. The consensus amongst the Workgroup was that these customers shouldn't be excluded from the solution, instead the legal drafting should be drafted in a way that it is flexible and respects the SLC requirements. This was on the basis that it would avoid the need to re-draft the BSC, and allow domestic and microbusiness customers to CoMC to HH Settlement now, subject to SLC rights.

The Workgroup also discussed whether the ability of moving CT Advanced Meters from HH back to NHH should be removed as the market needs to move to HH Settlement eventually. The consensus was that the downgrade process should remain to maintain the opt-out/in rights for domestic and microbusiness customers. The BSC requirement should be drafted in a way to facilitate this.

Remote communications

The Workgroup questioned how Suppliers should tackle CT Advanced Meters that can record HH data but do not have working communications. Another Member also pointed out that if the Metering Systems that are moving to HH Settlement via CoMC do not have

[24] https://www.elexon.co.uk/change-proposal/cp1433/
[25] https://www.ofgem.gov.uk/publications/decision-access-half-hourly-electricity-data-settlement-purposes

© Elexon Limited 2022

communications fitted then these Meters will need to be exchanged. The Proposer clarified that for a Meter to meet the Advanced Meter criteria as defined in the SLC, they would need to have working communications and be HH capable. Situations where premises have an Advanced Meter with no working communications would not fit the criteria to move to HH Settlement, so they would not be in scope of P432. It was noted the MHHS Programme would need to consider how to handle these instances.

A question was raised about what to do with CT Advanced Meters where the communications stopped working. It was clarified that only CT Advanced Meters where the communication is working will go through the CoMC process, if communications stop after the Meter has been moved to HH Settlement, then it will be considered in scope of P432 requirements. Hand held readings may then need to be taken until such time the communications issue is resolved through the Meter Faults process. A Workgroup Member pointed out that hand held reads are typically £15 a reading, in the HH market customers could essentially be looking at up to £180 a year on data collection costs (if readings are taken every month). The Proposer pointed out that this issue is a wider market issue and not specifically a P432 issue.

A Workgroup Member raised their concern over communication links being impacted by 2G hardware in phone masts being replaced for 4G/5G hardware. This will mean CSD connections over 2G will cease to work and GPRS connections over 2G will become more and more unreliable. This will all have impacts on the current communications performance of the Advanced Metering sector. However, it was highlighted that this is a wider market risk, rather than a specific P432 risk.

The Workgroup consensus was that P432 should not require significant, if any Meter Exchanges, as the SLC12.27 requirement to fit Advanced Meters to CT connection was December 2021. It should only be edge cases, where Meters may not have been able to be installed due to the Pandemic that may be lacking, but should still be fitted in time for the P432 migration.

Assessment Procedure Consultation Responses

Do you envisage P432 requiring Meters to be exchanged? If so please provide rationale, noting the SLC requirements and provide an indication of the number of likely meter exchanges required.			
Yes	**No**	**Neutral/No Comment**	**Other**
3	3	1	0

Some respondents stated that Meters would need to be exchanged. One stating they have identified 10% as needing a Meter exchange due to interoperability issues.

One respondent stated they only anticipate a small number of Meters being exchanged, these will be limited to Metering Systems that do not have the appropriate password levels needed to re-scheme the Metering System and where metering service providers hold the correct information to re-scheme the metering systems but do not work with a specific metering type.

Two respondents stated that given non-communicating Meters are out of scope of P432, there should be no Meter exchange requirements

A Workgroup Member noted that in principal P432 should not require Meter exchanges. under the SLC, CT Meters should have been fitted and communications should be working. Only a small proportion of the ~50k Meters would need to be exchanged due to technical reasons.

© Elexon Limited 2022

Another Workgroup Member pointed out that if Meters need to be exchanged it is better to do that now rather than later during the migration to the MHHS TOM.

Monitoring, reporting and managing the migrations

PAB's role

Elexon presented the Workgroup with three different options for monitoring the compliance of the obligations, and noted that P432 will be a smaller migration activity, with less risk to Settlement, than P272 and so the assurance approach should reflect this and be proportionate. Indicative estimates suggest ~50k CT Advanced Meters with 1-2% of the total SVA import volume may be in scope for P432.

