# CP Assessment Report

# CP1448 'Changes to allowable software for Method 3 Proving Tests'

## Contents



## About This Document

This document is the Change Proposal (CP) Assessment Report for CP1448 which ELEXON will present to the Supplier Volume Allocation Group (SVG) at its meeting on 5 January 2016. The SVG will consider the proposed solution and the responses received to the CP Consultation before making a decision on whether to approve CP1448.

There are four 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.
- Attachments A and B contain the proposed redlined changes to deliver the CP1448 solution.
- Attachment C contains the full responses received to the CP Consultation.

**Committee**

Supplier Volume Allocation Group

**Recommendation**

Reject

**Implementation Date**

N/A


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# 1 Why Change?

## What is a protocol approval?

A protocol is the computer language used to communicate with Meters and Outstations. The protocol itself is embedded into the Meter but a copy of it also needs to be written to the computer in software.

A protocol approval is the BSC process for ensuring that the computer software has been properly written (in accordance with the manufacturer's protocol) so it is able to communicate with the Meter effectively. For example, a protocol might specify that when the characters '1234' are sent to the Meter's communications port the Meter will respond with a reading. We therefore would need to check that the computer is sending '1234' when the user calls for a Meter reading.

BSCP601 'Metering Protocol Approval and Compliance Testing' is the process that validates third party software for consistency with the Meter manufacturer's protocol.

## What is a proving test?

A proving test is undertaken by a Half Hourly (HH) Data Collector (DC) and a HH Meter Operator Agent (MOA) whenever a HH Metering System needs to be installed or reconfigured.

A proving test involves the HHMOA asking the HHDC to obtain a HH Meter reading from the Metering System for a given Settlement Period. The HHMOA will then compare this reading to the reading it obtained when it installed or reconfigured the Metering System, to determine whether it has passed the test (if the readings match) or failed the test (if the readings do not match). This is usually a manual process for both Supplier Agents.

These tests are carried out to give assurance to the Supplier and the HHDC that correct information is being received from the Metering System. This is necessary as the data is used both to bill the customer and in Settlement.

### Methods of proving tests

BSC Procedure (BSCP) 502 'Half Hourly Data Collection for SVA Metering Systems Registered in SMRS' and BSCP514 'SVA Meter Operations for Metering Systems Registered in SMRS' list four different methods for carrying out proving tests. 'Method 3' permits a MOA to use any software that it chooses as its data retrieval system, even if that software does not have a protocol approval. 'Method 4' allows the HHMOA to use the Meter manufacturer's software to read information from the Meter as part of the proving test.

## What is the issue?

Currently, there are ambiguities in the requirements between 'Method 3' and 'Method 4' of BSCP502 and BSCP514 for software used by MOAs for proving tests.

CP1439 'Proving Test Permissible Software' amended BSCP502 and BSCP514 to allow the MOA to use other BSCP601-approved software during the proving test process under 'Method 4'. This change was implemented in the November 2015 BSC Systems Release. The intention of CP1439 was to encourage the HHMOA to collect data on an automated

**What is 'Method 3'?**

Under 'Method 3' the MOA installs or reconfigures the Metering System, commissions it and records the HH reading while on site. When at the office, the MOA then uses its own data retrieval system to read the Metering System for the same HH Settlement Period as collected during the site visit. The MOA compares the HH Metered Data collected on site with the data retrieved at the office. The HHDC then collects data for a HH Settlement Period of its own choosing and sends this to the MOA. The MOA uses its data retrieval system to read the Meter for the same HH Settlement Period provided by the HHDC.

basis to aid with the proving test volumes for Approved Modification P272 'Mandatory Half Hourly Settlement for Profile Classes 5-8'.

It was noted during the CP Consultation for CP1439 that 'Method 3' allows any software to be used, which does not have to be BSCP601-approved. This was in contrast to CP1439 which amended 'Method 4' to allow the use of BSCP601-approved software. When approving CP1439, the SVG noted this anomaly between 'Method 3' and 'Method 4'. The SVG agreed that, for robustness, software should also be BSCP601-approved under 'Method 3'. It therefore noted that a further change would be necessary to remove this allowable software anomaly between 'Method 3' and 'Method 4' (SVG174).

