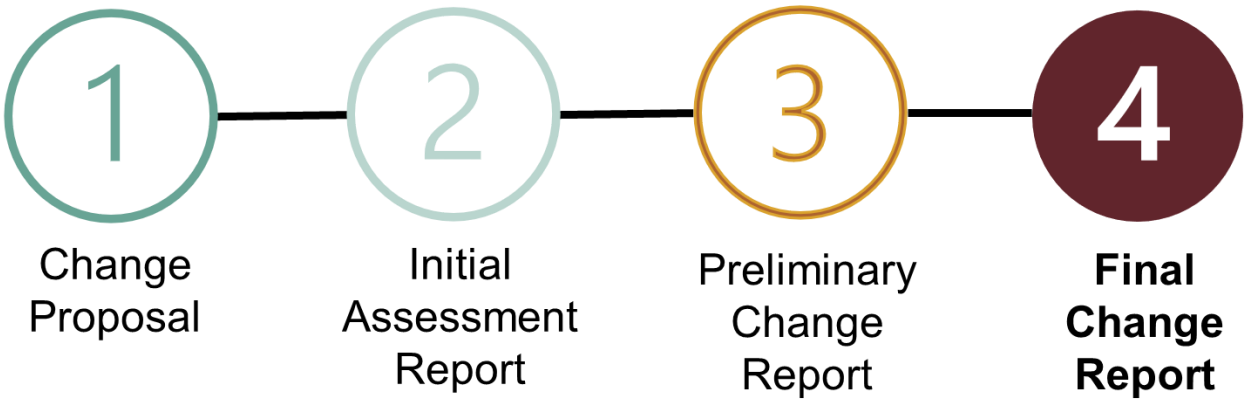
RETAIL ENERGY CODE

This document is classified as **WHITE**.
Information is for public, unrestricted dissemination and publication.

FINAL CHANGE REPORT



PURPOSE:	The Final Change Report sets is the final stage of the Change Proposal, following consultation of the Preliminary Change Report. The Code Manager will set out their final assessment and recommendation, clarifying any changes made from the Preliminary Change Report.
NOTES:	There are three versions of the Final Change Report: one is issued the Responsible Committee for decision; one is published after the vote; and (if Authority Approval is required) one is published after the Authority determination.
NEXT STEPS:	The Final Change Report will be issued to the Responsible Committee who will vote to either approve or reject the Change Proposal, considering the recommendation of the Code Manager.

RETAIL ENERGY CODE

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

FINAL CHANGE REPORT

R0010 – NEW METER TYPES FOR AUXILIARY PROPORTIONAL CONTROLLERS (APCS)

DOCUMENT VERSION	1.0
DATE ISSUED	19/08/2022
DOCUMENT APPROVAL STATUS	PRE-VOTE

RESPONSIBLE COMMITTEE	TECHNICAL EXPERT PANEL

LEAD ANALYST	Jonathan Holland	EMAIL
TECHNICAL LEAD	Rosalind Timperley	EMAIL

CHANGE OVERVIEW

This change seeks to introduce a method for industry parties to identify new SMETS2 variant meter types with Auxiliary Proportional Controllers (APCs).

CODE MANAGER'S RECOMMENDATION

The Code Manager recommends solution option 1, as set out in this Change Proposal R0010, is **APPROVED** for implementation on 30 June 2023.

	High Impact: N/A
	Medium Impact: Electricity Suppliers, Distribution Network Operators, Metering Equipment Managers
	Low Impact: Non-Half Hourly Data Collector,

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BACKGROUND

1 SUMMARY

In November 2020 the Smart Energy Code (SEC) introduced a series of new Electricity Smart Metering Equipment (ESME) variants that parties are obliged to provide to the Data Communications Company (DCC), as part of any meter installation.

Industry parties need to be able to identify where Auxiliary Proportional Controllers (APCs) are installed in a property. This is identified in the DCC Smart Metering Inventory. The Change Proposer has identified that Data Item DI50230 (J0483 Meter Type) could also be used as a potential way to identify these new meter types, however, they are not currently listed in Data Item Enumerations. Therefore, identification and correct configuration of the new meter types is not possible outside of the DCC Smart Metering Inventory.