The three options were:

- **Option 1– Only checking compliance in October 2023.** The PAB and Elexon do not manage or monitor the migration period at all, and only perform checks at the end of the migration window (October 2023). If a Supplier has any CT Metering Systems which remain NHH Settled at that time, escalation/enforcement options would be applied as deemed necessary.
- **Option 2 – P272 style Supplier Migration Plans.** The PAB and Elexon would request a migration plan from all Suppliers, detailing approaches and timescales for migration of the portfolio of CT Metering Systems. These plans would be monitored monthly, with deviations from the plans triggering escalation/enforcement routes as necessary.
- **Option 3 – Lighter Touch.**
  Elexon, supported by the PAB, would engage with Suppliers ahead of the migration window, emphasising the obligation. Approaches to the migration would be discussed with Suppliers, although no formal 'plan' would be required to be submitted. As the migration window progresses, monitoring would be done at industry-level as well as Supplier level, with any Supplier(s) appearing to be 'behind' approached for further information. Any escalation/enforcement would only be sought after the migration deadline (October 2023), as necessary.

The majority of the Workgroup Members preferred option three, but one Workgroup Member had a preference for option two. They had the view that if the migrations aren't managed properly throughout, at the end of the process P432 may not be a success.

The Workgroup noted that a new CP has been raised; CP1558 'New Registration data items and processes to support the MHHS transition'. This CP will introduce new Registration Service data items and supporting BSC processes into existing Supplier Meter Registration Service (SMRS) systems, making it easier to identify CT Advanced Meters. The target implementation date for CP1558 is 23 February 2023. The Workgroup had a strong preference to use this data for the reporting of P432. However, if the CP1558 is delayed or rejected then there needs to be an alternative option, for example, Supplier reporting (noting that they would have to agree reporting with their Agents to meet the P432 obligations anyway), which could be done under existing arrangements. The PAB also noted that the implementation of CP1558 is important in order to determine the number of Metering Systems in scope for P432, so that the assurance could be applied against this number and the migrations can be adequately assessed.

PAB's initial views were that P432 was unlikely to have a material adverse impact on Settlement accuracy and queried whether assurance of the migration better sat with the

© Elexon Limited 2022

MHHS Programme. However, the PAB did indicate a preference for option three but highlighted that it may be difficult to monitor because of the tight timescales between CP1558 being implemented and the short migration window.

MHHS Programme's views were that they would expect the monitoring of the CoMC process for this Modification to be run by Elexon as part of the implementation of P432 (with input from the MHHS Programme).

The Workgroup also discussed whether Elexon could do the reporting for P432 instead of the PAB. Once CP1558 is implemented, it will allow Elexon to track the number of CT Advanced Meters that still need to be migrated. The Workgroup consensus was that some monitoring should be done with option three and the starting point is for Elexon to do that. If there is a significant risk identified during the reporting then the PAB and Elexon can then take remedial action accordingly using existing arrangements. Ultimately, the MHHS Programme will then make sure the CT Advanced meters are moved over to the MHHS TOM which will be picked up as their wider MHHS activities. In conclusion, no new BSC obligations were required to support the assurance of P432. Any assurance required could be done using existing PAF processes and techniques. For example, Elexon could place a Supplier into Error and Failure Resolution[26] for failure to comply with the P432 migration, it could do checks via the BSC Audit[27] or request data from Suppliers (and their Agents), as outlined in BSC Section Z 'Performance Assurance' 5.1.4.

Change of Supplier events

When P272 was implemented, Suppliers were obligated to migrate their Advanced Meters within 45 working days of Change of Supplier (CoS). The Workgroup discussed whether this should also be a requirement for P432. They concluded that there should be no requirements linked to Change of Supplier events for this Modification, as there is a hard deadline under P432.

Supplier Charges and Performance Levels

The Workgroup reached the consensus that Supplier Charges and Performance Levels should not be impacted by this Modification. The Workgroup did note that they were concerned the general movement of the Meters will result in Suppliers moving their 'good Meters', with higher metered volumes to HH, therefore the 97% Performance Level requirement for NHH Metering Systems may become harder to reach, consequently impacting the associated Supplier Charges for the 97% target. However, this issue is not unique to P432, it needs further consideration as part of the wider migration to MHHS.

P432 Costs

The baseline view is that a large impact on costs for BSC Parties is not expected as the processes already exist, and have already been conducted for P272. The bulk of the costs are expected to be from the CoMC activity.

[26] https://www.elexon.co.uk/reference/performance-assurance/performance-assurance-techniques/error-and-failure-resolution/

[27] https://www.elexon.co.uk/reference/performance-assurance/performance-assurance-techniques/bsc-audit-performance-assurance-framework/

© Elexon Limited 2022

Cost Exercises conducted

A Workgroup Member was concerned about the costs increasing for end customers as a result of P432 and conducted two exercises to investigate the possible impacts.

Attachment B provides the full details and analysis, together with the Proposer's response.

Cost exercise one

For this exercise, the Workgroup Member used the portfolio of a major client of theirs, comparing the cost differences between sites that have NHH Meters and HH Meters, across 1045 stores.