# 2 Solution

## Proposed solution

CP1448 'Changes to allowable software for Method 3 Proving Tests' was raised by ELEXON on 9 September 2015. It proposes that, under proving test 'Method 3', the HHMOA will be required to use data retrieval software that has been approved under BSCP601. This removes the anomaly between 'Method 3' (under which the relevant software does not currently have to be BSCP601-approved) and 'Method 4' (under which it does).

This will provide assurance that the chosen software for a proving test does not pose any risk to Settlement, as the software will have been witness tested by ELEXON and approved by the Panel.

## Proposer's rationale

We believe that this change will align with CP1439. Currently, under 'Method 3', a HHMOA is able to use any data retrieval system, which may not have an approval under BSCP601. In circumstances where a HHMOA uses unapproved software then either a new approval can be sought via BSCP601 or the MOA will need to choose an alternative proving test method.

We believe that the current arrangements under 'Method 3' undermine the requirement to use software that has been verified for Settlement use, and therefore pose a risk to Settlement. Now that CP1439 has been implemented, if a HHMOA chooses to use proving test 'Method 4', it must use either software that has been approved under BSCP601 or the Meter manufacturer's software. We therefore believe that 'Method 3' should also require this approval.

## Proposed redlining

Attachments A and B contain the proposed changes to BSCP502 and BSCP514 to deliver CP1448.

# 3 Impacts and Costs

## Central impacts and costs

CP1448 will require changes to BSCP502 and BSCP514. No system changes are required and there will be no impact on BSC Agents.

The central implementation costs for CP1448 will be approximately £240 (one ELEXON man day) to implement the relevant document changes.

| Central Impacts | |
|---|---|
| Document Impacts | System Impacts |
| • BSCP502<br>• BSCP514 | *None* |

## BSC Party & Party Agent impacts and costs

### Participant impacts

CP1448 will impact HHMOAs. Four of the nine respondents to the CP Consultation indicated that they will be impacted by CP1448. One respondent commented that they currently use a system which is not BSCP601-approved but which has, in their opinion, not caused any risk to Settlement. Furthermore, this system continues to be developed to better support the requirements for P272, manage D0001 'Request Metering System Investigation' data flows and monitor Metering Systems ahead of commissioning (functions for which protocol approval is not required). They therefore believe that the need to continually seek approval under BSCP601 will frustrate such business improvements. Another respondent suggested that they are in a position where they could, without difficulty, use BSCP601 protocols for proving. However they felt that this is inappropriate and devalues the proving test.

Another respondent commented that the use of BSCP601 approved software runs the risk of both the HHDC and HHMOA applying the same incorrect pulse multiplier and so getting the same incorrect result. We confirmed that this is not the case. BSCP601 ensures that the software is written in accordance with the manufacturers' protocol and does not ensure that a pulse multiplier is needed to get the correct readings back. In addition, it is not necessarily the case that the HHMOA has to input the data before using it for the proving test. A HHMOA can, quite independently, commission its own software that works in the same way as the Meter manufacturer's software does, i.e. it will bring back the kWh values without having to input a scaling factor first. We noted, therefore, that the protocol approval process does not stipulate how data is to be brought back. However, it does ensure that it is brought back in a way that is compatible with the Meter's communication language.

| BSC Party & Party Agent Impacts | |
|---|---|
| BSC Party/Party Agent | Impact |
| HHMOAs | Changes will be required to implement the solution. |

## Participant costs

Two of the nine respondents, both of which are Supplier Agents, indicated that there will be costs associated with CP1448. One respondent noted that there would be an ongoing cost of keeping protocol approval updated across all supported Meter types. The other respondent commented that they have been unable to assess the cost implications; any HHMOA costs should be one-off to expedite the BSCP601 compliance process for CP1448.

The remaining seven respondents did not identify any costs associated with CP1448.

# 4 Implementation Approach

## Recommended Implementation Date

CP1448 is proposed for implementation on **25 February 2016** as part of the February 2016 BSC Systems Release.

