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# CODE CHANGE AND DEVELOPMENT GROUP TRANSITION CONSULTATION

MARKET-WIDE HALF HOURLY SETTLEMENT

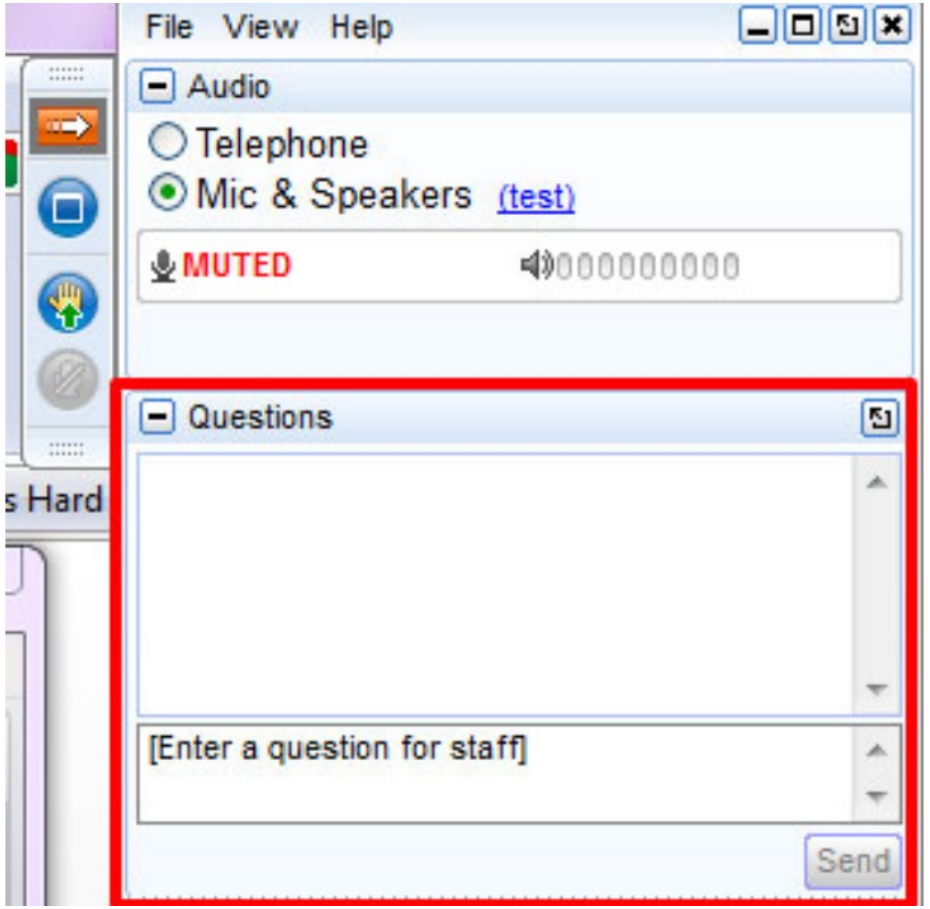
7 July 2021

# Agenda

- Introduction on Settlement Reform by Anna Stacey Head of Settlement Reform, Ofgem
- Introduction to the Transition work by Kevin Spencer, Technical Lead for CCDG, Elexon
- Presentation on the CCDG's Transition consultation by Matthew McKeon, Market Architect, and Kevin Spencer, Elexon
- Questions and Answers

# Asking questions

- If you want to ask a question, please use the questions drop down menu
- We will read out the question and then one of the speakers will answer it



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# OFGEM INTRODUCTION

- Market-wide Half Hourly Settlement (MHHS) Decision and Full Business Case published 20 April 2021
  - Implementation period to October 2025
  - Consultation on the Implementation and Governance arrangements for MHHS closed 25 June 2021

- Target Operating Model: Outlines how settlement arrangements will need to change to deliver MHHS

- Key for energy sector transformation
  - Decarbonise our economy and embrace the opportunities of a digitalised energy system.

- Stakeholder participation is vital in helping us get things right for the market now, but also the market in the future.