The sites were made up of:

Sites	**Projected costs (all based on 62,000kwh)**
40 CT metered supplies currently settled Half Hourly	£9,945.89
52 WC metered supplies currently settled Half Hourly	£9,858.22
953 Non Half Hourly settled supplied in profile classes 03/04	£8,725.73

The average cost across both CT and WC sites settling HH is £9,902.05, meaning that typical SME customers may pay around £1,200 more per year if the supply is settled HH. The Member's view was that Supplier profits were driving these higher costs and they have been overcharging the HH customers.

The Workgroup believed this was important information for Ofgem to consider, but were related to broader market issues, not P432 specific issues.

Cost exercise two

For the second exercise the Workgroup Member wanted to demonstrate how difficult it is for a customer to engage with the Suppliers in this sector of the market and also the effort needed to obtain offers directly from Suppliers.

They created 10 email addresses, using 10 different limited companies. Acting as a customer approaching a Supplier, they emailed the first, most suitable email address found on each Supplier's websites. Each 'company' requested a quote from 10 Suppliers. All Suppliers were asked to send a quote within 8 working days, with the start date of a new 12 month fixed price contract to commence from 1st April 2022 and the quote was to include their own MOA/DC/Data Aggregator charges.

Four quotes were returned in total, two quotes were received before the deadline, and two were received after the deadline. The Member had the view that Suppliers don't want to supply these low volume customers with CT Advanced Meters in the HH market because they are too labour intensive.

© Elexon Limited 2022

The exercise showed that there was an average difference per quote of £2,592 between HH and NHH customers with the range of difference being £988 to £6,425. Whilst the quotes have been carried out on a like for like basis, customers in the NHH market are mostly being charged on a single rate tariff, with typical costs being lower on such a tariff. Customers retain the option to choose single rate when contracting in the NHH market, however suppliers quoting HH customers mostly quote for the more expensive day/night tariff.

The Workgroup believed this was important information for Ofgem to consider, but were related to broader market issues, not P432 specific issues.

Customer Journey

The Ofgem representative welcomed Workgroup and industry views on the impacts P432 would have on consumers and the customer journey.

Following the second exercise conducted by the Workgroup Member the question raised was if P432 is approved will end users find it necessary to increase their engagement with Suppliers, particularly in relation to supply contract arrangements, or will impacted customers share the same experience that they presently do with Supplies being settled on a NHH basis?

Elexon's view was that whilst being NHH Settled the Suppliers know how your consumption will be allocated throughout the day, this is regardless of when you actually use the electricity. If customers are being HH settled then there would be a driver for more engagement between Suppliers and customers regarding Time of Use (ToU) contracts, which would be of benefit to the customer's energy efficiency.

A Workgroup Member was sceptical as to whether this would materialise, as they did not believe it had for the P272 segment.

Targeted Charging Review (TCR)

Elexon highlighted that these costs are mostly commercial rather than a cost to serve the customer. The quotes gathered from the cost exercises are based on the current Network charging regime which are in the process of changing under the TCR.[28] The Proposer held the same view and challenged the relevance of comparing total contract values for supply contracts now, as it does not consider the incoming changes to costs via the network charging reforms which will take effect in April 2023 (and why the Proposer is recommending the migration not to start until April 2023).

The TCR modifications (due to take effect in in April 2022 & 2023) as directed by Ofgem, have been progressed to reduce harmful distortions and were based on informed consumer research findings that determined non-domestic consumers (particularly those who can load manage to avoid charges) are not paying their fair share of the residual network total cost. The TCR is expected to lead to an increase in wholesale market prices during peak periods over the years by fixing the residual part of the network bill that has incrementally increased the domestic share of these costs. This will be remedied by making those costs fixed in both the domestic & non-domestic market and so require DNO's (DUoS) & NGESO (TNUoS) to recover costs based on 4 non-domestic connection

[28] https://www.ofgem.gov.uk/publications/targeted-charging-review-decision-and-impact-assessment

© Elexon Limited 2022

types (LV WC, LV CT, HV CT & EHV CT) and consumption (aggregated tariffs) or capacity (site specific charges).

The move to connection type derived network cost recovery partly enables the industry's arrangements link between network costs (Both DUoS & TNUoS) and Settlement method (NHH or HH) derived to be moved away from the current MC assigned to an MSID. As P432 has been raised as an enabler to facilitate the migration to MHHS TOM which does not facilitate NHH methods of Settlement in the advanced segment, NHH CT must move to HH Settlement.

