RETAIL ENERGY CODE

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01	Initial Assessment Report
02	Preliminary Change Report
03	Final Change Report

FINAL CHANGE REPORT

R0032 - NEW REGISTRATION DATA ITEMS AND PROCESSES TO SUPPORT THE TRANSITION TO MARKET-WIDE HALF-HOURLY SETTLEMENT (MHHS)

CHANGE REPORT	FINAL
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RESPONSIBLE COMMITTEE	CHANGE PANEL	CHANGE PATH	SELF GOVERNANCE
PRIORITY STATUS	HIGH	URGENCY	STANDARD

DEADLINE FOR ALTERNATIVE CHANGE PROPOSALS	24/06/2022

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CHANGE OVERVIEW

This change seeks to deliver a recommendation from the Market-Wide Half Hourly Settlement Programme's (MHHSP's) Code Change and Development Group (CCDG), to introduce Registration Service Data Items that will be needed for MHHS, into the existing Supplier Meter Registration Service (SMRS) systems, before MHHS migration commences in October 2024.

	High Impact: Energy Suppliers, Distribution Network Operators, Metering Equipment Manager.
	Medium Impact: N/A
	Low Impact: N/A

RESPONSIBLE COMMITTEE DECISION

On the 15 November the Change Panel voted to **APPROVE** Change Proposal R0032 for implementation on 30 June 2023.

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BACKGROUND

1 SUMMARY

The CCDG is one of three industry working groups set up to support Ofgem's Significant Code Review on Electricity Settlement Reform.

The CCDG issued a consultation in July 2021, which set out their recommendation for the key stages of the MHHS Transition. This covers essential pre-migration and migration activities, with the aim of ensuring that the transition to MHHS happens as efficiently and smoothly as possible. You can access the consultation document by following this link: 'Code Change and Development Group Transition Consultation on Market-wide Half Hourly Settlement'.

Of the recommendations made by the CCDG, this Change Proposal relates to Recommendation 1 which aims to introduce new Registration Data Items and process changes to support the MHHS transition. The Registration Service Data Items will be part of the MHHS Design Baseline. These items are critical to the MHHS rules and processes. It is therefore recommended that this subset of items is introduced into the existing SMRS systems, before MHHS migration commences in October 2024.

These Data Items will be introduced into Market Messages across both the Balancing and Settlement Code (BSC), REC and displayed in the Electricity Enquiry Service (EES). BSC CP1558 was raised to progress the BSC elements and was approved for implementation on 30 June 2023, by the Supplier Volume Allocation Group at its meeting on 5 July 2022.

The proposed solution would:

- Create new Data Items within the REC Data Specification
- Amend the MM00256 Market Message (D0312), to introduce both newly created and to add existing Data Items

2 PROBLEM STATEMENT

There are Registration Service Data Items that are critical to the MHHS rules and processes.

The MHHSP is concerned that starting migration in October 2024 with poor underlying data quality would lead to avoidable time and effort being spent fixing issues during the 12-month migration period.

To facilitate MHHSP data cleanse activity, prior to the transition to Half Hourly Settlement, Registration Service Data Items need to be introduced into the existing SMRS system and also displayed in EES.

3 USER STORIES

REF.	USER STORIES
MARKET PARTICIPANT USER STORIES	
M1	As an impacted Market Participant, I want to ensure good quality underlying data is available to support the transition to HH Settlements to avoid additional time and effort being spent fixing data quality issues during the migration period.
M2	As the MHHSP, I want Registration Service Data Items to be available ahead of the MHHS migration to enable data cleanse activity to be completed to address data quality issues.

PROPOSAL

4 SUMMARY OF ANALYSIS UNDERTAKEN

The MHHSP put forward a solution that would introduce new and update existing Data Items that will be utilised through existing SMRS systems via the Electricity Retail Data Service (ERDS) and will be displayed in EES.

The Data Items will be associated with metering level information held in EES, and as a result the solution is to utilise the MM00256 (D0312) currently used by Metering Equipment Managers (MEMs) to maintain metering level information within EES.