# ELEXON INTRODUCTION

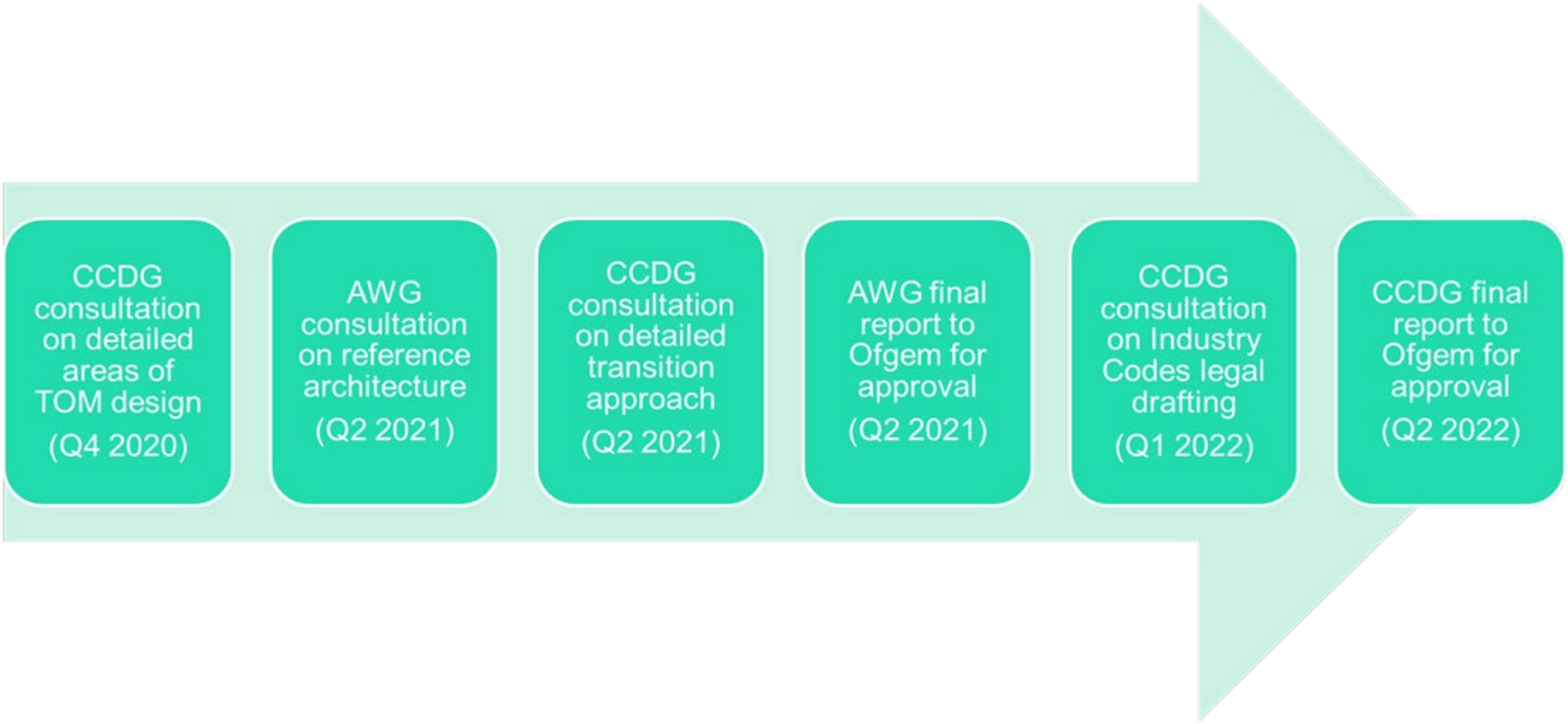
- CCDG and AWG Timeline
- HOW TO RESPOND
- The MHHS Target Operating Model

## CCDG Recommendations:

- SECTION A – RECOMMENDED PRE-MIGRATION ACTIVITES
- SECTION B - RECOMMENDATIONS FOR THE MIGRATION TO MHHS
- SECTION C - TRANSITION APPROACH FOR UNMETERED SUPPLIES
- SECTION D - ASSURANCE FOR MHHS

# CCDG AND AWG TIMELINE

# CCDG and AWG Timeline



# HOW TO RESPOND

# How to Respond

- Email your response to **CCDGsecretary@elexon.co.uk** by **08:00 a.m. on 02 AUG 2021** using the subject line **CCDG Transition Consultation on MHHS**
- **Use the Word response form** where possible to make it easier for the CCDG to identify and summarise views.
- Provide supporting reasons for your answers to help the CCDG understand your response.
- Identify clearly which, if any, aspects of your response are confidential. Elexon will not publish any information marked as confidential, or share this with the CCDG. However, Ofgem will see all responses in full. We encourage you to provide non-confidential responses where possible, to inform the CCDG's discussions.

