

Discussion Request 1218			MCC Implementation for 3-phase and CT DG5 customers		
Status	Issued to Market	Priority	Medium	Status Date	18/10/2021

Date	Version	Reason for Change	Version Status
18/10/2021	1.0	Issued to Market	Final

Part 1 DETAIL OF DISCUSSION REQUEST / MARKET CHANGE REQUEST	
Requesting Organisation(s)	ESB Networks
Request Originator Name	Kevin O'Connor
Date Raised	07/10/2021

Classification of Request	
Change Type	Schema Impacting

Detail of Request	
Reason for Request	

Background

Phase 1 of the National Smart Metering Programme (NSMP) was completed in March 2021 and delivered the installation of 250,000 Smart Electricity Meters. With the Market Schema Release V13 delivered as part of this phase, all system, business, and market changes were completed to allow 30-minute interval data to flow to Suppliers via the Market Systems and for Active Import Interval Data to be used in all market processes including DUoS Billing and Market Settlement Aggregation.

Phase 2 of the Programme was approved by the CRU Position Paper entitled 'Smart Meter Upgrade Phase 2 Scope' (CRU/21/074) in July 2021, and section 2.2 refers to the implementation of 'less common MCC codes' for the V14 Release at the end of Phase 2.

Smart MCCs approved MCC12, MCC13, MCC14, MCC15, MCC16, MCC17, MCC18, MCC19 and MCC20 were identified in the schema. MCC12 and MCC16 were implemented in Phase 1 (Schema V13.00) for the bulk of DG1 and DG2 locations, which make up most of the existing meter inventory.

Phase 2 will deliver the installation of an additional 1 million Smart Electricity Meters (including this meter cohort) by the end of September 2023. With the Market Schema Release V14 at the end of September 2023, it will require new Smart MCCs to be enabled in the meters. To implement a design for the next meter cohort, the following will need to be in place:

- Current Transformer (CT) metering
- 3-phase whole current metering
- Smart MCCs MCC17 & MCC13 to provide a Smart data service for those customer locations that require the following: register kWh/kVArh (MCC17) and interval kW/kVArh plus 24 kWh/kVArh register (MCC13).

This DR provides details of the Retail Market Design changes associated with MCC Implementation for 3 Phase and CT Meter for DG5 Customers.

Proposed Solution

This details the changes required to the Retail Market Design to enable the utilisation of Smart MCCs - MCC13 & MCC17 for 3 phase and CT metering for DG5 customers.

There are 2 MCCs being updated for the V14 release (MCC13 and MCC17), they will be delivered by adding the required detail to the Market Documentation. A placeholder currently exists in the Schema for these MCCs. The Customer Groups availing of New Smart MCC13 and MCC17 are DG5, LV connected Commercial/ Industrial customers. The MCCs can be described as the following:

MCC17

- Active Day Off Peak Import kWh
- Active Night Off Peak Import kWh
- Active Peak Import kWh
- Reactive Wattless Import kVAh

As this is Register based, expected frequency of reading data is to be provided on the bi-monthly billing cycle.

MCC13

- Active HH Import kW
- Reactive HH Import kVAh
- Active Cumulative Import kWh
- Reactive Cumulative Import kVAh

As this is Interval based, expected frequency reading data is be provided daily.

The legacy MCCs MCC04, MCC07 and MCC08 (and other legacy MCCs requiring a Reactive Import data register) will be provided with a Standard Smart Tariff (SST) MCC as part of the proposed ESN deployment led approach.

The proposal is to follow the same general design approach as that of MCC16/MCC12 for Schema V13. The new MCCs will be requestable as part of the following processes: CoS, CoLE, New Connections, Change of Customer Details and Re-energisation.

The scope and content of the proposed changes, involving changes to Market Messages, Data Items, Data Definitions and Data Codes are detailed below.