The approach being adopted is that an appointed MEM, who currently has responsibility for the submission/update/maintenance of metering related information held in ESS, should also be responsible for the additional Data Items being added through this change.

The Code Manager validated that the solution proposed by the MHHSP was the most appropriate way to address the Problem Statement. As part of this validation activity, alternative solution options were considered. These are further explained in section 8.

5 PROPOSED SOLUTION

The solution to R0032 includes the addition of new Data Items, amendment to Data Items and a restructuring of Market Message MM00256/D0312 “Notification of Meter Information to MPAS”.

New Data Items

ESME ID (DI#####J####)

This Data Item does not currently exist in the Data Specification and will need to be created.

This is an alphanumeric field, containing additional characters (-), that will be 23 characters in length.

It is proposed that the ESME ID will be mandatory where the Meter Type is prefixed with ‘S1’ and ‘S2’. If the ESME ID is unknown (due to inheritance of the asset on churn), then the ESME ID should be populated as ’00-00-00-00-00-00-00-00’ to avoid issues of poor data quality. Using

a standardised ‘filler’ ESME ID will support monitoring and manual resolution of missing ESME IDs. This rule will only apply to SV00256 (MEM sending MM00256/D0312 to the ERDS).

Where a dummy ’00-00-00-00-00-00-00-00’ value is supplied to ERDS, the response flow will include the ERDS held value to allow the MEM to update its system. A consultation respondent recommended that the MHHSP report on the number of Smart Meters with the dummy ID applied and enforce that MEMs cleanse the data.

Where the ERDA is the sending Party (SV00258 and SV00259) a rule has been added to state that:

‘*Where the ESME ID is unknown the ERDA will provide the dummy ESME ID (“00-00-00-00-00-00-00-00”) to allow the receiving party to resolve’.*

Number of Displayed Register Digits (DI#####/J####)

This Data Item does not currently exist in the Data Specification and will subsequently need to be created.

This Data Item can mirror an existing Data Item in the Data Specification, “Number of Register Digits” DI50228 (J0478).

Existing Data Items

MOP Flow Response Code (DI51544/J2256) (amended)

This Data Item does currently exist in the Data Specification, with proposed amendments as follows:

- Data Item length increased to 2CHAR to accommodate new alpha Enumeration Values
- Enumeration Values added as per table below:

Value	Description
V	Rejected – ESME ID already exists within MRPS and does not match Removed Meter, Associated Import/Export MSID or Related MPAN
W	Rejected - MSN relates to a Smart Meter Type and the ESME ID is NULL
X	Rejected – ESME ID Format is Invalid
Y	Rejected – Number of Displayed Register Digits is NULL and the MSN relates to a Smart Meter Type
Z	Rejected – Non-Smart Meter Type with Number of Displayed Register Digits populated
AA	Rejected – Meter Location is invalid
AB	Rejected – Non-Smart Meter Type with ESME ID populated
AC	Rejected – Number of Displayed Register Digits is incorrect

Meter Location (unchanged)

This Data Item does currently exist in the Data Specification, “Meter Location” DI50194 (J0419), and can be utilised within the MM00256 (D0312).

Structural Amendments to MM00256 (D0312)

For the solution to be implemented amendments will need to be made to the structure of the MM00256 (D0312):

- Group/Collection – 12D – "Meter Info Group"
    - Meter Location, ESME ID and Number of Displayed Register Digits are to be added as Conditional with rules stating that they are mandatory for Meter Types that are prefixed with a "S1" or "S2".
    - ESME ID will have an attached rule to state that "*Where the ESME ID is unknown and cannot be provided, the ESME ID should be populated as "00-00-00-00-00-00-00-00"*".
    - Number of Displayed Register Digits will have an attached rule to state that "*Where the Meter Type is S1, the value should be populated as per the manufacturer specification. Where the Meter Type is S2AD, S2ADE, S2B, S2BD or S2BDE the value should be "5". Where the Meter Type is prefixed with "S2C" the value should be "6".*
- Group/Collection – 13D – "Meters Removed"
    - ESME ID is to be added as Optional.