DUoS impact

The overall DUoS cost could be lower for HH CT customer dependent on how much electricity a site consumes under P432 as HH Settlement means energy consumed can be accurately apportioned to the DUoS Red, Amber, Green (RAG) time periods, which in itself provides an incentive for suppliers to offer time of use tariffs as is incentivised in Ofgem's Full Business Case for MHHS.

TNUoS impact

The existing NHH TNUoS charge is derived from kWh consumption between 16:00-19:00 and charged daily, the existing HH CT+ yearly charge is derived from 3 highest HH peaks in national demand over the winter season on a £ per kWh basis (AKA TRIAD charges). In NHH Meters the charge is currently a volume based charge. Subject to the final decision on CMP343[29], TNUoS residual costs will move from being volumetric derived costs to fixed costs under the same charging band structure so it mirrors that of DUoS effective from April 2023. If P432 CoMC activitieswere to commence any earlier than 1 March 2023, consumers would be caught up in double charges in the annual TNUoS bill overall, due to the differences in NHH & HH TNUoS charges in play today.

Metering costs

Simply being HH settled currently incurs higher costs, Settlement performance targets for Measurement Class E, F and G Meters in the current HH market requires suppliers to meet 99% of actual reads by R1 (approx. 35 days) as opposed to the NHH measure of 97% by RF (approx. 14 months), as well as consumer billing accuracy commitments. This means the expectation of Suppliers to correct faults with Meters (e.g. comms failures) and obtain the HH consumption data has a requirement to be in Settlement and consumer bills (assuming Supplier bills to HH data) a lot quicker than they otherwise would for NHH Settlement, which comes at a cost.

NHH CT Meters are perceived to be a cheaper cost primarily because a gaining Supplier does not know a NHH meter is CT when agreeing a new supply contract (this comes after as part of the registration process) or it may assume that all NHH is WC metered within pricing structures because the vast majority of today's NHH market are WC metered. This is information which is not available to industry in registration data currently.

[29] https://www.ofgem.gov.uk/publications/cmp343-consultation-minded-decision-and-impact-assessment#:~:text=We%20are%20minded-to%20approve,a%20year%2C%20to%20April%202023

© Elexon Limited 2022

However, supporting REC CP R0032 and BSC CP1558 propose to introduce a connection type indicator aligned to the TCR charging bands, which (if approved) also addresses other market issues (e.g. where an appointed Suppliers Agents staff are not qualified to work on CT Metering Systems) and that may enable Suppliers to price in costs associated for CT Metering services, so that the cost to serve the physical meter is better reflected in consumer bills.

It is not in the scope of P432 to enforce any commercial decisions as to what and how Suppliers or Supplier Agents provide offers to the market, or to impose cost restrictions on Supplier Agent services as these are not factors under BSC governance. However, the Proposer did agree this is a consumer cost that is very likely to impact consumers impacted by P432 as the metering service provisions can also better reflect the connection equipment in use. This should be considered on balance with all other CT Metered consumers as the ~50K consumers in scope of P432 are not paying a comparative costs for its metering service versus the 250K who are already HH settled today. All CT Metered customers currently settling HH are subject to these costs and consequently Suppliers generally make allowances for customers to choose their own Agents, thus enabling competition for Agent services to drive those costs.

Assessment Procedure Consultation Responses

Will customers (of electricity supply) be exposed to higher charges if P432 is approved?			
Yes	**No**	**Neutral/No Comment**	**Other**
5	0	3	0

Majority stated they expected customers to be exposed to higher charges as there is a higher cost to serve HH Settlement than NHH. One respondent highlighted that charges are set to increase as part of the MHHS Programme regardless, however P432 will bring forward that cost increase by 18 months.

One respondent stated in some instances charges will increase, however there is existing DUoS ToU benefits that some consumers may be able to benefit from that could either offset or overall benefit the consumer bill changes

Significance of P432 implementation

A Workgroup Member pointed out that assuming the figure is correct, ~50,000 CT Advanced Meters out of 2.4 million NHH commercial supply points that are due to be migrated under MHHS is only 2% of the total Meters that will be migrated. They questioned whether this is a significant enough figure for P432 to be implemented.

The Proposer did not agree with this comparison. They suggested a better comparison would be to compare the number with the existing HH market which stands at approximately 250,000 Meters, and this would increase by 20% as a result of P432.

Retrospective Supplier Agent appointments for CoMC activities

Lessons learned from P272 suggested that the requirement to process Agent appointments prior to carrying out any Meter reconfiguration or Meter exchange needed for a CoMC led to challenges for Parties. Specifically, if the reconfiguration/replacement did not happen on

© Elexon Limited 2022

the intended date, then HH appointments had to be "backed out" before the CoMC could be attempted again.

