

CP Assessment Report

CP1466 'Removing SMETS compliant Meters from the scope of BSCP601'

ELEXON

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Committee

Supplier Volume Allocation Group / Imbalance Settlement Group

Recommendation

Approve

Implementation Date

23 February 2017
(February 2017 Release)



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About This Document

This document is the Change Proposal (CP) Assessment Report for CP1466 which ELEXON presented to the Supplier Volume Allocation Group (SVG) and the Imbalance Settlement Group (ISG) at their meetings on 1 November 2016 and 22 November 2016 respectively. The SVG and ISG considered the proposed solution and the responses received to the CP Consultation before making a decision on whether to approve CP1466.

There are four parts to this document:

- This is BSC Panel 261/09A and the main document. It provides details of the solution, impacts, costs, and proposed implementation approach. It also summarises the SVG's and ISG's initial and final views on the proposed changes and the views of respondents to the CP Consultation.
- BSC Panel 261/09B contains the CP1466 proposal form.
- BSC Panel 261/09C contains the proposed redlined changes to deliver the CP1466 solution.
- BSC Panel 261/09D contains the full responses received to the CP Consultation.

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1 Why Change?

Settlement Reform Advisory Group recommendations

The [Settlement Reform Advisory Group](#) (SRAG) identified a number of changes required to facilitate elective Half Hourly (HH) Settlement for Data Communications Company (DCC) enrolled smart Meters.

The SRAG presented its report to the BSC Panel in February 2016 ([BSC Panel 249/13A](#)). The Panel noted that changes would be raised to progress the SRAG recommendations, including this CP.

What is the issue?

The SRAG recommended changes to [BSC Procedure \(BSCP\) 601 'Metering Protocol Approval and Compliance Testing'](#) to remove the requirement of protocol approval and Code of Practice (CoP) compliance testing, for Smart Metering Equipment Technical Specifications (SMETS) compliant Metering Equipment. There are currently two versions of SMETS; [SMETS1](#) and [SMETS2](#). Suppliers are responsible for compliance testing with the SMETS.

Protocol approval

The method of communication with SMETS2 Meters will be via the DCC infrastructure, and will be common for all Meters serviced by the DCC Communication Service Providers (Arqiva and Telefonica). As such, the requirement for protocol approval for communication with SMETS2 Meters is redundant.

Currently the HH data from SMETS1 (foundation) Meters will be collected by Smart Metering System Operators (SMSO) on behalf of Suppliers, although it is anticipated that the DCC will enrol SMETS1 Meters in the future. The SRAG recommended that protocol approval requirements should also be removed for communication with SMETS1 Meters, to limit the barriers to elective HH Settlement for these Meters. However, ELEXON notes that the removal of protocol approval for SMETS1 compliant Meters could pose a risk to Settlement, as it is possible that not all SMETS1 Meters will be enrolled in the DCC.

It was clarified at the SVG meeting on 1 November 2016 ([SVG189/05](#)), that protocol approval requirements apply to Half Hourly Data Collectors (HHDCs). However, in the case of SMETS1 Meters, HHDCs will not be reading the Meters. The SMSOs that will retrieve HH readings are already retrieving Non Half Hourly (NHH) readings from SMETS1 Meters.

Compliance testing

At present, smart Metering Equipment must be compliance tested twice: under the SMETS and under BSCP601. CoP compliance testing under BSCP601 is only required for Meters settled on a HH basis. Therefore, CoP compliance testing for SMETS Metering Equipment could be a potential barrier to moving Meters to HH Settlement.



What was the SRAG?

The SRAG was a group established by the BSC Panel to help develop solutions to address small scale Settlement issues related to the balancing arrangements. At BSC Panel 249 the SRAG was stood down.



SMETS1 vs SMETS2

SMETS1 is the minimum standard a foundation smart Meter must meet to be eligible for adoption by the DCC. SMETS2 Meters are enrolled in the DCC from installation. The main difference between SMETS1 and SMETS2 Meters is the security model they use and their communication method.