EES Updates

The solution for this change results in these new Data Items being held in EES, it is proposed that these are held at the meter level and are party to the associated validation and permissions linked to meter data held in EES.

These Data Items should also where possible be added into the existing reporting outputs associated and provided by the EES.

As part of these Data Items being available in EES, an amended version of the Data Access Matrix has been produced.

6 DRAFT LEGAL TEXT

The legal text changes to deliver the proposed solution to R0032 can be found here.

7 SUMMARY OF IMPACT ASSESSMENT ACTIVITY

7.1 REC PARTY IMPACT ASSESSMENTS

A Party Impact Assessment was published by the Code Manager on 13 May 2022, inviting REC Parties to provide their responses by 14 June 2022. Eight responses were received from Parties, three from Metering Equipment Managers, two from Suppliers, one of which was confidential and three from Distribution Network Operators.

Following the REC Party Impact Assessment issued on 13 May 2022, the Code Manager initiated a further REC Party Impact Assessment in response to comments, questions and queries raised by respondents. Seven responses were received from Parties, two from Metering Equipment Managers, two from Suppliers, and three from Distribution Network Operators.

One of these responses was received passed the deadline however the Code Manager has acknowledged the response and taken this it into consideration.

The responses received from both Impact Assessments are contained in the consolidated impact assessment responses documents.

ENERGY SUPPLIERS	• Agree the solution addresses the Problem Statement, however exploration of potential alternative solutions is needed. • In the 13 May Impact Assessment (IA) responses, a number of questions were raised (these were addressed as part of the second IA request). • No specific costs or benefits were identified.
DISTRIBUTION NETWORK OPERATORS	• Agree the solution addresses the Problem Statement • Impact Assessment responses have been provided through the DNOs' service provider for the ERDS. • 3 – 9 Months lead time required for DNOs to test and implement.
METERING EQUIPMENT MANAGERS	• Agree the solution addresses the Problem Statement, however exploration of potential alternative solutions is needed. • Concerns raised around the current D0312 process into EES. • Concerns raised around the long-term plan for the D00312. • Up to 18 Months lead time required due to size of this change.

Concerns were also raised regarding Change Proposals that relate to MHHS, which are outside of the MHHSP. In agreement with the MHHSP this Change Proposal is not recognised as in the scope of the MHHSP. However, we are working closely with Elexon, in their capacity as Code Administrator for BSC CP1558 and also the Implementation Manager for the MHHSP, to ensure any impacts from MHHSP activity, such as the replanning of the MHHSP plan, are fully considered.

Comments were also received on the back population of Data Items and the data population plan. The MHHSP have confirmed that the intent is for Data Items to be populated over time as the information becomes known.

8 DELIVERY AGAINST CHANGE PROPOSAL PLAN

To date all activity has been completed within the planned timescales.

The Change Proposal Plan can be found here.

9 KEY RISKS, ASSUMPTIONS, ISSUES AND DEPENDENCIES

9.1 RISKS AND ISSUES

NO.	RISK	NOTES	MITIGATION
R1	Design assumptions may change based on MHHSP determinations in the future.		Any changes in design assumptions would be progressed via new Change Proposals.
R2	Final MHHSP design has not yet been approved therefore the R0032 Solution and/or implementation date may need to change.		Any changes in design assumptions would be progressed via new Change Proposals.

9.2 ASSUMPTIONS AND DEPENDENCIES

NO.	ASSUMPTION	NOTES	HOW/WHEN TO VALIDATE
A1	Aligning implementation of this Change Proposal to BSC CP1558.		Data Items detailed in BSC CP 1558/1568 are included in Change Proposal R0066.
A2	Retrospective updating of the Data Items will not be mandated as part of this Change Proposal.		Any back population of these Data Items will be managed through the MHHSP.

10 PROPOSED IMPLEMENTATION DATE AND APPROACH

PROPOSED IMPLEMENTATION DATE	30/06/2023

PROPOSED IMPLEMENTATION APPROACH	BIG BANG

The Code Manager acknowledges and recognises the replanning activity currently under review by the MHHSP. RECCo and the Code Manager are engaged in the replan activity and believe there is low risk that the replan activity will impact this Change Proposal.