By following an unagreed mapping of the new variants to the existing meter types could lead to misinterpretation by parties.

2 PROBLEM STATEMENT

Currently there is no way to identify new meter types that incorporate Auxiliary Proportional Controllers (APCs) outside of the DCC Smart Metering Inventory. Failure to correctly identify these could result in an incorrect meter type being assigned to a supply point. Also, inaccurately record where meter types that incorporate Auxiliary Proportional Controllers (APCs) are located at a property, could result in the meter not being configured correctly by the Supplier. This may impact switching, timely and accurately billing, and industry settlements.

Options need to be considered to accurately record what and where meter types that incorporate Auxiliary Proportional Controllers (APCs) are installed at a property.

3 USER STORIES

REF.	USER STORIES
CONSUMER USER STORIES	
C1	As an Energy Consumer, I want to be quoted the correct rates, relevant to my meter type, as part of my contract conversation when switching supplier.
C2	As an Energy Consumer, I want my meter set-up correctly to be able to utilise secondary electricity loads at specific times for specific purposes. (e.g. overnight Electric Vehicle (EV) charging, Heat/Hot Water, Boost, etc.)
C3	As an Energy Consumer, I want to switch to my chosen Supplier without any delays or issues.
MARKET PARTICIPANT USER STORIES	
M1	As an Energy Supplier, I need to identify meter types with Auxiliary Proportional Controllers (APCs) at a property, so that I can offer my customer the correct tariff, configure their meter correctly and invoice them accordingly for the energy used.

M2	As a Meter Equipment Manager (MEM), I need to identify where meter types that incorporate Auxiliary Proportional Controllers (APCs) are present at a property, so that any necessary maintenance/repair work can be carried out appropriately.
M3	As a Distribution Network Operators (DNO), I need to identify where meter types that incorporate Auxiliary Proportional Controllers (APCs) are present at a property, so that any necessary maintenance/repair work can be carried out appropriately.
M4	As a Non-Half Hourly Data Collector (NHHDC), I need to identify where meter types that incorporate Auxiliary Proportional Controllers (APCs) are present at a property, so that when I record data at a property, I am recording it correctly.

PROPOSAL

4 SUMMARY OF ANALYSIS UNDERTAKEN

The proposer of R0010 put forward a solution that would add APC meter types to the Meter Type Data item DI50230 (J0483). Suppliers and MEMs would then populate this field with the appropriate APC meter type when sending flows with this data item. By adding these new meter types to the existing meter product table, this information will become available to Electricity Enquiry Service (EES) Users when using the EES, including via the API. This is **Solution Option 1**.

Three alternative solution options were subsequently identified by the Code Manager to address the issue. Firstly, sourcing the data directly from the DCC Inventory. This could be achieved by adding the APC information to the MM00308 (D0350) Notification of DCC Services at the Metering Point. DCC would then use this flow to send the information to the Meter Point Administration Service (MPAS). MPAS would then pass the information on to the EES to display, including via the API. This is **Solution Option 2**.

A further solution option identified was to update the Data Transfer Network (DTN) Market Message meter type enumerations, such that all SMETS2 meter type enumerations were aligned with those in the DCC Inventory. (Note, only SMETS2 meters have the potential for APC functionality, therefore this option would only amend the SMETS2 meter type enumerations). This option would ensure that there is consistency between the Market Messages and DCC Inventory enumerations. This is **Solution Option 3**.

It was also identified by the Technical Expert Panel (TEP) that doing nothing was also an option. This is **Solution Option 4**.

In consultation with the SEC, the DCC, the TEP and via industry impact assessment, information was gathered to enable these solutions to be analysed.

Appendix 1 sets out the analysis conducted by the Code Manger, documenting any impacts, costs, weighing up the pros and cons to the REC legal text, Party, system, cross code and risks for each solution.