Protocol approval

Applicants who wish to collect data from an Outstation must demonstrate that their Installation can communicate appropriately using the device's protocol. A protocol, in the context of an Outstation, is the set of rules governing the communication of data between the Outstation and any other device connected to it. It is usually designed by the manufacturer of the Outstation.

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Proposed solution

[CP1466 'Removing SMETS compliant Meters from the scope of BSCP601'](#) was raised by ELEXON on 18 May 2016.

This CP proposes to include a statement in BSCP601 Section 1.1 'Scope and Purpose of the Procedure' to specify that the BSCP does not apply to SMETS compliant Metering Equipment. Excluding SMETS compliant Metering Equipment from the scope of BSCP601 removes protocol approval for communication with SMETS compliant Metering Equipment and the requirement of CoP compliance testing such Metering Equipment. For the avoidance of doubt, this only removes the compliance testing requirements; it does not remove the requirement for this Metering Equipment to be CoP compliant. By removing SMETS compliant Metering Equipment from the scope of BSCP601, any Metering Equipment that complies with a future version of SMETS will also be exempt from protocol approval and CoP compliance testing.¹

The statement referring to SMETS in BSCP601 Section 3.4.22 'Level 1 Passwords' introduced by [CP1450 'Security Requirements for CoP10 Metering Equipment'](#) will also be removed as part of CP1466. If the requirement for compliance testing is removed, the exception in relation to the SMETS security arrangements is no longer relevant.

Proposer's rationale

Suppliers are having Meters built that comply with the SMETS and Ofgem is seeking to remove barriers to elective HH Settlement, as set out in Ofgem's ['Elective half-hourly Settlement: conclusions paper'](#).

Protocol approval will not be required for SMETS compliant Meters because the method of communication with the Meter will be common for all SMETS Meters serviced by the DCC Communication Service Providers. Ofgem is also seeking to remove barriers to elective HH Settlement for SMETS1 Meters. It is therefore proposed that protocol approval for communication with SMETS1 Meters is also removed.

Removing CoP compliance testing for Metering Equipment compliant with the SMETS, removes the need for multiple compliance tests and a potential barrier to elective HH Settlement. Compliance with the SMETS mitigates the risk of removing CoP compliance testing.

Proposed redlining

BSC Panel 261/09C contains the proposed changes to BSCP601 to deliver CP1466.

The redlining included a Housekeeping Change. The intention of the Housekeeping Change was to reflect the changes to the CoPs introduced by [P266 'Improving the allocation of Reactive Power flows between Import and Export Metering Systems'](#). However, ELEXON has since identified that the Housekeeping Change may be material and an improved solution has been proposed. Therefore, we propose to withdraw the Housekeeping Change from the CP1466 redlining.

¹ The requirements for future versions of SMETS may require reconsideration of testing requirements for Settlement purposes e.g. if a SMETS version with Meter variants using Current Transformer was introduced.

3 Impacts and Costs

Central impacts and costs

CP1466 will require a change to BSCP601. No central system changes are required and there will be no impact on BSC Agents.

Central Impacts	
Document Impacts	System Impacts
<ul style="list-style-type: none">BSCP601	<i>None</i>

The central implementation costs for CP1466 will be approximately £240 (one ELEXON man day) to implement the document changes.

BSC Party & Party Agent impacts and costs

Participant impacts

The changes to BSCP601 proposed by CP1466 are document changes only. There is no anticipated impact on Suppliers. However there may be a small impact on HHDCs.

Suppliers are already required to ensure that smart Metering Equipment meets the SMETS requirements. For this reason, the change does not impose any additional costs or impacts on Suppliers.

HHDCs will need to communicate with the Supplier to determine if a Meter is SMETS compliant. If a Meter is not SMETS compliant, the HHDC will need to carry out protocol approval.