11 SUMMARY OF CONSULTATION RESPONSES

A consultation was circulated on 05 August 2022 to obtain views on the Preliminary Change report, which can be found here. In total 10 responses were received from Energy Suppliers, DNOs and MEMs. The key themes from these responses have been summarised and set out below.

11.1 SUMMARY OF RESPONSES

11.1.1 COMMENTS ON THE SOLUTION AND LEGAL TEXT

One respondent did not agree with the solution and sought further clarification, which has been reflected in the updated Solution documentation.

Three respondents highlighted concerns around the MHHS replan activity underway and a potential need to wait for MHHS design to conclude prior to making changes.

Six respondents agreed with the proposed solution.

11.1.2 CASE FOR CHANGE AND CODE MANAGER'S RECOMMENDATION

Six respondents agreed with the case for change and Code Manager's Recommendation.

Three respondents requested additional lead time between 12-18 months and one respondent raised concerns that it is too early to consider changes to Market Messages given the delays to completion of the final MHHS baseline design.

Although the Code Manager acknowledges the request for additional lead time from three respondents, there is also recognition that this number of respondents represents a small proportion of the impacted MEMs and a seven-month implementation lead time is generally considered sufficient for a change of this complexity.

11.1.3 IMPLEMENTATION APPROACH AND DATE

Six respondents agreed with the proposed implementation date and approach.

Two respondents believe the proposed implementation date of June 2023 has a dependency on the outcome of MHHSP replanning consultation and believe a decision should not be made on R0032 until the outcome of the replan has been established.

One respondent raised concerns that it is too early to consider changes to Market Messages given the delays to completion of the final MHHS baselined design.

12 SUMMARY OF AMENDMENTS MADE FOLLOWING CONSULTATION

DOCUMENT	SECTION	AMENDMENT	REASON
Final Change Report	Proposed Solution	Within the New Data Items section, we have clarified the new ESME ID format and introduced a new Market Message population rule.	To reflect updates and clarifications on the solution as per consultation responses.

		Updates made to the Structural Amendments (Group/Collection – 12D – Meter Info Group) within the MM00256 (D0312).	
Final Change Report	Business Case Assessment	Added new section 13.2 *Post implementation strategy for data population.*	Inclusion of additional supporting information as provided by the MHHSP.
Final Change Report	Business Case Assessment	Data Quality Intangible Benefits expanded.	Inclusion of additional information to support the Business Case.

13 BUSINESS CASE ASSESSMENT

13.1 COST BENEFIT ANALYSIS

The benefits for this change are linked to a settlement risk, however Ofgem have estimated that the MHHSP will bring "net consumer benefits of between £1.6bn and £4.5bn[1] over the period 2021-2045.

COSTS	TOTAL COSTS
PARTIES	£30,000
SERVICE PROVIDERS	£135,000 – £218,000

The Code Manager considers that change would bring about the following significant intangible benefits.

INTANGIBLE BENEFITS	BENEFITS DESCRIPTION
DATA QUALITY	Enables the industry to prepare for MHHS, with good quality underlying data to support the transition to HH Settlements. It will avoid additional time and effort being spent fixing data quality issues during the migration period. Natural population of these Data Items using MEM mastered data will provide a complete MEM view of the ESME Id for *each physical asset*. This would enable a comparison of

[1] Decision to approve Retail Energy Code modification R0003: Market-Wide Half-Hourly Settlement Implementation and Governance Arrangements | Ofgem

	the MEM view of the enrolled meter with the Smart Meter inventory view.
REDUCING THE NEED FOR EXTENSIVE DATA CLEANSE	This would allow the natural population of data and could reduce the need for big bang activity which could be a larger ask of industry to cleanse data at a later stage.