Email Elexon's MHHS team at CCDGsecretary@elexon.co.uk with any questions.

The CCDG will consider your responses and deliver its final report to Ofgem.

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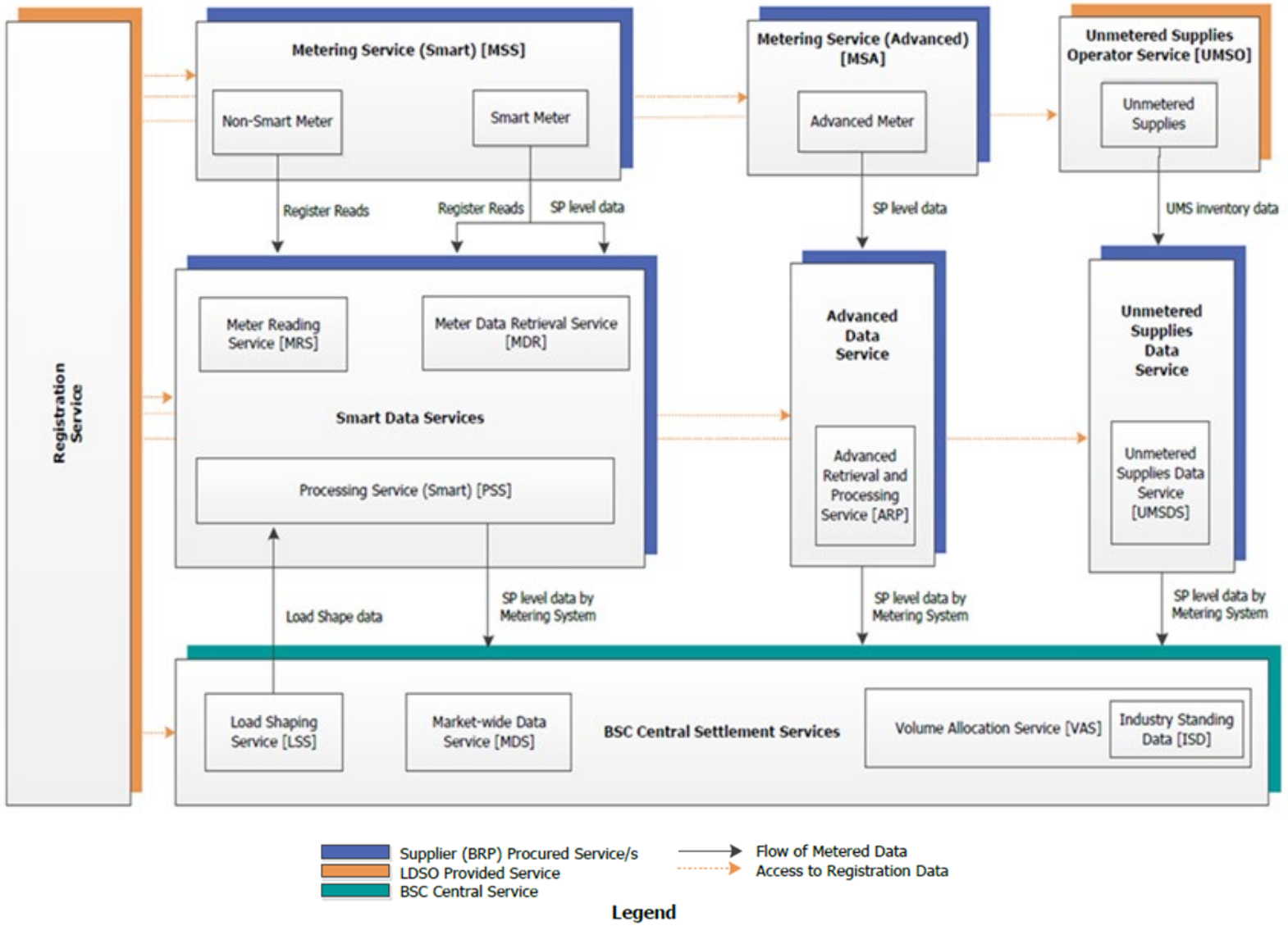
# The MHHS Target Operating Model

