CP Assessment Report

CP1443 'Standard Settlement Configurations for smart and advanced Meters'

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About This Document

This document is the Change Proposal (CP) Assessment Report for CP1443 which ELEXON will present to the Supplier Volume Allocation Group (SVG) at its meeting on 4 August 2015. The SVG will consider the proposed solution and the responses received to the CP Consultation before making a decision on whether to approve CP1443.

There are three parts to this document:

- This is the main document. It provides details of the solution, impacts, costs and proposed implementation approach. It also summarises the SVG's initial views on the proposed changes and the views of respondents to the CP Consultation.
- Attachment A contains the proposed redlined changes to deliver the CP1443 solution.
- Attachment B contains the full responses received to the CP Consultation.

Committee

Supplier Volume Allocation Group

Recommendation

Approve

Implementation Date

25 February 2016
(February 2016 Release)

Contact

Claire Kerr

020 7380 4293

claire.kerr@elexon.co.uk

1 Why Change?

What are the current BSC arrangements?

There are currently two ways to switch electrical loads or time-of-use registers:

- either locally, by timeswitching (i.e. via a timeswitch in, or attached to, the Meter); or
- remotely, using a time signal from the Radio Teleswitch Service (RTS).

Suppliers who use the RTS to switch load or registers should assign Metering Systems to an RTS Standard Settlement Configuration (SSC). An RTS SSC includes two additional data items in Market Domain Data (MDD):

- a Teleswitch User ID (TSU); and
- a Teleswitch Group ID (TSG).

The Time Pattern Regime IDs for an RTS SSC have a teleswitch/clock indicator value of 'S' (as opposed to 'C' for clock-switched or timeswitched) and, by convention, have five-digit IDs that are greater than 00999.

In the case of timeswitched Meters, MDD pre-defines both the time-of-use registers and the switching times. In the case of teleswitched Meters, MDD defines the registers, but the Teleswitch Agent notifies the Supplier Volume Allocation Agent (SVAA) of the broadcast switching times for each TSU and TSG on a daily basis.

What is the issue?

With the introduction of smart metering, the Data and Communications Company (DCC) will process requests from Suppliers to remotely switch registers and control load. In addition, it will send commands to be applied by the relevant smart Meter.

When a Meter Operator Agent (MOA) replaces an RTS Meter with a smart Meter, the Supplier can retain the Metering System on its existing RTS SSC. The MOA can then configure the smart Meter's switching calendar so that the load (and/or time-of-use registers) is set to the same time as the RTS group to which the Metering System previously belonged. However, this presents three problems:

- Assigning a non-RTS Metering System to an RTS SSC means that the Metering System will be mislabelled;
- Suppliers, Supplier Agents and Distribution System Operators (DSOs) will lose the distinction between smart Meters and teleswitch Meters and will be unable to track the migration of RTS Metering Systems; and
- When the RTS signals are eventually no longer broadcast for the RTS group in question, any Metering Systems left on the RTS SSC will no longer be settled correctly.

In February 2015, the Profiling and Settlement Review Group (PSRG) completed a project to identify ways to ensure accurate Settlement for dynamically-controlled load (and time-of-use registers) through smart Meters. The PSRG concluded that Half Hourly (HH) Settlement for dynamically-controlled load is the best longer-term option. However, in the shorter term, Suppliers can treat dynamically switched smart Meters as static timeswitched

(with an approximation in Settlement). Static[1] or semi-static[2] switching regimes already account for a significant majority of RTS Metering Systems, so Suppliers can move these Metering Systems to an equivalent timeswitched SSC.

At its 3 February 2015 meeting, the SVG (SVG168/09) agreed with the PSRG's recommendations. It requested that ELEXON raise a CP to mandate that Suppliers move smart Meters with dynamically-controlled load to a new (or existing) non-RTS SSC upon installation of a smart Meter.