13.2 POST IMPLEMENTATION STRATEGY FOR DATA POPULATION – AS SET OUT BY THE MHHSP.

The MHHSP intends to use the mechanism introduced by R0032 to drive a data population for the new Data Items between implementation and MHHS go-live. In addition to the data captured for new Smart Meter installs, the MHHSP will engage with MEMs to develop a population strategy for the rest of the installed Smart Meter portfolio.

The MHHSP's working assumption is that roughly a third of the installed Smart Meter population by MMHS milestone M10 will have these Data Items populated for newly installed meters, and a further third can be back populated for existing Smart Meters through targeted site visit activity. This will leave a final third for population as we approach M10. However, if the back-population approach can achieve more than its third, it will reduce the size of the residual population.

The intent of R0032 is that the new Smart Meter Data Items introduced are a genuine MEM view of what they should be. Sourcing data such as ESME Id from elsewhere (e.g. DCC inventory) is suboptimal as this has not been verified by MEMs and would simply replicate any errors there.

14 CASE FOR CHANGE

The Code Manager considers that there is a case for change to implement this Change Proposal, on the basis that:

- The proposed solution resolves the problem statement.
- A positive business case can be made, as set out in section 13 of this report.
- By not delivering this Change Proposal we will risk poor quality data at MHHS go live and could lead to additional time and effort being spent trying to fix issues during the migration period.

The Code Manager's assessment of the case for change is predicated on the Data Item population assumptions set out by the MHHSP in section 13.2 of this report.

15 CODE MANAGER'S RECOMMENDATION

Based on the evidence in section 13 and 14 of this report, the Code Manager considers a positive business case can be made for the implementation of this solution and recommends that the Change Panel;

- **APPROVE** the proposed change solution.
- **APPROVE** the proposed implementation approach.
- **APPROVE** the proposed implementation on 30 June 2023

16 RESPONSIBLE COMMITTEE DECISION

This report was discussed at the REC Change Panel meeting on 15 November 2022.

The REC Change Panel voted to:

- **APPROVE** the proposed change solution;
- **APPROVE** the proposed implementation approach; and
- **APPROVE** the proposed implementation date of 30 June 2023.

17 APPENDIX

CHANGE PROPOSAL	Link
CONSOLIDATED FIRST IMPACT ASSESSMENT RESPONSES	First IA Responses - 13 May
CONSOLIDATED SECOND IMPACT ASSESSMENT RESPONSES	Second IA Responses - 29 June
CONSOLIDATED CONSULTATION COMMENTS AND CODE MANAGER'S RESPONSES	Link
RELATED CHANGE	BSC CP1558 New Registration Data Items to facilitate MHS
SOLUTION DOCUMENTS	Link

18 GLOSSARY

TERM	DEFINITION
Retail Energy Code (REC)	means this Code, including its Schedules and the Technical Specification, maintained pursuant to the electricity supply licences granted under the Electricity Act 1989 and the gas supply licences granted under the Gas Act 1986, as such code is modified from time to time in accordance with its provisions
Balancing and Settlement Code	means the Balancing and Settlement Code, as defined in the Electricity Supply Licences.
Energy Supplier	means a person which is either or both an Electricity Supplier and/or a Gas Supplier.
Smart Energy Code	means the code of that name maintained pursuant to the DCC Licence.
Half Hourly	refers to electricity being traded and/or settled on a half hourly basis.
Distribution Network Operator (DNO)	means a person holding an Electricity Distribution Licence.
Meter Equipment Manager (MEM)	means, as applicable, either: (a) for electricity, the Meter Operator Agent (as defined in the BSC) Appointed by an Electricity Supplier; or (b) for gas, the Meter Asset Manager (as defined in the UNC) Appointed by the Gas Supplier
Electricity Enquiry Service (EES)	means the service described as such in the EES Service Definition.
Data Items	means the most granular level of data defining a specific attribute in respect of a Data Type, the permissible values for which are defined and controlled in the Data Item Catalogue.
Metering Point Administration Service (MPAS)	means the service of that name which each DNO is required to provide under its Electricity Distribution Licence.
Electricity Retail Data Service (ERDS)	means the electricity registration services to be provided under this Code to support the provision of electricity retail data to the CSS and other services.