The February 2016 Release is the next available Release that can include this CP.

Six of the nine respondents to the CP Consultation agreed with the proposed Implementation Date. Two respondents disagreed with one providing a neutral view.

One respondent that disagreed commented that they do not support the solution but do believe that further consideration should be given to the problem it is seeking to address. They therefore suggested that the Implementation Date should be deferred pending the discussion at the BSC Audit Market Issues – Proving Tests Group on 12 November 2015. ELEXON attended this meeting to discuss any concerns with members of this group. Further details on the discussion at this meeting can be found in section 6.

The other two respondents, one who disagreed and the other who had a neutral view, were the same respondents who disagreed with the overall proposal.

# 5 Initial Committee Views

## SVG's initial views

The SVG considered CP1448 at its meeting on 29 September 2015 (SVG176/06).

The SVG had no initial comments on this CP and did not ask for any additional questions to be added to the CP Consultation.

# 6 Industry Views

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

| Summary of CP1448 CP Consultation Responses | | | | |
|---|---|---|---|---|
| Question | Yes | No | Neutral/ No Comment | Other |
| Do you agree with the CP1448 proposed solution? | 5 | 4 | 0 | 0 |
| Do you agree that the draft redlining delivers the intent of CP1448? | 8 | 1 | 0 | 0 |
| Will CP1448 impact your organisation? | 4 | 5 | 0 | 0 |
| Will your organisation incur any costs in implementing CP1448? | 2 | 7 | 0 | 0 |
| Do you agree with the proposed implementation approach for CP1448? | 6 | 2 | 1 | 0 |
| Do you have any further comments on CP1448? | 2 | 7 | 0 | 0 |

## Comments on the CP

Five of the nine respondents to the CP Consultation agreed with the proposed changes for CP1448. Respondents commented that they believe the software used under 'Method 3' and 'Method 4' should have similar approval requirements.

Four of the five respondents to the CP Consultation disagreed with the proposed changes for CP1448. One respondent commented that although the change would make the proving test process easier and quicker for its business and does not entail investment or any costs, it disagreed with the overall proposal.

### Interactions with P272

This same respondent (as noted above) highlighted that CP1439 made it possible for HHMOAs to use protocol approved software to collect bulk reads to facilitate the implementation of P272. It noted that this CP extends this option by enforcing its use in those tests where Meter manufacturers' software is not used under 'Method 3'. Another respondent commented that they supported CP1439 as it facilitated industry in efficiently managing the high number of proving tests required for P272. However, it believed that CP1448 is not justified to support the P272 delivery as 'Method 3' and 'Method 4' have more differences than the requirements for the software being used. ELEXON confirmed that the intention of CP1448 is not to directly support P272 but to amend the discrepancy where uncontrolled software can be used for 'Method 3' but not for 'Method 4' proving tests.

### Are non-BSCP601 protocols a risk to Settlement?

One respondent did not believe that non-BSCP601 protocols are a risk to the Settlement data in a Meter. They commented that the proving test process under 'Method 3 has' been unchanged for many years, and they are unaware of any examples of data corruption due to the use of non-BSCP601 protocols. All downloaded reads for proving tests are done using 'read only' passwords and therefore they do not understand how the risk of data corruption could occur. Another respondent provided a similar concern, querying whether there is any evidence that HHMOA systems used in proving tests have posed a significant risk to Settlement. They note there is no requirement for third parties to use BSCP601-approved systems for non-Settlement purposes (e.g. customers reading their own Meters). ELEXON confirmed that it is aware that third parties are providing software for HHMOAs which may not have been written in accordance with the Meter manufacturers' protocols. Therefore the data may be corrupted by the use of third party Meter readings or programming software, which poses a significant risk to Settlement. We noted that the potential for issues to occur may currently be low, but if an issue does occur then the cost to Parties will be high.