Scope of Change

Design Documentation	Business Process	DSO Backend System Change	MP Backend System Change	Tibco	Supplier EMMA	Schema	Webforms	Webservice	Extranet Market Website
☒	☒	☒	☒	☒	☒	☒	☒	☒	☒

Market Messages

Message No.	Market Procedure	Changes to Message structure	Changes to MSG data elements	Impact on validations
010	Registration Request	N	Y	Y
013	Customer Details Change	N	Y	Y
014R	Customer Details Rejection	N	N	Y
016	Change Of Legal Entity	N	Y	Y
017	Meter Point Status Change Request	N	Y	Y
030	MeterWorks Request	N	Y	Y
101	New Connection Registration Acceptance	N	Y	N
101P	New Connection Provisional Acceptance	N	Y	N
101R	New Registration Rejection	N	Y	N
102	Change of Supply Registration Acceptance	N	Y	N
102P	Change of Supplier Provisional Acceptance	N	Y	N
102R	Change of Supplier Registration Rejection	N	Y	Y
105	Change of Supplier Confirmation	N	Y	N
114	Change of Customer Details Confirmation	N	Y	N
116	CoLE Confirmation	N	Y	N
116R	CoLE Rejection	N	N	Y
117R	Meter Point Status Request Rejection	N	N	Y
130R	MeterWorks Request Rejection	N	N	Y
301	Meter Point Characteristics	N	Y	N
301N	Proposed Meter Point Characteristics	N	Y	N
320	Validated CoS Reading	N	Y	N
320W	Withdrawn CoS Reading	N	Y	N
331	Interval Meter Technical Details	N	Y	N
332	Non Interval Technical Meter Details	N	Y	N
332W	Withdrawn Read Non Interval Meter Technical Details	N	Y	N
343	SMART Import Interval Meter Daily Readings	N	Y	N
345	SMART HH Cumulative Register Readings	N	Y	N

Data Definitions

No change.

Data Codes

New Meter Configuration Codes on MM010, MM013, MM016, MM017, MM101, MM102, MM105, MM114, MM301, MM320, MM331, MM332, MM101P, MM102P, MM102R, MM301N, MM320W, MM332W
 MCC13: HH2CH_2CR_IPW:
 MCC17: SST IMP + W

New Register Type Codes on MM331, MM343, MM345
 71: Import HH kVAr
 75: Import 24hr kVArh

Market Message Implementation Guides	
Message Guide	Yes/No
Customer and Data Agreements	Yes
Data Processing	Yes
Meter Registration	Yes
Meter Works	Yes

Market Process Diagrams – MPDs		
Market Process Number	Market Procedure	Affected
MPD 4	SoLR - Process Design Document	Yes
MPD 5	New Non Interval Metered Connection	Yes
MPD 11	Changes to Meter Configuration	Yes
MPD 13	Planned Meter Exchange	Yes
MPD 15 .1	Data Processing for Half Hourly Interval Metering	Yes

Guidance Documentation		
Document	Version	Affected
No impact		No Impact

Briefing Document	
Briefing Document	Affected
HH Validation Estimation and Substitution Summary	Yes
Meter Configuration Code Guidance Notes	Yes
Periodic Consumption and Initial EUF Values for Smart Non-Interval Sites	Yes
Supplier Communications Resulting from DUoS Billing and Invoicing	Yes
Periodic Consumption and EUF Parameter Values	Yes

User and Technical Documents			
Reference	Name	Version	Affected
No impact			No Impact

Comments
<p>Additional impacts:</p> <ul style="list-style-type: none"> • Webform - TBC description of the new data codes • RMP Extranet - to accommodate new data codes • Downloadable files (tbc exactly which) - to accommodate new data codes • MPRN Enquiry Webservice - to accommodate new data codes • RMDS website glossary to be updated to include any additional terms <p>All Market Design Documentation for SMART Metering Retail Market Design Workshops affected by this DR can be found on the RMDS Secure Website (Impacted Briefing documents affected by this DR will be uploaded to the RMDS Secure Website later).</p> <p> ROI Market Message Guide - Data Processing v14 Working Draft ROI Market Message Guide - Customer and Data Agreements v14 Working Draft ROI Market Message Guide - Meter Registration v14 Working Draft ROI Market Message Guide - Meter Works v14 Working Draft MPD 04 - SoLR Process v14 Working Draft MPD 05 New Non Interval Metered Connection v14 Working Draft MPD 11 Changes to Meter Configuration V14 Working Draft MPD 13 Planned Meter Exchange v14 Working Draft MPD 15.1 Data Processing for Half Hourly Interval Metering v14 Working Draft </p>

Part 2 - Performance and Data Changes	
Market Messages volume, processing etc.	
Data	
Details of Data changes e.g. cleansing	

Approved by	CRU