[1] Registers/load switched at the same time every day of the year.
[2] Registers/load switched at the same time every day within a defined season or which change only to accommodate British Summer Time and/or Bank Holiday adjustments.

2 Solution

Proposed solution

CP1443 'Standard Settlement Configurations for smart and advanced Meters' was raised by ELEXON on 12 May 2015. It proposes to add a new requirement to section 4.2 of BSCP516 'Allocation of Profile Classes and SSCs for Non Half Hourly SVA Metering Systems Registered in SMRS' so that Suppliers only use SSCs for teleswitch regimes when the Metering System's registers are switched using the RTS. Suppliers should therefore assign all other Metering Systems (including smart Meters which are switched remotely or by a switching calendar) to a timeswitched SSC.

This change will have the benefit of providing an enduring solution beyond the end of the RTS to smart transition. It will also avoid mixing RTS and smart Metering Systems on the same SSC, and therefore facilitates Supplier reporting of RTS migration.

Proposed redlining

Attachment A contains the proposed redlined changes to BSCP516 to deliver CP1443.

3 Impacts and Costs

Central impacts and costs

Central impacts

CP1443 will require updates to BSCP516 to implement the proposed solution. No system changes will be required for this CP.

Central Impacts	
Document Impacts	System Impacts
• BSCP516	• *None*

Central costs

The central implementation costs for CP1443 will be approximately £240 (one man day) for ELEXON to implement the relevant document changes. There are no BSC Agent costs or impacts.

BSC Party & Party Agent impacts and costs

Participant impacts

CP1443 will impact Suppliers and HHMOAs. Five of the seven respondents to the CP Consultation indicated that they will be impacted by CP1443. Four of these five respondents commented that this impact will involve minor changes to current systems and processes. One respondent highlighted that, as a NHHDC and NHHMOA, it will be receiving data flows from Suppliers who have reconfigured Meters using the DCC. It will therefore need to try to ensure that these rules have been followed.

The other respondent commented that the proposed changes will have a significant impact on its customers as they will need to be moved from dynamic to either static or semi-static switching regimes going forward. Further details on the potential impacts on customers can be found in Section 6.

Participant Impacts	
Participant	Impact
Suppliers	Changes will be required to implement the solution.
HHMOAs	

Participant costs

Four of the seven respondents indicated that there will be costs associated with CP1443. Two of these respondents commented that the estimated costs will be minimal. However, one respondent highlighted that although it is not possible to quantify the costs at this stage, it estimated that given the customer numbers involved it may be significant.

The other respondent who indicated that it will incur costs in implementing CP1443 noted that changes to its Supplier systems will need to be made so they referenced the new SSCs. It did not provide an approximate estimate of the cost involved for this. However, the same respondent noted that there will be implementation efficiencies gained if all new SSCs are created at once rather than separate SSCs being created at different times. They suggested that ELEXON should co-ordinate this activity. We advised that Suppliers are best placed to know what SSCs they will need to support the tariffs that they are offering to their customers with smart Meters. Suppliers are also best placed to have discussions with Licensed Distribution System Operators (LDSOs) on the valid SSC/Profile Class (PC)/Line Loss Factor Class (LLFC)/Meter Timeswitch Class (MTC) combinations that will need to be set up. There is a risk that ELEXON will miss SSCs or will create unneeded SSCs. On balance, ELEXON does not recommend taking on the role of co-ordinating any new SSCs that need to be raised as detailed further in Section 6.

The remaining three respondents did not identify any costs associated with CP1443.

4 Implementation Approach

Recommended Implementation Date

CP1443 is proposed for implementation on **25 February 2016** as part of the February 2016 BSC Systems Release. It requires changes to participants' systems and processes, so we believe the February 2016 Release is more appropriate than the November 2015 Release.

Respondents to the CP Consultation unanimously agreed with the proposed Implementation Date, commenting that implementation prior to the go-live of the DCC and smart roll-out is essential.

