CP Progression Paper

CP1508 'Updating references to the British and International Standards within the relevant Code Subsidiary Documents'

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About This Document

This document provides information on new Change Proposal (CP) CP1508 and outlines our proposed progression timetable for this change, including when it will be issued for CP Consultation in the next suitable Change Proposal Circular (CPC) batch.

We are presenting this paper to capture any comments or questions from the Imbalance Settlement Group (ISG) and Supplier Volume Allocation Group (SVG) Members on this CP before we issue it for consultation.

There are nine parts to this document:

- This is the main document. It provides a summary of the solution, impacts, anticipated costs, and proposed implementation approach, as well as our proposed progression approach for this CP.
- Attachment A contains the CP1508 proposal form.
- Attachments B-H contain the proposed redlined changes to deliver the CP1508 solution.

ELEXON



Committee

Supplier Volume Allocation Group



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1 Why Change?

Background

The <u>Codes of Practice (CoPs)</u> and <u>Balancing and Settlement Code Procedure (BSCP) 601</u> <u>'Metering Protocol Approval and Compliance Testing'</u> reference standards, or sections of a standard, that Metering Equipment must conform to in order to comply with the relevant Code Subsidiary Document (CSD). These standards are the International Electrotechnical Commission (IEC) and British Standards Institution (BSI) standards.

The IEC publishes and governs the International Standards for all electrical, electronic and related technologies, collectively known as 'electrotechnology'. This includes Metering Equipment. All IEC standards are prefixed with 'IEC'.

Metering Equipment can also be required to conform to the British Standards, which are governed by the BSI. British Standards may be prefixed "BS" or "BS EN" (European Normative) to indicate that the standards are also accepted in Europe.

IEC and BSI standards detail the testing methodology and limits of accuracy, under different testing conditions, that the Metering Equipment must conform to in order to be classified under the relevant standard.

What is the issue?

Many of the standards referenced in the CSDs are outdated, have been withdrawn or superseded. This means that parties are unable to install Metering Equipment tested to the latest standard because they will be non-compliant with the CSD.

A generic Metering Dispensation (D/477) was approved by the SVG (201/04) and ISG (199/01) to allow parties to install Metering Equipment tested to the latest standards that are not currently referenced in the CSDs. This was approved on a lifetime basis. The SVG and ISG acknowledged that a CP would be raised to update the CSDs and supersede the dispensation.

References to the standards throughout the CSDs also either currently detail 'IEC' or 'BS (EN)'. This may be interpreted that a party must install Metering Equipment that is tested to the International Standards but not British Standards, and vice versa, despite the standards being adopted by both the IEC and BSI. For example, the CoPs currently reference 'BS EN 62053-22'. This standard is adopted by both the IEC and BSI and, therefore, the CoPs should reference it as 'BS EN/IEC 62053-22'.



What are the Codes of Practice (CoPs)?

CoPs detail the technical requirements for Metering Systems. Versions of the CoPs are not time limited in the same way as other documents.

When Metering Equipment is first registered in Settlement, it must comply with the requirements which are set out in the relevant CoP version in place at that time.



What is Metering Equipment?

Defined in Section X Annex X-1 of the BSC as meters, Measurement Transformers (voltage, current or combination units), metering protection equipment including alarms, circuitry, associated Communications Equipment and Outstations and wiring.



What is a Generic Metering Dispensation?

Registrants of Metering Systems can apply for a Metering Dispensation if the associated Metering Equipment will or does not comply with the applicable CoP.

A Generic Metering Dispensation can be applied to any relevant item of Metering Equipment, and is not limited to a single Registrant or site. SVG211/03

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2 Solution

Proposed solution

This change proposes to update all current references to standards to their latest published equivalent within:

- CoP 1 'The metering of circuits with a rated capacity exceeding 100MVA for Settlement purposes';
- CoP 2 'The metering of circuits with a rated capacity not exceeding 100MVA for Settlement purposes';
- CoP 3 'The metering of circuits with a rated capacity not exceeding 10MVA for Settlement purposes';
- CoP 4 'The calibration, testing and commissioning requirements of Metering Equipment for Settlement purposes';
- CoP 5 'The metering of energy transfers with a maximum demand of up to (and including) 1MW for Settlement purposes';
- CoP 10 'The metering of energy via low voltage circuits for Settlement purposes'; and
- BSCP601 'Metering protocol approval and compliance testing'.