The same respondent also suggested that it is logical that the HHMOA should use either manufacturers' software or independent software to undertake their part in the proving test process. They suggested that the HHMOA should not use anything which the corresponding HHDC may also use, in order to ensure a true and independent test. By totally barring the HHMOA's use of independent software and replacing this with the use of HHDC protocol approved software, issues are less likely to be identified. The respondent was concerned that CP1448 is effectively forcing HHMOAs to use protocol approved software for the P272 volumes as this is the only 'bulk' solution available (as Meter manufacturers' software cannot be used for high volumes of tests). They therefore suggested that this type of proving test will be a meaningless exercise in a high number of instances.

We advised that our concern is with the potential for a HHMOA to use any software under 'Method 3' but only manufacturers' or HHDCs' software being used under 'Method 4'. The software available to the HHMOA for a proving test under 'Method 3' can be uncontrolled whereas under 'Method 4' it is controlled. The intention of this CP is to close that gap.

### Should HHMOAs and HHDCs use the same software?

One respondent suggested that CP1448 encourages the HHDC and HHMOA to use the same systems to undertake proving tests and noted that this reduces the limited assurance the proving process delivers. ELEXON advised that there is no requirement for the HHMOA to use the same software as the HHDC and if the HHMOA has its own software protocol approved under CP1448, then it would aid the separation of differential system proving tests.

Another respondent commented that its HHMOA may need to seek approval to use existing software or use an alternative method. As a Supplier, they felt that they would lose confidence in the proving test process. ELEXON noted the respondent's concerns that there is the potential for third party software to be used which has no bearing on the Meter manufacturers' protocols, rather than whether it is the same software as the HHDCs or not.

### How can Suppliers check that the software they are using is approved under BSCP601?

Two respondents queried how Suppliers can check that the software they or their agents may be using has been approved under BSCP601. They believed it is unclear how this will be tracked as MOAs do not currently approve software under BSCP601. ELEXON advised that a revised list of software (Code of Practice (CoP) Compliance and Protocol Approval List) will be issued and made available on the Codes of Practice page of its website for Parties to check as part of the implementation of the CP. This list intends to be an expansion of the list of approvals which already exists for Meter compliance and protocol approvals.

One of the respondents also suggested that there is a potential risk that Parties may be using unapproved software without currently having a means to check; the consequences of which are unclear. ELEXON noted the concerns, highlighting that this risk is being addressed under this CP.

## Comments on the proposed redlining

Two respondents to the CP Consultation provided an identical comment on the draft redlined text. They suggested that, for consistency, 'Method 3' should also allow 'manufacturers' software' to align with 'Method 4'. ELEXON noted that the intention was not to exclude the use of manufacturers' software and so agreed to provide further clarity to prevent any confusion in the draft redlined text. We have since updated BSCP502 and BSCP514 (highlighted in yellow) in Attachments A and B to reflect this discrepancy.

## BSC Audit Market Issues – Proving Tests Group

As recommended by a respondent to the CP Consultation, ELEXON added CP1448 to the agenda of the BSC Audit Market Issues – Proving Tests Group hosted by ELEXON on 12 November 2015. Present at this meeting were many of the respondents to the CP Consultation.

Members of the group highlighted that although the CP appears to be a small clarification change between Method 3 and Method 4, it goes a lot further than this and would in fact be a fundamental change for HHMOAs. One member suggested that this issue has arisen out of P272. This is because there is going to be a high volume of Metering System IDs (MSIDs) moving from Non Half Hourly (NHH) to HH Settlement, which will all require proving tests. Therefore there is a perceived risk due to the high volume of Meters that will require proving tests.

A member commented that HHMOAs contact Meters all the time and not just for proving tests e.g. dialling up the Meters. If the intention of the CP was to control access to the Meters via BSCP601 then the change would only capture a small element of it. Another member highlighted that the perceived risk to Settlement is not just for proving tests and applies to all interactions with the Meter.

ELEXON noted that, until recently, it was unaware that HHMOAs were using any other software apart from the manufacturers' software. A member of the group commented that HHMOAs often use a combination of software depending on what they are doing. HHMOAs could have their own system that uses manufacturers' software or they could use the HHDC's software. ELEXON highlighted that this CP does not force HHMOAs to use the HHDC's software.