Refresher Slide

# The DWG preferred TOM



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# SECTION A – RECOMMENDED PRE-MIGRATION ACTIVITES

# Enabling Registration data and process changes to support the MHHS transition (1)

**Recommendation 1: Early introduction of new data items into existing SMRS systems, along with supporting processes between November 2022 and February 2023.**

The CCDG notes that all the required Registration Service data items needed for MHHS will be part of the Design Baseline published in **April 2022**. However, it recommends that a subset is introduced before migration commences in October 2024.

**Distributor mastered data items and processes**

- **Connection Type and Effective From Date (EFD)**
  Whole Current (W), LV Current Transformer (L), HV Current Transformer (H) or EHV Current Transformer (E)
- **Metered Indicator**
- **Import/Export Indicator** (a.k.a *meteringPointEnergyFlow*)
- **Import/Export Relationship MPAN** (relationship between the respective import MPAN and export MPAN)

Some of the new data items proposed for early introduction can be initially populated by a rule to derive a value from existing data items, and new processes for maintaining them will only be needed to amend data items where the current value is wrong. Other data items have no existing source to derive values from, and so will require the data item master to populate these values over a period of time. An approach to data cleanse has been set out in Recommendation 2.

## Meter Operator Agent / Metering Service mastered data items and processes

The following data items will be mastered by the Meter Operator Agent (MOA) and then by the Metering Service:

- **Smart Device Id (a.k.a. DCC GUID)**
  This is the Id by which the DCC recognises the electricity meter, associated with the Meter Serial number

- **Effective from Settlement Date {MSMTD}**
  Important to determine date (and time) of when MTD updates are applicable from

- **Meter Equipment/Service Location (J1025)**
  This is the existing CHAR(30) data item used to give textual information about meter equipment location

- **Meter Location (J0419)**
  This is the existing CHAR(1) indicator of meter location using defined set of codes defined in the DTC

- **Number of Register Digits (J0478)**
  The number of digits should refer to the 'total advance' of the meter

For smart meters, the Registration Service will be the source of meter technical details in MHHS and therefore the data items above need to be added and populated prior to migration. The CCDG recommends modifying the existing D0312 'Notification of Meter Information to MPAS' flow to enable MOAs to populate and maintain these data items

# Enabling Registration data and process changes to support the MHHS transition (3)

## Supplier mastered data items and processes

- **Domestic Premises Indicator and EFD**
  This is the same indicator set by the Supplier in CSS, added with an EFD populated in SMRS.

- **Consent Granularity and EFD**
  This is either populated by the supplier (for domestic import) or by rule to indicate the ability to access SP data.

The CCDG expects that an interim process could be implemented under the existing arrangements by amending the D0205 'Update Registration Details' process to allow Suppliers to update their customers' consent preferences into existing SMRS systems.

| **Question 1. Do you agree with the CCDG's recommendation for early introduction of the new Registration Data Items and processes using existing interfaces to support migration?** |
|---|
| **Yes/ No or Response:** |
| **Rationale:** |

# Data Cleanse activity for newly introduced Registration Service (SMRS) data items

## Recommendation 2: A period of data cleanse activity of registration data items running from February 2023 to October 2024.

Once the new registration data items, supporting interfaces and processes have been introduced, the CCDG recommends a period of data cleanse activity from **February 2023** to **October 2024**, with a priority on the cleansing data items required for Market Segment allocation by **October 2023**. This will ensure that the most critical data items will be as accurate as possible when migration starts in October 2024.