5 Initial Committee Views

The SVG considered CP1443 at its meeting on 2 June 2015 (SVG172/05).

An SVG Member commented that participants may need assistance with the practicalities of setting up any new SSCs required. ELEXON advised that this CP will introduce the new requirement in BSCP516, but that any new SSCs will be introduced through the normal MDD change process as and when they are needed. The availability of auxiliary load control switches and variant Smart Metering Equipment Technical Specification (SMETS) Meters will dictate when Suppliers need new SSCs; this will be independent of the CP Implementation Date.

Another SVG Member queried whether Suppliers will dynamically switch Meters via the DCC. ELEXON advised that CP1443 primarily targets former RTS Metering Systems on static or semi-static switching regimes. Once Suppliers have installed smart Meters they will switch registers (and load) via the DCC using the smart Meter's switching calendar. It noted that time-switched SSCs can also be used for dynamically-switched Metering Systems where switching occurs within a narrowly-defined switching window. For broadly-defined switching windows, HH Settlement is likely to be a better solution.

The SVG did not request any additional questions to be added to this CP Consultation.

6 Industry Views

This section summarises the responses received to the CP Consultation. You can find the full responses in Attachment B.

Summary of CP1443 CP Consultation Responses				
Question	Yes	No	Neutral/ No Comment	Other
Do you agree with the CP1443 proposed solution?	6	1	0	0
Do you agree that the draft redlining delivers the intent of CP1443?	7	0	0	0
Will CP1443 impact your organisation?	5	2	0	0
Will your organisation incur any costs in implementing CP1443?	4	3	0	0
Do you agree with the proposed implementation approach for CP1443?	7	0	0	0
Do you have any further comments on CP1443?	1	0	0	0

Comments on the CP

Six of the seven respondents to the CP Consultation agreed with the proposed changes for CP1443. Respondents commented that the change will support the industry in reaching a position where the population of RTS SSCs will reach zero ahead of RTS signals being switched off. It will also support improvements to industry data quality where RTS Meters are already mislabelled or misinterpreted. One respondent also noted that the change will mitigate the risk that Settlement data is incorrect following a move to smart metering.

Does the change remove customer choice?

One respondent disagreed with the proposed changes for CP1443 commenting that as a significant player in using dynamically-switched regimes, it believes it will have a significant impact on its customers. It noted that the change effectively removes customer choice by forcing customers to move to either static or semi-static switching regimes, and removes the flexibility that a dynamically-switched regime can provide.

ELEXON advised that customers can remain on a dynamic tariff, but Suppliers will need to assign the relevant Metering Systems to a static or semi-static SSC. This will create inaccuracies in Settlement, especially where dynamic switching occurred in a wide operating window.

An alternative approach will be for Suppliers to register these Metering Systems as domestic HH. The PSRG reviewed alternative options for HH Settlement for dynamically switched Metering Systems. One option was to co-ordinate the switching times for customers with smart Meters and those for customers with RTS Meters. This will also allow LDSOs to continue to use the RTS Groups for load management purposes during the roll-out. However, for this to be achievable, the Group Code Sponsor will need to publish switch times (day ahead or as far in advance as is feasible), such that Suppliers can switch

load at the same times using co-ordinated instructions to the smart Meter through the DCC. This option is only practical for as long as the RTS arrangements remain in place and the Energy Networks Association (ENA) continues to notify switch times to the SVAA. The PSRG also explored the option of individual Suppliers sending dynamic switching times to the SVAA, which would require new, Supplier-specific SSCs. There was only minority support for each of these two options, after taking into account the likely cost of the changes relative to the low number of customers on dynamically switched tariffs.

Should there be a standardised outcome when migrating RTS SSCs to equivalent time-switched SSCs?

