Issue Report

Issue 67 'Meter Timeswitch Codes for smart Meters'

Contents

About This Document

This document is the Issue 67 Group's Report to the BSC Panel. ELEXON will table this report at the Panel's meeting on 13 April 2017.

There is one part to this document:

- This is the main document. It provides details of the Issue Group's discussions and proposed solutions to the highlighted issue and contains details of the Workgroup's membership.

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1 Summary

Background

Issue 67 'Meter Timeswitch Codes for smart Meters' was raised on 19 January 2017 by Scottish and Southern Energy PLC.

Scottish and Southern Energy (SSE) have identified that the current set of Meter Timeswitch Codes (MTCs) are not appropriate for smart Meters, considering that a SMETS compliant smart Meter can be operated in credit or prepayment mode and change configuration. SSE raised this as an issue so that there can be an industry agreement on which MTCs should be used for a Smart Metering Equipment Technical Specification (SMETS) compliant meter and recognised by Supplier, Meter Operator (MOP), Licensed Distribution Service Operator (LDSO), Data Collector (DC) and Settlements.

Conclusions

The Issue 67 Workgroup has unanimously determined that no changes to MTC codes to support smart Meters are required. No changes to the Balancing and Settlement Code (BSC) or its Subsidiary Documents were identified that would better facilitate Identification of smart Meter payment mode.

2 Background

What is a Meter Timeswitch Code?

The Meter Timeswitch Code (Data Item J0220) is described in the Data Transfer Catalogue (DTC) as a "unique identifier of an indication of the charging regimes that a meter at a metering point will support and an indication of the switching behaviour of the meter through time for the register of meter consumption". The MTC additionally indicates the type of payment the meter will support (credit or prepayment). By using the MTC and the associated reference tables, Suppliers can identify the metering at a Customer's premises and the details of any associated Time Pattern Regime (TPR), allowing them to formulate and quote appropriate charges. The MTC also indicates if there is a Related Metering Point that the Supplier needs to register simultaneously.

MTCs were first introduced in 1998 and can be found in the top line of every Meter Point Administration Number (MPAN). The Data Item J0220 is owned by administered by MRASCo. However, as it is part of Market Domain Data (MDD), changes to the MTCs are made via the Balancing and Settlement Code Procedure (BSCP) 509 'Changes to Market Domain Data'.

The majority of MTCs must form part of a Valid combination with Standard Settlement Configurations (SSCs) and MTC tables published by the LDSOs.

What is the issue?

The MTCs available were defined before smart Metering was introduced into the industry. As such, smart Meters are yet to be considered with regards to what would be an appropriate MTC. Assumptions appear to have been made across the industry and as a result, it is not clearly identifiable that a site has a Smart Meter installed through looking at the top line of the full MPAN (which includes the MTC, Profile Class and Line Loss Factor). The rules for updating the MTC are out of date and do not apply to SMETS compliant electricity Meters in so much as they cannot account for a smart Meter that can be both in credit or prepayment mode and on any Time Pattern Regime / Tariff.

3 Issue Group's Discussions

Which BSC Parties use MTCs now and how do they use them?

A member described that the original intent of MTCs had been to enable Suppliers to identify the capability of Meters on Sites they were in the process of acquiring. Most Suppliers now use MTC to identify payment type and if the MPAN is related. A member questioned if anyone else uses MTCs. The Workgroup was uncertain but felt that it was unlikely. Distributors may use them for the same reasons as Suppliers but Issue group Members could not see why they would need to. A member noted that use of the MTC by LDSO's is not within the scope of the Issue group as they were never intended for that purpose and any use of them was likely to be limited.

A member questioned if the MTCs were used in any risk assessment or credit vetting of new customers. The members present advised they did not believe this to be the case as Suppliers had more reliable ways of making these decisions.

It was noted by the Issue group that MTCs are only used and held by the Meter Point Administration System (MPAS) and displayed in Electricity Central Online Enquiry Service (ECOES). Third Party price comparison websites are about to start using ECOES as part of their process but members did not believe that they would be using MTCs to identify smart Meters or the payment type of those Meters.

What impact do smart meters have?

The Issue group members were uncertain that the roll out of Smart Metering would be impacted by MTCs at all. It was agreed that smart Meters had different characteristics to Meters currently mapped in the existing MTC tables, however the need to add smart specific MTCs was disputed. A member noted that if the main driver for new MTCs was to identify the payment mode of the smart Meter, this was not required. The member noted that SPAA had already amended the Gas Market Domain data (MDD) so that all gas smart Meters would be identified as credit. Members suggested that it was sensible to apply the same approach to electricity smart meters for the following reasons;

- SMETS2 Meters can be contacted via Data Communications Company (DCC) to identify the payment mode and are all set to credit mode upon change of registration
- This will eventually apply to SMETS1 Meters too but even outside of DCC they are all set to credit mode upon change of registration
- Once Half Hourly (HH) Settlement becomes mandatory MTCs will become obsolete as they are not used for HH Meters
- New ways of operating that smart Meters provide could result in frequent changes to Payment Type, resulting in significant increases in Data Flows requesting change of MTC
- Creation of new MTCs and subsequent mapping to SSCs would cause massive proliferation in MTC tables
- There is no binding principle that obliges Suppliers to use any new MTCs for smart Meters

Other members noted that you can only query DCC if you are a User and only once registration is confirmed. This could cause problems for Suppliers in ensuring that they are offering an appropriate tariff to the customer as they will be unable to determine that the customer's previous mode was prepayment unless the customer advises them. This may lead to delays in recognising the customer preference to pay via prepayment, particularly in collective switching scenarios.