In response to the CP Consultation, four of the eight respondents indicated that they would not be impacted by CP1466. The other four respondents indicated that CP1466 would impact them. Of these respondents:

- one respondent noted only small procedural impacts;
- one respondent noted that if a Meter was not SMETS compliant, protocol approval is required; and
- two respondents noted that they would need to introduce a process to identify if a Meter is SMETS compliant.

BSC Party & Party Agent Impacts	
BSC Party/Party Agent	Impact
HHDC	Additional communication required to determine if a Meter is SMETS compliant

Participant costs

Four of the eight respondents to the CP Consultation confirmed that they would incur no costs in implementing CP1466. The other four respondents noted that they would only incur small costs.

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4 Implementation Approach

Recommended Implementation Date

CP1466 is proposed for implementation on **23 February 2017** as part of the February 2017 BSC Systems Release.

This Implementation Date is proposed to meet the expectations of Ofgem on the progression of changes relating to elective HH Settlement, as set out in Ofgem's ['Elective half-hourly Settlement: conclusions paper'](#).

As part of the CP Consultation, seven of the eight respondents agreed with the Implementation Date. One respondent noted that it did not support the implementation approach, on the basis of disagreement with the proposed solution – see Section 6 for further explanation.

SVG's initial views

The SVG considered CP1466 at its meeting on 2 August 2016 ([SVG186/05](#)).

An SVG Member queried why ELEXON is trying to facilitate elective HH Settlement prior to the DCC Go-live and how CP1466 will help facilitate elective HH Settlement. ELEXON indicated that there are a number of SMETS1 Meters already in place and removing the requirement of CoP compliance testing removes a barrier to elective HH Settlement. ELEXON noted that protocol approval is not required for SMETS Meters that will be adopted by the DCC.

ISG's initial views

The ISG considered CP1466 at its meeting on 23 August 2016 ([ISG184/04](#)).

An ISG Member had concerns about whether this change should apply to SMETS1 Meters. The ISG Member noted that while the CP is appropriate for a DCC enrolled Meters, the change should not apply to SMETS1 Meters until they are adopted by the DCC.

An ISG Member queried how protocol approval and compliance testing was a barrier to elective HH Settlement, and how CP1466 would remove this barrier. ELEXON noted that at present smart Meters must be CoP compliance tested under BSCP601, in addition to the SMETS. ELEXON noted that the Meters in scope of this change will be compliant with either SMETS1 or SMETS2, so compliance testing with the BSC is a duplication in effort of SMETS compliance testing. Therefore, this change will avoid the need for multiple compliance tests.

ELEXON noted that there is a risk that SMETS1 Meters may not be adopted by the DCC, therefore the removal of protocol approval for these Meters could be seen as a risk.

6 Industry Views

This section summarises the responses received to the CP Consultation. You can find the full responses in BSC Panel 261/09D.

Summary of CP1466 CP Consultation Responses				
Question	Yes	No	Neutral/ No Comment	Other
Do you agree with the CP1466 proposed solution?	7	1	0	0
Do you agree that the draft redlining delivers the intent of CP1466?	8	0	0	0
Will CP1466 impact your organisation?	4	4	0	0
Will your organisation incur any costs in implementing CP1466?	4	4	0	0
Do you agree with the proposed implementation approach for CP1466?	7	1	0	0
Do you have any further comments on CP1466?	1	7	0	0

Comments on the CP

Proposed solution

Seven of the eight respondents to the CP Consultation agreed with the proposed solution. Two of these respondents noted that this would remove the duplication of compliance testing. One respondent noted that the solution supported the proposer's justification.

One respondent did not agree with the proposed solution. They agreed with removing compliance testing for SMETS1 and SMETS2 Meters and removing protocol approval for SMETS2 Meters. However, the respondent did not agree with removing protocol approval for SMETS1 Meters. They noted that the rationale for removing protocol approval for SMETS Meters is that the Meters have a common communication method, i.e. via the DCC. However, the respondent believed that this rationale was not true for removing protocol approval for SMETS1 Meters. They noted that the DCC will eventually service SMETS1 Meters, but believed this would not be imminent. The respondent considered that while data retrieval systems other than the DCC service SMETS1 Meters, the scope of protocol approval should include SMETS1 Meters. The respondent believed that removing protocol approval for SMETS1 Meters introduces a risk that Data Retrievers do not ensure the integrity of their systems to remotely connect to SMETS Meters.