After considering these and noting the party views gathered during the Party impact assessment phase, the Code Manager recommends that Solution Option 1 is taken forward.

RETAIL ENERGY CODE

5 SUMMARY OF IMPACT ASSESSMENT ACTIVITY

5.2 SERVICE PROVIDER IMPACT ASSESSMENTS

The Data Communication Company (DCC), the Electricity Enquiry Service (EES) Provider and the Electricity Retail Data Service (ERDS) Provider, were asked to impact assess each of the solution options. The following table summarises the aggregated costs provided.

SERVICE PROVIDER COSTS - SOLUTION OPTION 1	£31,000 - £32,000*
SERVICE PROVIDER COSTS - SOLUTION OPTION 2	£160,000 - £405,000
SERVICE PROVIDER COSTS - SOLUTION OPTION 3	£31,000 - £32,000
SERVICE PROVIDER COSTS - SOLUTION OPTION 4	n/a

*Estimated costing based on implementing Option 1 at the same time as REC Change Proposal R0032 'New Registration data items and processes to support the transition to Market-wide Half-Hourly Settlement (MHHS)'.

5.3 REC PARTY IMPACT ASSESSMENTS

A Party Impact Assessment was published by the Code Manager on 4 March 2022, inviting REC Parties to provide their responses by 28 March 2022. Three responses were received from Parties, one from a Metering Equipment Manager, one from a Supplier and one from a Distribution Network Operator. The responses received are contained in the consolidated impact assessment responses document.

METERING EQUIPMENT MANAGER	• Agree Option 1 addresses the problem statement with the minimum change approach and is all that is required right now with negligible implementation cost. • Not supportive of Option 2. They see no benefit in implementing Option 2 as they do not believe that it addresses the issue. • Supportive of Option 3 but believes it would not be worth the additional effort. • Do not believe Option 4 'do nothing' is a good option.

DISTRIBUTION NETWORK OPERATOR	• Believe Option 1 addresses the problem statement most effectively, has the least impact on Meter Point Registration Service (MPRS) (ERDS) and is the preferred option. • Not supportive of Option 2 as there is much greater impact in MPRS compared to Option 1. Sees no benefit in implementing Option 2 as they do not believe that it addresses the issue. • Not supportive of Option 3 as the Development and Test costs are greater when compared to Option 1. • Do not believe that Option 4 'do nothing' is a viable solution.

ENERGY SUPPLIER	• Believes Option 1 and 3 appear to be reasonable solution options and addresses the problem statement. • Overall cost for industry with Option 2 could be higher than other proposed solution options. • Option 2 may make it harder to update/correct meter types if marked incorrectly. However, it could result in less double working for Suppliers and remove the need to update the Smart Metering Inventory and the DTN. • Solution 3 could avoid further confusion between understanding the DCC variants and the DTN meter type variants. • Option 4 will lead to further gaps with identifying APCs in the future.

6 DELIVERY AGAINST CHANGE PROPOSAL PLAN

	PLANNED	COMPLETED
SERVICE PROVIDER IMPACT ASSESSMENT ISSUED	21/01/2022	21/01/2022
PARTY IMPACT ASSESSMENT ISSUED	29/04/2022	04/03/2022
PRELIMINARY CHANGE REPORT ISSUED	27/06/2022	17/06/2022
CONSULTATION ISSUED	12/07/2022	01/07/2022

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

7 KEY RISKS, ASSUMPTIONS, ISSUES AND DEPENDENCIES

7.2 RISKS AND ISSUES

No.	RISK	NOTES	HOW/WHEN TO VALIDATE
R1	REC Change Proposal R0032 may not be approved for implementation on 30 June 2022	The Code Manager will monitor the progression of REC Change Proposal R0032 and take any necessary action, this may include seeking formal approval of any cost variations caused by changes to the R0032 implementation	The Code Manager will update the Responsible Committee

No issues have been identified that would affect the progression of the Change Proposal.