What number ranges could be used to support new MTCs for smart?

The Issue group members discussed the potential to use existing unused ranges of MTCs for smart Meters. A member noted that only an estimated 544 of the current 999 MTCs are actually allocated, the majority of which are between 800 and 899. One member suggested that the MTC 901 or range 996-999 would be ideal as it is currently unused or the range from 400-499, which is described as reserved but is also unused. Other members agreed but restated that using any range of MTCs would still involve proliferation, as they are mapped to the various SSC and Profile Class (PC) combinations. A member suggested that this could be avoided by creating a limited number of un-mapped MTCs similar to MTC 800. Other members thought that this would not work as the Meter Point Registration System (MPRS) would reject any unmapped MTCs. A member suggested that changes could be made so that MTCs on Meters flagged as SMETS could bypass validations built in to MPRS. This was not widely supported by the Issue group, due to concerns over allowing validation to be bypassed.

Are there any other Solutions that could identify Payment Type?

Members of the Issue group noted that Suppliers can already query DCC to establish the payment mode of the Meter. It was accepted that this only becomes available once registration has completed and where communication with the meter is active. However the Issue Group could not articulate why it was critical that a Supplier should know this information earlier or how any other method would provide the data early enough in the sales process to make a difference. ECOES was mentioned as one possible route for Suppliers to access the payment type but again this would rely on MTCs and their accuracy where the mode is being changed on a weekly basis. A new mode indicator could be introduced but this could not be established under the BSC.

Will the Faster Switching Programme have any impact?

A member stated that MTCs are outside the scope of the Faster switching Programme. Another member agreed but noted that the full name was the Faster and more reliable switching programme and therefore anything that would make switching Supplier more reliable should be in scope. Members agreed that this was not within the scope of Issue 67 and that Faster Switching was unlikely to have any impact directly on MTCs.

4 Conclusions

Issue 67 Workgroup recommendations

On balance the Issue 67 Workgroup determined that there would be little benefit in the creation of new MTCs for smart Meters. This was because;

- The potential for proliferation of MTCs is significant and they are already often inaccurate with confusion over which MTCs should be applied
- The transition to HH Settlement for all Meters means that any new MTCs are unlikely to be used for long
- There is already industry consensus that SMETS Meters should be identified as Credit Meters
- The flexibility of SMETS Meters creates potential for Daily or even Hourly updates to MPAS to maintain accurate MTC representation of Payment Type

The Issue 65 Workgroup therefore recommends that no changes are raised at this time and that Suppliers should identify all SMETS meters with a payment type of 'Credit'. The Workgroup notes that this recommendation does not prevent any BSC Party requesting a change to MTCs to support SMETS Meters if they believe one is required.

Appendix 1: Issue Group Membership

Issue Group membership and attendance

Issue 67 Group Attendance		
Name	Organisation	1 Mar 17
Jemma Williams	ELEXON *(Chair)*	✓
Royston Black	ELEXON *(Lead Analyst)*	✓
Kevin Spencer	ELEXON *(Design Authority)*	✓
Emslie Laws	SSE *(Proposer)*	☎
Christopher Rotherham	Opus	✓
Faye Hankin	Bryt Energy	✓
Goncalo Esteves	Our Power	✓
Jon Harrow	EDF	✖
Mark Agnew	British Gas	✓
Julie Jeffreys	Spark Energy	✖
Nick Johansen	Our Power	✖
Tim Newton	Eon	✓
Neil Mace	SSE	✖
Jacqui Barton	Western power	✓
Natalie Rae	Spark Energy	✓
Anthony Allcock	Utiligroup	✓
Ian Jones	Extra Energy	✖

Appendix 2: Glossary & References

Acronyms

Acronyms used in this document are listed in the table below.

Acronyms	
Acronym	Definition
BSC	Balancing and Settlement Code
DC	Data Collector
DCC	Data Communication Company
DTC	Data Transfer Catalogue
ECOES	Electricity Central Online Enquiry Service
HH	Half Hourly
LDSO	Licensed Distribution Service Operator
MDD	Market Domain Data
MOP	Meter Operator
MPAN	Meter Point Administration Number
MPAS	Meter Point Administration Service
MPRS	Meter Point Registration System
MRA	Master Registration Agreement
MTC	Meter Timeswitch Codes
PC	Profile Class
SMETS	Smart Metering Equipment Technical Specification
SPAA	Supply Point Administration Agreement
SSC	Standard Settlement Configurations
SSE	Scottish and Southern Energy Ltd
TPR	Time Pattern Regime

DTC data flows and data items

DTC data flows and data items referenced in this document are listed in the table below.

DTC Data Flows and Data Items	
Number	Name
J0220	Meter Timeswitch Codes

External links

A summary of all hyperlinks used in this document are listed in the table below.

All external documents and URL links listed are correct as of the date of this document.

External Links		
Page(s)	Description	URL
2	Issue 67 page on the ELEXON website	https://www.elexon.co.uk/smg-issue/issue-67/
3	Link to the BSCP509 document on ELEXONs website.	https://www.elexon.co.uk/wp-content/uploads/2014/07/bscp509_v22.0.pdf