A respondent commented that in order to fully support the solution being proposed under CP1443, ELEXON should dictate the tolerance as to how close an approximate SSC needs to be in order for it to be used. They noted that it is important that the industry has a standardised outcome when migrating RTS SSCs to equivalent time-switched SSCs and will welcome ELEXON taking the lead on this issue. We advised that we could produce a mapping of RTS switch times and non-RTS static and semi-static SSCs and identify any gaps. However, this analysis would require significant ELEXON effort and the data to do this is available to Suppliers through the D0018 'Daily Profile Data Report' data flow (switch times) and MDD (SSCs). Overall, ELEXON does not recommend taking on the role of co-ordinating new SSCs that need to be raised, for the reasons identified in Section 3.

Interactions with DCP204

One respondent commented that it believed that the proposed changes conflict with the ongoing work under the Distribution Connection Use of System Agreement (DCUSA) DCP204 'Smart Metering Related Amendments to Schedule 8'. ELEXON highlighted that discussions on DCUSA DCP204 are still ongoing. At this stage it is not confirmed whether it will conflict with CP1443. However, if DCP204 is approved and requires BSC changes, DCUSA parties may wish to reconsider some of the options that were originally looked at by the PSRG. ELEXON would work with DCUSA to ensure efficient cross-code co-ordination.

Comments on the proposed redlining

Respondents to the CP Consultation unanimously agreed that the proposed redlined changes to BSCP516 deliver the intention of CP1443.

7 Recommendations

We invite you to:

- **APPROVE** the proposed changes to BSCP516 for CP1443;
- **AGREE** that ELEXON should not co-ordinate the mapping and/or migration of RTS SSCs to timeswitch SSCs; and
- **APPROVE** CP1443 for implementation on 25 February 2016 as part of the February 2016 Release.

Appendix 1: Glossary & References

Acronyms

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

Acronyms	
Acronym	Definition
BSC	Balancing and Settlement Code *(Industry Code)*
BSCP	Balancing and Settlement Code Procedure *(Code Subsidiary Document)*
CP	Change Proposal
CPC	Change Proposal Circular
DCC	Data and Communications Company
DSO	Distribution System Operator
ENA	Energy Networks Association
HH	Half Hourly
LDSO	Licensed Distribution System Operator
LLFC	Line Loss Factor Class
MDD	Market Domain Data
MOA	Meter Operator Agent *(Party Agent)*
MTC	Meter Timeswitch Class
PARMS	Performance Assurance Reporting and Monitoring System
PC	Profile Class
PSRG	Profiling and Settlement Review Group *(Panel sub-Committee)*
RTS	Radio Teleswitch Service
SMETS	Smart Metering Equipment Technical Specification
SSC	Standard Settlement Configuration
SVAA	Supplier Volume Allocation Agent *(BSC Agent)*
SVG	Supplier Volume Allocation Group *(Panel Committee)*
TSG	Teleswitch Group ID
TSU	Teleswitch User ID

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
D0018	Daily Profile Data Report

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
3	SVG168 page on the ELEXON website	https://www.elexon.co.uk/meeting/svg-168/
4	CP1443 page on the ELEXON website	https://www.elexon.co.uk/change-proposal/cp1443/
4	BSCPs page on the ELEXON website	https://www.elexon.co.uk/bsc-related-documents/related-documents/bscps/
6	SVG172 page on the ELEXON website	https://www.elexon.co.uk/meeting/svg-172/
8	Half Hourly Settlement for dynamically switched Meters: PSRG impact assessment page on the ELEXON website	https://www.elexon.co.uk/consultation/half-hourly-settlement-dynamically-switched-meters-psrg-impact-assessment-november-2014/
8	DCUSA DCP204 page on the DCUSA website	http://www.dcusa.co.uk/SitePages/Activities/Change-Proposal-Register.aspx#InplviewHasheedde852-0231-4b85-87ff-0f14d79826f5=Paged%3DTRUE-p_DCP%3D232-p_ID%3D255-PageFirstRow%3D11