It was also noted that a common MOA system had been developed and is in use by four of those MOAs objecting to this CP. A demonstration of this software was provided during the meeting.

ELEXON highlighted that HHDCs go through a rigorous protocol approval process and queried why HHMOAs should not have to go through the same process. Members of the group noted that the data HHMOAs submit does not go directly into Settlement whereas the HHDCs' data does. They agreed that although there is still a risk relating to the HHMOAs data, this is a different risk to that of the HHDCs.

The group did not believe that BSCP601 is prescriptive enough as there is no procedure detailing what exact process HHMOAs should follow. ELEXON pointed out that BSCP601 is specific to both HHDCs and MOAs. However, until recently MOAs have only ever used the Meter manufacturers' software, so it appeared less relevant to MOAs than HHDCs. The group agreed that BSCP601 needs to be specific where it matches protocol approval and manufacturers' software. ELEXON advised that the specific process HHMOAs should follow is the same as that for HHDCs. Members of the group agreed but believed this needs to be explicitly stated within BSCP601. ELEXON agreed that a further change may be required to clarify BSCP601 to prevent any discrepancies between the processes for HHMOAs and HHDCs.

The group discussed removing the need for proving tests where the pulse multiplier and Meter constant is '1'. Although this is not directly related to CP1448 it would, if implemented, significantly lessen the impact of this CP. The BSC Audit Market Issues workshop remains ongoing, and a verbal update was presented to the Performance Assurance Board (PAB) at its meeting on 17 December 2015. Depending on the final recommendations of the BSC Audit Market Issues group a further CP may be raised that has a wider scope.

## ELEXON's recommendation

ELEXON notes that five of the nine respondents to the CP Consultation agreed with the proposed changes for CP1448 but that four disagreed. Following the CP Consultation, we raised the issues at the BSC Audit Market Issues – Proving Tests Group and discussed concerns with impacted Parties in an open forum.

ELEXON considers that, on balance, it is a relatively simple and low cost exercise for a HHMOA to get a protocol approved. Given the main practical reason for objection is based on a single application in use by a number of MOAs, then only a single protocol approval may be necessary. However, having taken into account CP Consultation respondents' concerns and those of members of the BSC Audit Market Issue Group, we do agree that the control of MOA software is a wider issue than is used for a single method of proving test. Therefore we do not believe that it would be appropriate for the CP1448 solution to be implemented at this time as the issue will be picked up under the wider CP as noted above.

ELEXON therefore recommends that the SVG rejects CP1448.

# 7 Recommendations

We invite you to:

- **REJECT** CP1448.

# 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)* |
| CoP | Code of Practice |
| CP | Change Proposal |
| CPC | Change Proposal Circular |
| DC | Data Collector *(Party Agent)* |
| HH | Half Hourly |
| MOA | Meter Operator Agent *(Party Agent)* |
| MSID | Metering System ID |
| NHH | Non Half Hourly |
| PAB | Performance Assurance Board *(Panel Committee)* |
| SVG | Supplier Volume Allocation Group *(Panel Committee)* |

## 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 |
| D0001 | Request Metering System Investigation |

## 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 | BSCPs page on the ELEXON website | https://www.elexon.co.uk/bsc-related-documents/related-documents/bscps/ |
| 2 | CP1439 page on the ELEXON website | https://www.elexon.co.uk/change-proposal/cp1439/ |
| 2 | SVG174 page on the ELEXON website | https://www.elexon.co.uk/meeting/svg-174/ |

| External Links | | |
|---|---|---|
| Page(s) | Description | URL |
| 2 | P272 page on the ELEXON website | https://www.elexon.co.uk/mod-proposal/p272-mandatory-half-hourly-settlement-for-profile-classes-5-8/ |
| 4 | CP1448 page on the ELEXON website | https://www.elexon.co.uk/change-proposal/cp1448/ |
| 7 | SVG176 page on the ELEXON website | https://www.elexon.co.uk/meeting/svg-176/ |
| 10 | CoP Compliance and Protocol Approval List on the CoP page of the ELEXON website | https://www.elexon.co.uk/bsc-related-documents/related-documents/codes-of-practice/ |