Working Practice 66 (which was governed under the Master Registration Agreement (MRA)) mitigated against this risk by allowing the appointments to take place retrospectively following a successful reconfiguration/replacement. However, the Working Practice 66 no longer exists, following the transition of the MRA to the REC. Working Practise 66 also didn't mitigate the issue entirely as it only applied to MOA appointments.

Assessment Procedure Consultation Responses

Do you believe that a related change should be raised under the REC to allow retrospective CoMCs?			
Yes	**No**	**Neutral/No Comment**	**Other**
5	1	2	0

Majority of the respondents supported a related change being raised under the REC to allow retrospective CoMCs, with one respondent stating that the "lessons learned" from P272 should be implemented where possible.

100kW Metering Systems

It is understood that the 100kW requirement is an arbitrary number included in the Electricity Act in 1989 to support the gradual opening of the electricity market to competition. As the whole market is now open to competition, the 100kW threshold is becoming irrelevant. The 100kW requirement is not being amended as part of P432 as the industry is moving away from the arbitrary 100kW requirements already and moving towards connection type as a differentiator instead.

© Elexon Limited 2022

7 Workgroup's Conclusions

The **majority** of the Workgroup Members believe that P432 would better facilitate Applicable BSC Objectives (c) and (d) and so should be **approved**. The Workgroup unanimously believes that P432 will be neutral against all other Objectives, (a), (b), (e), (f) and (g).

Does P432 better facilitate the Applicable BSC Objectives?		
Obj	Proposer's Views	Other Workgroup Members' Views[30]
(a)	• Neutral	• Neutral
(b)	• Neutral	• Neutral
(c)	• **Positive**	• **Majority positive** (two detrimental, one neutral)
(d)	• **Positive**	• **Majority Positive** (one detrimental, one neutral)
(e)	• Neutral	• Neutral
(f)	• Neutral	• Neutral
(g)	• Neutral	• Neutral

Objective (c)

Larger consuming electricity sites have the largest impact on Settlement accuracy. CT Metering Systems have the capability to consume more energy than WC Metering Systems, using the actual data available in the already installed Advanced Meter is a minimal additional cost. It enables a smooth migration to the MHHS TOM for Advanced Meters (subject to SCR progression). This Modification will promote effective competition in the generation and supply of electricity because the data will be more accurate and granular which will enable innovation and competition, in line with arguments in P272 and the MHHS business case.

Two Workgroup Members did not believe P432 would better facilitate Objective (c), rather they believed it would be detrimental. One Member had the view that if P432 progresses it will stifle competition rather than promote it because they believe Suppliers are not prepared to offer perceived low consuming customer's contracts for supply (see attachment B for further details). They believe there is a lack of competition in this segment of the market. They provided some case studies, prepared especially for P432, from which they concluded, aside from having to pay more, it's quite feasible that a customer could have options to choose around 20 Suppliers in the NHH market, however only 3 or 4 are prepared to offer contracts once moved to HH.

Another Workgroup Member that was neutral against Objective (c) stated P432 will not make a difference to the competition of the generation and supply of electricity.

[30] Shows the different views expressed by the other Workgroup Members – not all Members necessarily agree with all of these views.

What are the Applicable BSC Objectives?

(a) The efficient discharge by the NETSO of the obligations imposed upon it by the Transmission Licence

(b) The efficient, economic and co-ordinated operation of the National Electricity Transmission System

(c) Promoting effective competition in the generation and supply of electricity and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity

(d) Promoting efficiency in the implementation of the balancing and settlement arrangements

(e) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency [for the Co-operation of Energy Regulators]

(f) Implementing and administrating the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation

(g) Compliance with the Transmission Losses Principle

© Elexon Limited 2022

Objective (d)

The majority of the Workgroup believes P432 will simplify and clarify the BSC arrangements and consequently better facilitates efficiency in the implementation and operation of the BSC. The Modification will align the definitions between the SLC and the BSC. It will also remove references to the 'P272 go live date' as well as P272 monitoring, reporting and Supplier Migration Plan requirements as these references are obsolete, and furthermore it will provide greater Settlement accuracy.

One Workgroup Member was neutral against objective (d) and another Workgroup Member believed P432 will be detrimental to Objective (d) as P432 will force consumers to move to HH Settlement via CoMC early, as opposed to giving them a choice. They also highlighted that there will be an additional burden on Parties to make changes to systems to operate these arrangements which may need to be brought forward for P432.

Another Member pointed out that under MHHS TOM Suppliers will assign greater amount of resources for the activities, however relatively small amount of resources will be spared for the first CoMCs (if P432 is implemented).