**Updating of the Market Segment Id in advance of migration following successful data cleanse**

The successful data cleanse of the **Connection Type** and **Meter Type** data items will allow the early mapping of these items to a destination MHHS market segment before migration starts. The CCDG believes it would be beneficial to all parties to have certainty as to which Market Segment each MPAN will be migrating to, which will help with the development and monitoring of migration plans.

A Market Segment Id should be provisionally assigned as soon as possible after **October 2023** once the relevant source data items have been sufficiently cleansed, even if it is only formally set for the enduring target state at the point of migration.

**Question 2. Do you agree with the CCDG's recommendation for a period of data cleanse activity of registration data items running from February 2023 to October 2024?**

# Mandating early HH settlement for CT Meters in the Advanced Segment

## Recommendation 3: A period of mandatory CoMC activity for all NHH settled CT Advanced Meters running from October 2022 to October 2023.

A key enabler of an effective transition for the Advanced segment is to align the BSC definition of an Advanced Meter with that in the Electricity Supply Licence and set explicit HH settlement and remote communications obligations for ~50k CT MPANs.

**The CCDG recommends:**

- For CT Advanced Meters settling NHH, a period of mandatory CoMC activity running from **October 2022** to **October 2023**.
- Where possible, WC Advanced Meters settling NHH are moved to settle HH via CoMC by **October 2024**. This will simplify the migration process but should not be mandated; and
- For all Advanced Meters (CT and WC) settling NHH, the mandatory CoMC activity should be supported by an obligation to ensure that remote communications are fitted and working, for CT Metered MPANs by **October 2023**, and for all Advanced Meters by **October 2024**.

**Question 3. Do you agree with the CCDG's recommendation to mandate the moving of CT Advanced Meters settling NHH to Half Hourly Settlement using the existing Change of Measurement Class (CoMC) process?**

# SECTION B - RECOMMENDATIONS FOR THE MIGRATION TO MHHS

# Introduce the ‘one way gate’ from the start of migration to prevent reverse migration

**Recommendation 4: Introduce a ‘one way gate’ from the start of migration to prevent MPANs in any segment moving back to current arrangements once migrated.**

The CCDG recommends that migrated MPANs are not permitted to revert to legacy arrangements due to a number of issues:

- The cost of designing and building a potentially complex ‘reverse migration’ process that will only be used for ~3 months;
- Accessing appropriate opening and closing reading (HH does not use the same data as NHH); and
- Allowing excess reverse migration would slow down and potentially delay migrations to the TOM.

The CCDG believes it would be optimal to align the ‘one-way gate’ with the start of migration in **October 2024** and therefore remove the need to create a reverse migration process. This can be achieved by bringing forward the last Qualification date for Suppliers and Smart and Non-Smart segment Supplier Agents to **November 2024**, which would ensure that customers changing Supplier would not need to revert to legacy arrangements from the start of migration.

At this point, all newly registered Metering Systems should be under the new arrangements. From **October 2024**, Suppliers should only be able to on-board new customers under the new arrangements. This will avoid Suppliers who are not yet ready from gaining these customers under the old arrangements (adding significant complexity and risk).

**Question 4. Do you agree with the CCDG’s recommendation to introduce the “one way gate” from the start of migration (milestone M11 / M12) to prevent MPANs moving back to current arrangements once migrated?**

# Recommendations for the registration and migration of export MPANs

**Recommendation 5: Where an export MPAN has already been registered for settlement, the export Supplier will be informed when its associated import MPAN has been migrated and will be required to migrate the export MPAN within 10 WD.**

**Where an export MPAN is not currently registered and a Supplier is paying the customer for export energy, then an export MPAN should be registered in the new MHHS arrangements within 30 WD of the import MPAN migrating.**

The CCDG discussed the order in which import/export MPANs need to be migrated. Noting that the export supplier needs to appoint the same MOA/metering service as the import supplier, the CCDG considered if the import MPAN should be migrated first. If the import MPAN is migrated prior to registration of the export MPAN then the export MPAN should be set up under the new arrangements without the need to settle on an interim basis in the current settlement arrangements. The import/export association should be set at the time the export MPAN is registered.

The CCDG expects that Suppliers may wish to register export MPANs in the current arrangements to gain the benefit of accurate settlement and mitigate the migration risks, nothing in these proposals stops the early registration of an export MPAN.