The respondent suggested removing compliance testing for SMETS1 and SMETS2 Meters, and only removing protocol approval for SMETS2 Meters. They believed that Data Retrievers should still be subject to protocol approval for any system they use to remotely connect to Meters (not through the DCC) – whether SMETS or not. The respondent noted that once the DCC has integrated SMETS1 Meters, a further change could be raised to remove protocol approval for SMETS1 Meters.

ELEXON has considered the risks of removing SMETS1 Meters from protocol approval. ELXON concludes that removing protocol approval for SMETS1 Meters poses a small risk.

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This is because the market share for elective HH Metering Systems with SMETS1 Meters is likely to be relatively low. Therefore, the materiality of any risk is limited.

It was clarified at the SVG meeting on 1 November 2016 ([SVG189/05](#)), that protocol approval requirements apply to Half Hourly Data Collectors (HHDCs). However, in the case of SMETS1 Meters, HHDCs will not be reading the Meters. The SMSOs that will retrieve HH readings are already retrieving Non Half Hourly (NHH) readings from SMETS1 Meters.

Identifying a SMETS Meter

One respondent questioned how HH Agents will ascertain if a Metering Equipment type is SMETS compliant. ELEXON notes that the Smart Energy Code (SEC) has a [Certified Products List](#) on its website which should fulfil this purpose.

Comments of the redlining

All eight respondents agreed with the proposed redlining. Therefore, the only change to the redlining after consultation is the removal of the original Housekeeping Change, as identified above.

SVG's final views

The SVG considered CP1466 at its meeting on 1 November 2016 ([SVG189/05](#)).

Removing Protocol Approval for SMETS1 Meters

ELEXON noted that the removal of protocol approval for SMETS1 compliant Meters could pose a low risk to Settlement. SVG challenged this assumption on the basis that there are 1.5 to 2 million SMETS1 Meters installed so the risk could be high. ELEXON noted that protocol approval is only applicable to HH Metering Systems and so removing protocol approval would only affect smart Meters that are settled HH. An SVG Member estimated that the number of smart Meters settled HH is around 50,000 Metering Systems.

Although the SVG initially asked for further clarity on potential numbers, it recognised that HHDCs will not be retrieving HH readings directly from SMETS1 Meters. Instead, Suppliers will obtain the readings using the services of an SMSO. The five SMSOs currently providing this service are all retrieving NHH readings from 1.5 to 2 million SMETS1 Meters using the relevant protocols. Retrieving HH data from these Meters should pose minimal additional risk because SMETS1 Meters are not subject to the same complexities as the HH Metering Equipment for the larger sites, i.e. the sites for which protocol approval was designed.

An SVG member also raised concerns about interoperability for SMETS1 Meters, but the SVG acknowledged that these were existing issues, relating to communication methods and commercial challenges, and that protocol approval would not help to resolve them.

The SVG agreed with this explanation, and noted that protocol approval is not necessary for SMETS Meters. An SVG Member noted that the issue and rationale for the change was not clearly presented in the CP1466 Assessment Report. ELEXON noted it will improve the clarity of the paper for the Final CP Report.

Removing SMETS2 Meters from the scope of BSCP601

An SVG Member raised a concern about the timing of the CP given delays to the DCC Go-Live date and asked whether the CP implementation date should be deferred or linked to the DCC Go-Live. ELEXON noted that Ofgem's aspiration is to remove barriers to elective HH Settlement in the shorter term. By the proposed implementation of June 2017, any prospective Metering Systems for elective HH Settlement are likely to have SMETS1 rather than SMETS2 Meters. So the shorter-term driver for change is removing protocol approval for SMETS1 Meters. As such implementation of CP1466 is not contingent on the installation of SMETS2 Meters. These are likely to be installed from early 2017.