Assessment Procedure Consultation Responses

Do you agree with the Workgroup's initial majority view that P432 does better facilitate the Applicable BSC Objectives than the current baseline?			
Yes	**No**	**Neutral/No Comment**	**Other**
4	4	0	0

Half of the respondents did not agree with the Workgroup's view that P432 better facilitates the Applicable BSC Objectives than the current baseline. The main arguments against it were that it would be a more efficient use of resources to move CT Advanced Meters to HH Settlement via CoMC as part of the MHHS migration activities. Those that agreed, did so for the reasons put forward by the Workgroup.

One respondent stated that P432 fails to meet Objective (c) as they believe if P432 gains approval customers will suffer financial detriment and there will also be a time burden created by the extra effort required to secure supply contracts in the Half Hourly market.

Most respondents that agreed P432 better facilitates Objective (c), stated that P432 will promote more accurate and granular data which will enable innovation and drive competition.

Respondents that agreed stated that Objective (d) is better facilitated because it will simplify and clarify the BSC arrangements for HH settled CT metering systems and consequently better facilitates efficiency in the implementation and operation of the BSC.

Self-governance

The Workgroup recommend that this Modification should not be considered suitable for Self-Governance and should be sent to the Authority for approval, as it will likely have a material impact on (Self-governance criteria (b) (i) and (b) (ii)):

- Existing or future electricity consumers because it will require CT Advanced Meters to be settled HH earlier than would otherwise be the case, which may result in different Supplier billing and charging to the customer;

© Elexon Limited 2022

- Competition in the generation, distribution, or supply of electricity or any commercial activities connected with the generation, distribution, or supply of electricity because the data will be more accurate and granular which will enable innovation and competition.

What is the Self-Governance Criteria?

A Modification that, if implemented:
(a) does not involve any amendments whether in whole or in part to the EBGL Article 18 terms and conditions; except to the extent required to correct an error in the EBGL Article 18 terms and conditions or as a result of a factual change, including but not limited to:
(i) correcting minor typographical errors;
(ii) correcting formatting and consistency errors, such as paragraph numbering; or
(iii) updating out of date references to other documents or paragraphs;
(b) is unlikely to have a material effect on:
(i) existing or future electricity consumers; and
(ii) competition in the generation, distribution, or supply of electricity or any commercial activities connected with the generation, distribution, or supply of electricity; and
(iii) the operation of the national electricity transmission system; and
(iv) matters relating to sustainable development, safety or security of supply, or the management of market or network emergencies; and
(v) the Code's governance procedures or modification procedures; and

(b) is unlikely to discriminate between different classes of Parties.

© Elexon Limited 2022

8 Panel's Initial Discussions

The P432 Assessment Report was presented to the Panel at its meeting on 9 June 2022 (327/04)[31].

The LDSO representative believed the impact on LDSOs could be medium to high and not low, as LDSOs will need to engage with customers about the new requirements and this may be more difficult for this type of customer. We updated the section 4 'Impacts & Costs' to reflect this following the Panel meeting.

The Panel pointed out that there is a clear split between the responses of Suppliers and Supplier Agents, majority of the Suppliers didn't see the benefits of this Modification and weren't in favour of its implementation. It was pointed out that the current difficult market situation should be considered. P432 will lead to increased costs to the majority of impacted consumers at a time where they are already facing exceptional cost of living pressure. Further, industry is facing these challenges and it would be wrong of the Panel not to carefully consider the views of the Suppliers who will need to implement P432.

A Panel Member added that if Suppliers state that they can't meet the deadlines for P432 (and believe it more efficient to migrate these Metering Systems under the MHHS Programme) they felt uncomfortable ignoring those voices. Another Member stated that they understood the reasons and logic for bringing P432 forward but that this needs to be weighed up against the feedback from Suppliers. At the same time, industry would not thank the MHHS Programme for delays or increased costs as a result of CT Advanced Meter market [where P432 was not progressed].

The Panel asked whether the cost of non-compliance had been factored in. Elexon stated that no compliance checks or mitigating actions would be taken prior to the migration deadlines, in line with PAB discussions that had been had. Elexon therefore expected the costs to be low for assurance activities, even after the migration deadlines, as the volumes of energy associated with these Metering Systems would pose a low risk to Settlement. However, Elexon and the PAB could take action using the existing PAF techniques, if needed.