The CCDG acknowledges potential gaps where MPANs may not be captured by either of these recommendations, such as where an export MPAN is not currently registered and the customer is not being paid for the energy. The CCDG is of the view that this is unlikely to be material as there is a commercial incentive for the customer to be paid for their export.

**Question 5. Do you agree with the CCDG's recommendations for the registration and migration of export MPANs?**

# Recommendations for coordinating the migration to MHHS

**Recommendation 6: Migration should be coordinated at a market level, to ensure that MHHS services and systems are not overloaded, but should allow some flexibility for parties to plan their own migration within those constraints.**

- **Migration will need to balance speed and settlement accuracy** because delays to migration will impose a cost on industry. There should be incentives to encourage early migration and potentially also penalties for failing to hit agreed migration targets. Some slots could be reserved for contingency but these should be used sparingly.

- **Migration should follow a "controlled start >> ramp up >> volume migration >> ramp down" sequence.** The controlled start should focus on migrating 'working' MPANs, i.e. where meters have working communications, registration data is up to date and accurate and a recent valid meter reading has been obtained. The timing of this sequence may differ across segments.

- **Migration should not leave a "rump" of broken MPANs to be migrated at the end of the 12 month period.** Migration exceptions should be resolved as they occur and be tracked as part of the migrated volumes that Suppliers have committed to in their migration plans. A decision could be made to implement a 'hard cutover' date when anything not migrated is settled under the new arrangements using default data, but this should not be incentivised.

**Question 6. Do you agree with the CCDG's recommendations for coordinating the migration to MHHS?**

# Recommendations for the runoff of current settlement arrangements

**Recommendation 7: Runoff should identify where reconciliation runs could be truncated to minimise the need to keep legacy systems running where settlement is sufficiently accurate or where making corrections at later runs is not cost effective. The CCDG believes that this date should be February 2026, the R2 run for the last date of migration.**

The CCDG believes that runoff should identify where reconciliation runs could be truncated to minimise the need to keep legacy systems running where settlement is sufficiently accurate or where making corrections at later runs is not cost effective. The CCDG believes this date should be **February 2026**, the R2 run for the last date of migration.

This approach will allow Suppliers a sufficient window to address migration errors and correct these under the old arrangements, but set a point after which data is effectively 'frozen' so that the current processes can be closed down as soon as possible after migration. Running two sets of parallel arrangements with supporting systems adds unwanted industry cost and complexity and should be kept to a minimum.

**What about Trading Disputes during the runoff period?**
One area of CCDG concern is how to deal with Trading Disputes during the runoff period where making changes to migrated MPANs will be more restricted. Solutions initially explored to make corrections outside the normal SVA VAR run process could have impacts on Distributor's ability to recover DUoS, as well as lacking the level of transparency provided by the Disputes Process.

This issue is being considered in more detail under the **Trading Disputes Technique Review** and the CCDG encourages the development of new techniques that could be used to manage disputes during the runoff 'tail'.

**Question 7. Do you agree with the CCDG's recommendations for the runoff of current settlement arrangements?**

# SECTION C - TRANSITION APPROACH FOR UNMETERED SUPPLIES

# Recommendations for Unmetered Supplies

**Tranches of MPANs**

Suppliers will need to identify tranches of UMS customers to move to HH Settlement. Most NHH MPANs have an annual consumption of <1000 kWh. Ideally the Supplier should move the larger NHH UMS customers first considering the fact that NHH UMS customers have up to 4 MPANs. The EACS for all the NHH MPANs need to be combined to get a view of the size of the UMS customer overall.

**What is the approach to consolidating UMS MPANs for MHHS?**

As part of the migration to MHHS there is the need to move all NHH UMS MPANs to HH MPANs. The existing BSCP520 CoMC process requires a new HH MPAN to be created. The ~32k NHH UMS MPANs today will reduce to <20k when settled on a single HH MPAN.

There are two potential approaches to this change:

- Follow the current BSCP520 CoMC process as requiring a new MPAN to be established with a HH measurement class. To enable the CoMC the new HH MPAN is energised and the old NHH MPANs are de-energised on the day of change, and then disconnected; or

- Change the CoMC process so that one of the existing NHH MPANs is changed to HH and the remaining MPANs are de-energised and disconnected.