Final decision

The SVG has:

- **AGREED** the amendments to the proposed redlining for BSC Procedure (BSCP) 601 for CP1466 following the CP Consultation;
- **APPROVED** the proposed changes to BSCP601 for CP1466;

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- **APPROVED** CP1466 for implementation on 23 February 2017 as part of the February 2017 BSC Systems Release; and
- **NOTED** that CP1466 will also be presented to the ISG on 22 November 2016 for decision.

ISG's final views

The ISG considered CP1466 at its meeting on 22 November 2016 ([ISG187/01](#)).

The ISG agreed with removing CoP compliance testing for SMETS1 and SMETS2 Meters. The ISG also agreed with removing protocol approval for SMETS2 Meters, as they will be serviced by the DCC. However, most ISG Members had concerns with removing protocol approval for SMETS1 Meters, and there being no alternative processes for SMETS1 Meters that provide assurance.

An ISG Member questioned how it is known that protocol approval is not needed for SMETS1 Meters. ELEXON responded that CP1469 will introduce new processes for SMETS Meters. CP1469 creates processes for the Supplier to collect Meter readings, and pass these to the HHDC. Therefore, protocol approval for a HHDC with a SMETS Meter is not necessary, as it will not be collecting data from the Meter. ELEXON noted that the SVG approved CP1469 on 4 October 2016 and will be implemented on 29 June 2017.

An ISG Member questioned if there is assurance a party can read a SMETS1 Meter, if the requirement of protocol approval is removed. ELEXON noted that a Supplier may not always be able to read a SMETS1 Meter via its SMSO, and if this occurs they have a few options. Either they replace the Meter with one they can remotely read, move the customer to NHH Settlement using the new CoMC processes defined in CP1474, or fix any communications issues that prevent the Meter from being read.

An ISG Member believed that protocol approval removes a barrier to HH Settlement. The ISG Member added that protocol approved provides assurance to the Supplier that when acquiring or wanting to service a SMETS1 Meter, there is communications. ELEXON responded that the Meter manufacturer's protocol could be used to extract HH data from the Meter but there is no obligation on the Meter manufacturer to apply for protocol approval. ELEXON noted that Suppliers are currently collecting HH data from SMETS Meters without having an approved protocol. An ISG Member noted that Suppliers would be deterred if they had to buy expensive software to read a SMETS1 Meter remotely. The ISG Member also noted that it would reflect poorly on the Supplier if they couldn't read SMETS1 Meters remotely. The ISG Member believed that by removing the requirement of protocol approval, it removes the option for another Supplier to read the Meter, creating a barrier to elective HH Settlement. ELEXON questioned if this situation differed to a SMETS1 Meter being read NHH, where the Supplier will still be using whatever protocol they have to read the Meter remotely. ELEXON noted that on change of Supplier, the new Supplier would still require a protocol to read the Meter, regardless of whether it's taking NHH or HH reads.

An ISG Member noted that if CP1466 removes the requirement for protocol approval by the HHDC, it is not clear if there is an equivalent process being added, e.g. that might apply to another BSC Party or Party Agent. ELEXON clarified that protocol approval for SMETS Meters is being removed because, in accordance with CP1469, HHDCs won't collect reads from SMETS Meters. Therefore, protocol approval for SMETS Meters is being removed as a redundant process as HHDCs will not be reading SMETS1 Meters. SMETS Meters will be read by either an SMSO or the DCC, which are not BSC Parties or Party

Agents. Therefore, as it stands, the BSC cannot put obligations for protocol approval on non-BSC parties. The ISG Member noted that if this is the case, the Supplier should require protocol approval. ELEXON responded that it would be down to the Supplier to manage its data retrievers.