It was also pointed out the reasons provided to implement this Modification is to do it prior to the MHHS migration rather than having hardcoded dates. The MHHS representative stated that P432 is a risk mitigation exercise, even if only some of the CT Advanced Meters can be moved by the mandated dates it will still help the migration to MHHS TOM. They added that P432 would help to avoid surprises in the MHHS migration at a time when you do not want surprises and that the MHHS migration start date was still unlikely to change. Further, the scale of the issues with CT Advanced Meters was not known, so starting early and learning lessons would be helpful for the MHHS migration.

It was pointed out that P432 is closely related to the MHHS Programme and it was raised to de-risk to Programme. The earlier CT Advanced Meters are moved to HH Settlement the sooner the Programme will observe what the issues are, therefore doing the work upfront will be beneficial.

The Panel agreed by majority that P432 does not better facilitate Applicable BSC Objectives (c) and (d), for the reasons put forward by the Workgroup, and thus made an initial recommendation that P432 should be rejected. The Panel commented that the

[31] https://www.elexon.co.uk/meeting/bsc-panel-327/

© Elexon Limited 2022

increased costs to serve and the competiveness of this market segment was beyond their control, but P432 could exacerbate this existing issue.

The Panel also unanimously agreed that P432 should be submitted to Ofgem for decision (not Self-Governance), for the reasons provided by the Workgroup, did not impact the EBGL balancing terms and conditions or extend them and that the legal text and subsidiary documents delivered the intent of P432.

Report Phase Consultation Question
Do you agree with the Panel's initial majority recommendation that P432 should be rejected?
The Panel invites you to give your views using the response form in Attachment D

Report Phase Consultation Question
Do you agree with the Panel's initial view that P432 should not be treated as a Self-Governance Modification?
The Panel invites you to give your views using the response form in Attachment D

Report Phase Consultation Question
Do you have any further comments on P432?
The Panel invites you to give your views using the response form in Attachment D

© Elexon Limited 2022

9 Recommendations

The BSC Panel initially recommends to the Authority:

- That P432 should be **rejected**;
- That P432 **does not** impact the EBGL Article 18 terms and conditions held within the BSC;
- That P432 is not a Self-Governance Modification Proposal;
- The draft BSC legal text for P432; and
- The the Code Subsidiary Documents for P432.

© Elexon Limited 2022

Appendix 1: Workgroup Details

Workgroup's Terms of Reference

Specific areas set by the BSC Panel in the P432 Terms of Reference	Conclusion
Should the references to the P272 implementation date in Section S 2.6.1A and 2.6.1B be removed, as the implementation date has now passed?	Workgroup consensus was that references to P272 that are no longer relevant should be removed.
Should the BSC definition of Advanced Meters be extended from SLC 12.18 to other SLCs?	The Workgroup agreed that the definition should be extended. The consensus was that the new definition for Advanced Meters in 'BSC Section X, Annex X-1' should be extended so that it captures all HH Metering Systems with remote communications that are not Smart Meters.
What interactions does the proposal have with existing P272 obligations and CP1549?	Workgroup consensus was that there are no interactions. PC5-8 Meters that are not Advanced won't settle HH, if they are Advanced then they should be settled HH by now.
Consider removing the ability to CoMC back to NHH?	The Workgroup decided to maintain the ability to move back to NHH to maintain domestic and micro-business opt-out rights.
Consideration of exemptions	The Workgroup agreed that domestic and microbusiness premises can opt out of the P432 requirements. The Workgroup also agreed that CT Advanced Meters with no working communications will be exempt from the P432 solution (unless the communications stopped working after the move to HH Settlement).
Assessment of the costs and benefits, where possible and needed.	The baseline view is that we don't perceive a large impact on costs as the processes are already there, and have already been conducted for P272. The main benefit is that P432 is de-risking the migration to MHHS.
Consider impacts on Supplier Charges.	Workgroup reached the consensus that P432 is not likely to materially impact Supplier Charges (in relation to SP04 and SP08), noting that some Suppliers will be more impacted by P432 than others, depending on their Supplier portfolio.