**Question 8. We would like to know Supplier views on the UMSO preferred approach to using one of the existing NHH MPANs. We would like to understand UMSO views on the system implications of either option.**

## Recommendations for Unmetered Supplies

**Recommendation 8: A period of mandatory CoMC activity for all NHH Unmetered MPANs running from October 2023 to October 2024.**

- CCD recommends to use the existing CoMC process to move the existing MPANs to HH by **October 2024** to de-risk the chances of Suppliers not completing the migration activities for this Market Segment as set out in the Ofgem Timeline.
- The UMSO will lead a data cleanse exercise in conjunction with the Supplier
- There is a question as to whether it is optimal to use an existing NHH MPAN or create a new HH MPAN

**Key dates:**

- **Feb 2022 (or Jun 2022)** new DTN data flows between UMSO & MA for Summary and Control files implemented
- **From Oct 2022 (or earlier) to Oct 2023** – commercial arrangements agreed between Suppliers and MA / UMSDS
- **From Oct 2023 (or earlier) to Sept 2024** – complete NHH to HH CoMC for all UMS MPAN
- **From Oct 2023** all new UMS connections shall be HH from date of connection
- **From Oct 2024 to Sept 2025 (or earlier)** migration of all UMS MPANs to UMSDS under TOM

**Question 9. Do you agree with the CCDG's recommended approach for the Unmetered segment?**

# SECTION D - ASSURANCE FOR MHHS

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# Transitional Assurance and Monitoring

Assurance will be part of the implementation Governance Framework which is being developed. This will need to be set up and carried out with the delivery partners. The CCDG supports the involvement of the Performance Assurance Board (PAB) in helping to shape key areas where relevant to the recommendations set out in this consultation, and will working with the PAB over the next 6 months via a subgroup to understand the expected impacts on the BSC's enduring Performance Assurance Framework once MHHS has been implemented.

CCDG discussions to date expect that Assurance is likely to be split into three phases:

- **Assurance prior to commencement of migration.** This should consider parties readiness plans, qualification requirements and migration plans, monitor the progress of registration data item population and data cleanse set out in Recommendations 1 and 2, and monitor the CoMC activity in Recommendations 3 and 8;

- **Assurance during migration.** The CCDG notes that additional data sources may be required to monitor performance at an industry and party level, to ensure no detrimental impact on data quality. Discussions have noted that the assurance framework developed should not discourage migration to the TOM. There will be is a need to monitor the progress of Recommendation 6 to ensure migration is progressed in a timely and co-ordinated manner and settlement errors are minimised; and

- **Assurance post migration.** The enduring Performance Assurance Framework will require development during the programme. This will offer an opportunity for industry to work collaboratively to derive new, and revise or decommission existing techniques.

The CCDG expects that a review of some existing Assurance techniques will need to be carried out during later stages of the Programme:
- Performance Standards and Liquidated Damages;
- Data Provision and Market Insight; and
- Technical Assurance and Audit.

## Transition Re-Qualification and Participant Testing

The CCDG believes that an incremental approach to Qualification should be considered, and to utilise (where possible) evidence from the System Integration Testing (reference **TE2**) and Security Framework requirements (reference **TE12**) within the Qualification process to mitigate any duplication of effort.

The CCDG note that some existing roles are changing more than others and this can be illustrated by the following:

- **High Impact Participants** (e.g. Supplier, Registration Service, Smart Data Service): New interfaces involved and specific obligations pending under the MHHS Programme.
- **Medium Impact Participants** (e.g. Advanced Data Service, Unmetered Supplies Data Service): New registration interfaces and security implications of new methods of consumption data transfer/sharing.
- **Low Impact Participants** (e.g. Metering Service, UMSO): Largely an evolution of existing market role, but with a new or enhanced interface with the Registration Service.

It is recommended that the Qualification process for new entrants during the transitional period is proportional to the identified settlement risks.

**Question 10. Are there any additional areas that should be considered as part of the next phase of Assurance activities?**

# Wrap Up Question

**Question 11. Is there anything else that you think the CCDG should consider for transition?**

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# THANK YOU

7 July 2021