Six ISG Members raised objections to CP1466 for the following reasons:

- removing protocol approval for SMETS1 Meters poses a potential risk to Settlement;
- the rationale states that protocol approval is not needed for SMETS2 Meters as the method of communication is common for all SMETS2 Meters serviced by the DCC. However, the rationale was not clear regarding SMETS1 Meters that are not serviced by the DCC; and
- There are too many reservations to not refer this to the Panel.

One ISG Member abstained from the vote.

Final decision

The ISG has:

- **REJECTED** the amendments to the proposed redlining for BSC Procedure (BSCP) 601 for CP1466 following the CP Consultation;
- **REJECTED** the proposed changes to BSCP601 for CP1466;
- **REJECTED** CP1466 for implementation on 23 February 2017 as part of the February 2017 BSC Systems Release; and
- **NOTED** that CP1466 was approved by the SVG on 1 November 2016.

Appendix 1: Glossary & References

Acronyms

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

Acronyms	
Acronym	Definition
BSC	Balancing and Settlement Code (<i>Industry Code</i>)
BSCP	BSC Procedure (<i>Code Subsidiary Document</i>)
CoP	Code of Practice (<i>Code Subsidiary Document</i>)
CP	Change Proposal
DCC	Data Communications Company (<i>Licensed industry body</i>)
HH	Half Hourly
HHDC	Half Hourly Data Collector (<i>Supplier Agent</i>)
ISG	Imbalance Settlement Group (<i>Panel Committee</i>)
NHH	Non Half Hourly
SEC	Smart Energy Code (<i>Industry Code</i>)
SMETS	Smart Metering Equipment Technical Specifications (<i>Industry document</i>)
SMSO	Smart Meter System Operator
SRAG	Settlement Reform Advisory Group (<i>Industry expert group</i>)
SVG	Supplier Volume Allocation Group (<i>Panel Committee</i>)

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	SRAG page on the ELEXON website	https://www.elexon.co.uk/group/settlement-advisory-reform-group-srag/
2	SRAG Report to the Panel	https://www.elexon.co.uk/wp-content/uploads/2015/10/27_249_13A_SRA_G_Report_PUBLIC2.pdf
2	BSCP page on the ELEXON website	https://www.elexon.co.uk/bsc-related-documents/related-documents/bscps/
2	SMETS1 policy on the government website	https://www.gov.uk/government/publications/smart-metering-implementation-programme-technical-specifications
2	SMETS2 consultation on the government website	https://www.gov.uk/government/consultations/smart-metering-equipment-technical-specifications-second-version

External Links		
Page(s)	Description	URL
2, 8, 9	SVG189 page on the ELEXON website	https://www.elexon.co.uk/meeting/svg-189/?from_url=https://www.elexon.co.uk/events-calendar-item/svg-189/
3	CP1466 page on the ELEXON website	https://www.elexon.co.uk/change-proposal/cp1466/
3	CP1450 page on the ELEXON website	https://www.elexon.co.uk/change-proposal/cp1450/
3, 5	Elective HH Settlement conclusions paper on the Ofgem website	https://www.ofgem.gov.uk/publications-and-updates/elective-half-hourly-settlement-conclusions-paper
3	P266 page on the ELEXON website	https://www.elexon.co.uk/mod-proposal/p266-improving-the-allocation-of-reactive-power-flows-between-import-and-export-metering-systems/
6	SVG186 page on the ELEXON website	https://www.elexon.co.uk/meeting/svg-186/?from_url=https://www.elexon.co.uk/events-calendar-item/svg-186/
6	ISG184 page on the ELEXON website	https://www.elexon.co.uk/meeting/isg-184/?from_url=https://www.elexon.co.uk/events-calendar-item/isg-184/
8	Certified Products List page on the SEC website	https://www.smartenergycodecompany.co.uk/sec/certified-products-list
10	ISG187 page on the ELEXON website	https://www.elexon.co.uk/meeting/isg-187/?from_url=https://www.elexon.co.uk/events-calendar-item/isg-187/