© Elexon Limited 2022

Specific areas set by the BSC Panel in the P432 Terms of Reference	Conclusion
Consideration of the role of Elexon and the PAB in monitoring, reporting and managing the migration and new obligations.	The Workgroup consensus was that no new requirements were needed. Some monitoring should be done and the starting point is for Elexon to do that using the data made available by CP1558. If there is a significant risk identified during the monitoring then the PAB and Elexon can then take remedial action accordingly, using existing mechanisms. Ultimately, the MHHS Programme will then make sure the CT meters are moved over to the MHHS TOM which will be picked under their wider MHHS activities.
What data cleanse obligations are required?	No data cleanse obligations are obligated under P432, but Suppliers will have to undertake data cleanse activities in order to complete the CoMC activities.
What barriers currently exist that prevent Suppliers from moving Whole Current Meters to settle HH?	As WC Meters are out of scope of P432 no change is needed to address these. A Workgroup Member stated there aren't any barriers, as WC could be moved to HH Settlement now using the existing CoMC process. However, the same issues with moving CT Meters to HH will persist for WC, such as higher costs for consumers.
How will P432 impact the BSC Settlement Risks?	Workgroup agreed with the Identified BSC Settlement Risks.
What changes are needed to BSC documents, systems and processes to support P432 and what are the related costs and lead times? When will any required changes to subsidiary documents be developed and consulted on?	The Proposed Modification makes amendments to BSC Sections L, S, X-1, Z and BSCP516. P432 is a document only change that will not require any changes to BSC Central Systems.
Are there any Alternative Modifications?	None formally raised.

© Elexon Limited 2022

Specific areas set by the BSC Panel in the P432 Terms of Reference	Conclusion
Should P432 be progressed as a Self-Governance Modification?	The Workgroup does not believe that this Modification meets the Self-Governance criteria on the basis that P432 will likely have a material effect on the existing or future electricity consumers because it will require CT Advanced Meters are settled HH earlier than would otherwise be the case, which may result in different Supplier billing and charging arrangements for the end customer. It will also impact competition in the generation, distribution, or supply of electricity or any commercial activities connected with the generation, distribution, or supply of electricity because the data will be more accurate and granular which will enable innovation and competition.
Does P432 better facilitate the Applicable BSC Objectives than the current baseline?	The Workgroup agreed by majority that the Proposed Modification does better facilitate Applicable BSC Objectives c) 'Promoting effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity' and d) 'Promoting efficiency in the implementation and administration of the balancing and settlement arrangements'
Does P432 impact the EBGL provisions held within the BSC, and if so, what is the impact on the EBGL Objectives?	The Workgroup believe that the redlining **does not impact** the EBGL Article 18 Terms and Conditions

Assessment Procedure timetable

P432 Assessment Timetable	
Event	Date
Panel submits P432 to Assessment Procedure	9 December 2021
Workgroup Meeting 1	24 January 2022
Workgroup Meeting 2	23 February 2022
Assessment Procedure Consultation	30 March 2022 – 22 April 2022
Workgroup Meeting 3	6 May 2022
Panel considers Workgroup's Assessment Report	9 June 2022

© Elexon Limited 2022

P432 Assessment Timetable	
Event	Date
Report Phase Consultation (10WDs)	15 June 2022 – 1 July 2022
Present Draft Modification Report to Panel	14 July 2022
Issue Final Modification Report to Authority	20 July 2022

© Elexon Limited 2022

Workgroup Membership and attendance

P432 Workgroup Attendance				
Name	Organisation	24 Jan 2022	23 Feb 2022	6 May 2022
Members				
Lawrence Jones	Elexon *(Chair)*	☎	☎	×
Elliott Harper	Elexon *(Chair)*	×	×	☎
Aylin Ocak	Elexon *(Lead Analyst)*	☎	☎	☎
Lee Stone	Npower Commercial and Gas Limited *(Proposer)*	☎	☎	☎
John Greene	SSE	☎	☎	☎
Phil Russell	Consultant	☎	×	☎
Tom Chevalier	Power Data Associates	☎	☎	☎
Nik Wills	Stark	☎	☎	☎
Pete Butcher	SSE	☎	☎	☎
Simon Askew	Business Energy Direct	☎	☎	☎
Ben Trasler	Drax	☎	×	☎
Andy Kelsall	Scottish Power	☎	×	☎
Tony Mason	Siemens	☎	×	☎
George Barnes	Utilita	×	☎	☎
Ian Hall	ImServ	×	☎	☎
Claire Roberts	Scottish Power	×	☎	×
Attendees				
Mark DeSouzaWilson	Elexon *(Design Authority)*	☎	☎	×
Jonny Moore	Elexon *(Design Authority)*	×	×	☎
Eden Ridgeway	Elexon *(Lead Lawyer)*	☎	☎	☎
Vlada Petuchaite	Ofgem	×	☎	×
Danielle Walton	Ofgem	×	×	☎
Helen Clarke	Siemens	×	☎	×
William McKay	Scottish and Southern Electricity Networks	☎	☎	☎
Louis Corsi	SSE	☎	☎	×
Chris Day	Elexon *(SME)*	☎	☎	☎
Oliver Meggitt	Elexon *(SME)*	☎	×	☎
Matthew McKeon	MHHS Programme	×	☎	☎
Kevin Spencer	MHHS Programme	×	☎	×

© Elexon Limited 2022