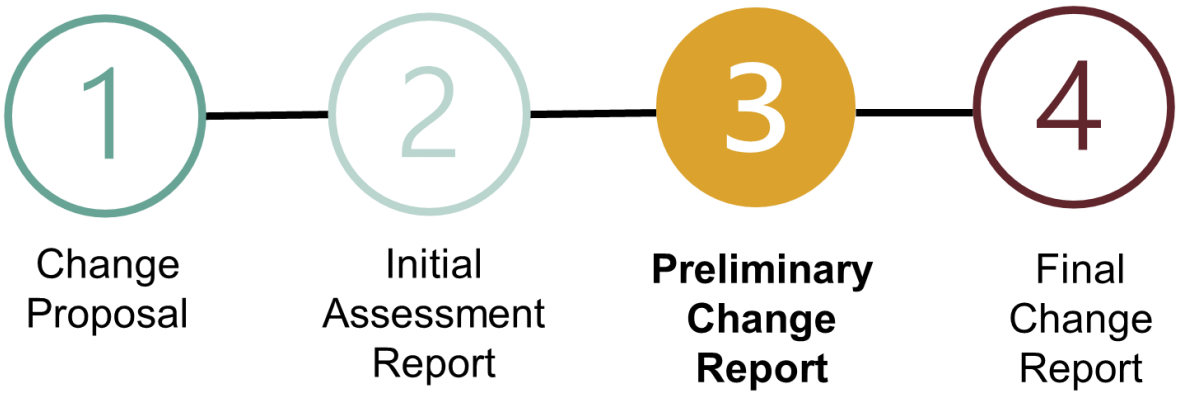
RETAIL ENERGY CODE

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Information is for public, unrestricted dissemination and publication.

PRELIMINARY CHANGE REPORT



PURPOSE:	The Preliminary Change Report is drafted by the Code Manager when a Change Proposal has a fully formed solution that has been sufficiently assessed to allow a decision to be made on whether this should be approved for implementation. The report includes a summary of the Change Proposal, details of the proposed solution and the Code Manager's view on the case for change and recommendation.
NOTES:	The report sets out the minded-to position, prior to formal consultation, and may be changed when publishing the Final Change Report.
NEXT STEPS:	The Preliminary Change Report will be issued for consultation. Following this, the Code Manager will produce a Final Change Report and the Responsible Committee will make a decision on whether to approve the Change Proposal.

RETAIL ENERGY CODE

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

PRELIMINARY CHANGE REPORT

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

DOCUMENT VERSION	1.0
DATE ISSUED	17/06/2022
DOCUMENT APPROVAL STATUS	NOT YET APPROVED BY RESPONSIBLE COMMITTEE

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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RETAIL ENERGY CODE

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. However, 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 Enumeration, 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 this 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, accurately 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 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.)
C4	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 and configure their meter correctly.
M2	As a Meter Equipment Manager (MEM), I need to identify 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 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 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 list of meter types, this information will become available to EES Users in the Electricity Enquiry Service, 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 DTN 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 the REC legal text impacts, Party impacts, system impacts, cross code impacts and costs, pros, cons and risks for each solution.

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

5 SUMMARY OF IMPACT ASSESSMENT ACTIVITY

5.1 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.

5.2 REC PARTY IMPACT ASSESSMENTS

A Party Impact Assessment was published by the Code Manager on 04 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. • Does not believe Option 4 ‘do nothing’ is a good option.

DISTRIBUTION NETWORK OPERATOR	• Believes 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 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. • Does not believe that Option 4 'do nothing' is a viable solution.
ENERGY SUPPLIER	• Believes Option 1 and 3 appear to be a 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

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

7 KEY RISKS, ASSUMPTIONS, ISSUES AND DEPENDENCIES

7.1 RISKS AND ISSUES

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

7.2 ASSUMPTIONS AND DEPENDENCIES

The Assumptions and Dependencies 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

8 PROPOSED SOLUTION

8.1 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 list of meter types, 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 Data Transfer Network (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 stated aim 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.

8.2 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 a number of test files are sent to the test environment to ensure that the new meter type values are processed as expected.

8.3 TRAINING REQUIREMENTS

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

8.4 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 are advised 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 proposed implementation for Change Proposal R0032.

11 CHANGE PATH

CHANGE PATH	SELF-GOVERNANCE

12 RESPONSIBLE COMMITTEE

RESPONSIBLE COMMITTEE	TECHNICAL EXPERT PANEL

13 BUSINESS CASE ASSESSMENT

13.1 COSTS

The aggregated solution costs provided as part of Impact Assessment responses are as follows:

	DESIGN / DEVELOPMENT / IMPLEMENTATION COSTS	ONGOING OPERATIONAL COSTS
SOLUTION OPTION 1	£31,000 - £32,000*	£0
SOLUTION OPTION 2	£160,000 - £405,000	£0
SOLUTION OPTION 3	£31,000 - £32,000	£0
SOLUTION OPTION 4	£0	£0

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

13.2 BENEFITS

The Code Manager does not consider the benefits of R0010 to be quantifiable, but 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 placed on an appropriate tariff.
CUSTOMER JOURNEY	Making the APC data available via the EES will reduce the risk of customers with APC experiencing issues including switching and timely and accurately billing.

13.3 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.

14 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 13 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.

15 CODE MANAGER'S RECOMMENDATION

Based on the evidence in sections 13 and 14 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.

16 CONSULTATION PLAN AND NEXT STEPS

The consultation on this Preliminary Change Report for R0010 will be published on the REC Portal on **01 July 2022**. Consultation will close on **22 July 2022.**

Following consultation, the Code Manager will produce an updated version of this Preliminary Change Report (referred to as the Final Change Report). This will include the outcome of the consultation, setting out a summary of the consultation responses and the Code Manager's recommendation.

The Final Change Report will be issued to Technical Expert Panel to make its determination.

17 APPENDIX

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