7.3 ASSUMPTIONS AND DEPENDENCIES

The Assumption identified in the Change Proposal Plan have been addressed and closed off as part of the Solution Development Activity.

No.	ASSUMPTION	NOTES	HOW/WHEN TO VALIDATE
A1	Aligning implementation of this Change Proposal to REC Change Proposal R0032 following Party recommendation	The Code Manager will assess the possibility of aligning to the implementation date for R0032	Validated through the development of the Change Proposal and will be confirmed in the Final Change Report

No.	DEPENDENCIES	NOTES	HOW/WHEN TO VALIDATE
D1	The quoted Service Provider Implementation costs are dependent on delivering REC Change Proposal R0032 at the same time as R0010		The Final Change Report for REC Change Proposal R0032 is being presented for approval to the Responsible Committee on 20 September 2022

8 PROPOSED SOLUTION

8.2 SOLUTION OPTIONS

The Code Manager recommends Solution Option 1 is taken forward. Under this solution, APC meter types would be added to the Meter Type Data item DI50230 (J0483). Suppliers and MEMs would then populate this field with the appropriate APC meter type when sending flows with this data item. By adding these new meter types to the existing meter product table, this information will become available to EES Users including via the API.

As noted in Appendix 1, four potential solutions were analysed. The primary reasons for selecting Solution Option 1 over the others were as follows:

- The costs associated with Solution Option 2 (sourcing the APC data directly from the DCC Inventory) were significantly higher than the other solution options. Whilst this option would ensure that there is only a single master version of the APC data (i.e., the DCC Inventory data), it was felt that the benefits did not outweigh the costs.
- Solution Option 3 (Replace DTN Market Message enumerations with DCC ESME Variant) would remove all existing SMETS2 meter types from the list of valid enumerations in the meter type Data Item and replace them with values that match the DCC ESME Variant, thereby fully aligning the DTN meter type enumerations with the DCC Inventory. However, removing all existing SMETS2 meter types would require Parties to back populate existing meter types with the updated enumerations, which

would be a significant activity. It was felt that the benefits of this option did not outweigh the costs.

- Solution Option 4 (do nothing) was identified as a viable option as the APC data is available via the DCC Inventory, so doing nothing is a feasible option that has a zero cost and zero impact. This option was not taken forward as it would not meet the problem statement of the Change Proposal, which is to make the data available via the EES.
- A majority of Party Impact Assessment respondents were supportive of Solution Option 1.

8.3 TESTING REQUIREMENTS

For the purpose of Solution Option 1, it is likely testing will be required by Suppliers and their agents to ensure that the additional meter type enumerations can be correctly sent and received.

The EES provider have also recommended that several test files are sent to the test environment to ensure that the new meter type values are processed as expected.

8.4 TRAINING REQUIREMENTS

Suppliers will need to ensure that their staff and agents are correctly using the new APC meter type enumerations.

8.5 RETROSPECTIVE REVIEW

At present, it is believed that no APC meters have yet been installed. If any APCs are installed prior to implementation of this Change Proposal, Suppliers will need to update the meter type enumeration to the relevant APC enumeration once R0010 has been implemented.

9 DRAFT LEGAL TEXT

The legal text changes to deliver the proposed solution to R0010 can be found here.

To maximise alignment with the DCC Inventory, the APC meter type enumerations are based on the ESME variant codes used under DCC. However, all current meter type enumerations that are associated with SMETS2 meters have a value that starts with “S2”, e.g., S2CDE. For enumerations added under R0010, this “S2” is not included in the legal text as the DI50230 data item length is 5 digits long and it would not be possible to match each of the DCC Inventory meter type codes with an S2 added and stay within this field length. As such, only a “2” has been added to the start of each of the new APC enumerations. This should enable users to quickly identify these are SMETS2 meters, whilst staying within the constraints of the data item length.

10 PROPOSED IMPLEMENTATION DATE AND APPROACH

PROPOSED IMPLEMENTATION DATE	30 JUNE 2023

PROPOSED IMPLEMENTATION APPROACH	BIG BANG

We propose this change is implemented in a standard REC release on the 30 June 2023, which is aligned to the proposed implementation date for Change Proposal R0032.

11 CHANGE PATH

CHANGE PATH	SELF-GOVERNANCE

12 RESPONSIBLE COMMITTEE

RESPONSIBLE COMMITTEE	TECHNICAL EXPERT PANEL

13 SUMMARY OF CONSULTATION RESPONSES

A 15 Working Day consultation was circulated on 01 July 2022 to obtain views on the Preliminary Change Report Link. In total seven responses were received, three from Distribution Network Operators, two from Metering Equipment Managers, one from an Energy Supplier and one from an ERDS Provider.

The responses have been consolidated, along with the Code Manager's responses, and can be found on Change Proposal page on the REC Portal here.

The key themes from these responses have been summarised and set out below.

13.2 SUMMARY OF RESPONSES

13.2.1 COMMENTS ON THE SOLUTION

All seven of the responding Parties agreed that the proposed Solution Option 1 addresses the problem statement.

13.2.2 CASE FOR CHANGE AND CODE MANAGER'S RECOMMENDATION

All respondents agreed there is a positive case for change and agreed with the Code Manager's recommendation.

13.2.3 IMPLEMENTATION APPROACH AND DATE

All respondents agreed with the Code Manager's recommended implementation date of 30 June 2023.

14 SUMMARY OF AMENDMENTS MADE FOLLOWING CONSULTATION

No amendments were made following industry consultation.

15 BUSINESS CASE ASSESSMENT

15.2 COSTS

No Party costs were provided as part of the Party Impact Assessment. The aggregated solution costs provided as part of Service Provider Impact Assessment for Solution Option 1 are as follows:

	DESIGN / DEVELOPMENT / IMPLEMENTATION COSTS	ONGOING OPERATIONAL COSTS
SOLUTION OPTION 1	£31,000 - £32,000*	£0

*Based on implementing Option 1 at the same time as REC Change Proposal R0032.

15.3 BENEFITS

Based on the impact assessment responses from Parties the Code Manager does not consider the benefits of R0010 to be quantifiable, however the change would bring about the following intangible benefits.

INTANGIBLE BENEFITS	BENEFITS DESCRIPTION
SALES JOURNEY DATA	Making the APC data available via the EES will ensure that Suppliers can access it during the sales journey, ensuring that customers are quoted an appropriate tariff.
CUSTOMER JOURNEY	Making the APC data available via the EES will reduce the risk of customers with an APC experiencing issues including switching and/or timely and accurately billing.

15.4 COST BENEFIT ANALYSIS SUMMARY

Overall, the Code Manager is of the view that although a full detailed cost benefit analysis cannot be completed, due to the limited number of impact assessment responses, the intangible benefits of the change outweigh the costs for implementation.

15.5 CASE FOR CHANGE

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

- Solution Option 1 resolves the problem statement.
- A positive business case can be made, as set out in section 15 of this report.
- By not delivering this Change Proposal we will risk seeing incorrect data being selected for meter types with APCs. Failure to accurately record where meter types that incorporate Auxiliary Proportional Controllers (APCs) are at a property could result in the meter not being configured correctly by the Supplier. This may impact switching, timely and accurately billing.

16 CODE MANAGER'S RECOMMENDATION

Based on the evidence in sections 13 and 15 of this report, the Code Manager considers a positive business case can be made for implementing and recommends that the Technical Expert Panel:

- **APPROVE** the proposed change Solution Option 1;
- **APPROVE** the proposed implementation approach; and
- **APPROVE** the proposed implementation date of 30 June 2023.

17 APPENDIX

CHANGE PROPOSAL	Link
LEGAL DRAFTING	Link
CONSOLIDATED IMPACT ASSESSMENT RESPONSES	Link
CONSOLIDATED CONSULTATION RESPONSES	Link
APPENDIX 1 – SOLUTION ANALYSIS	Link