This change does not propose to update:

- CoP 6 'The metering of energy imports via low voltage circuits fused at 100 AMPS or less per phase for Settlement purposes';
- CoP 7 'The metering of energy imports via low voltage circuits fused at 100 AMPS or less per phase for Settlement purposes';
- CoP 8 'The metering of import active energy via low voltage circuits for Non-Half Hourly Settlement purposes'; or
- CoP 9 'The metering of import and export active energy via low voltage circuits for Non-Half Hourly Settlement purposes'.

This is because no Metering Systems are currently (and are unlikely to be) registered against CoPs 6 and 7. Similarly, with the introduction of Smart Metering Equipment Technical Specification (SMETS) to cover smart Meter installs, and CoP 10 to cover Advanced Metering installs, no new Metering Systems will be installed to CoPs 8 and 9. This was agreed by a workgroup held by ELEXON on 12 March 2018 to discuss whether the new standards were still appropriate for Settlement.

ELEXON also proposes to amend the current standard prefixes by changing all references to be prefixed with 'BS EN/IEC' where both versions of the standard have been published and approved by the BSI and IEC (and are equivalent). Where the standard has only been published and approved by one organisation, that organisation will be the only body prefixed in the CSD.

The table below presents the current standards referenced in the CSDs and the latest published equivalent ELEXON is proposing to replace it with.

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| Summary of references to be updated | | |
|---|---|---|
| Current reference | Updated reference | Standard title |
| IEC 60044-1 | | Instrument transformers. Current |
| IEC Standard 185 | BS EN/IEC 61869-2 | transformers. |
| IEC 60044-2 | | Instrument transformers. Inductive voltage |
| IEC Standard 186 | BS EN/IEC 61869-3 | transformers. |
| IEC 60044-3 | | Instrument transformers. Combined |
| IEC Standard 44-3 | BS EN/IEC 61869-4 | transformers. |
| BS EN 61036 | BS EN/IEC 62053-21 | Electricity metering equipment (a.c.): Particular requirements – Static meters for active energy (classes 1 and 2). |
| BS EN 60521 | BS EN/IEC 62053-11 | Electricity metering equipment (a.c.). Particular requirements. Electromechanical meters for active energy (classes 0.5, 1 and 2). |
| BS EN 61268 | BS EN/IEC 62053-23 | Electricity metering equipment (a.c.). Particular requirements. Static meters for reactive energy (classes 2 and 3). |
| BS 5685 Part 4 | Remove | Specification for Class 3 Var Hour Meters. |
| BS EN 61107 | BS EN/IEC 62056-21 | Electricity metering. Data exchange for meter reading, tariff and load control. Direct local data exchange. |
| Statutory Instruments 2006 No. 1679 | Statutory Instruments 2006 No. 1153 | Weights and Measures. The Measuring Instruments (Active Electrical Energy Meters) Regulations 2006. |

ELEXON is also proposing, as part of this CP, to consult on whether this change will leave Parties with assets that cannot be installed compliantly. This is because Parties may have procured Metering Equipment that is tested and stamped to the older standard currently referenced in the CSDs. If approved, this change would make the installation of this Metering Equipment non-compliant. This could be costly to Parties that may have procured Metering Equipment in bulk and be left with a substantial amount of Metering Equipment they can no longer install. If this is the case, then ELEXON will raise a temporary generic Metering Dispensation to allow for the installation of Metering Equipment tested and stamped to the replaced standard, to ensure already procured assets are not left stranded.

Proposer's rationale

The current CoPs are out of date with the national and international standards that they quote. Whilst parties can install newer Metering Equipment due to a generic Metering Dispensation (D/477), the CoPs should be updated to ensure alignment to current applicable standards.

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Proposed redlining

Attachments B-H contain the proposed changes to deliver CP1508.

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3 Impacts and Costs

Central impacts and costs

Central impacts

This CP will require changes to seven CSDs, as shown below. CoPs 1 and 2 are owned by ISG only. CoPs 5 and 10 are owned by SVG only. CoPs 3 and 4, and BSCP601, are jointly owned by both the ISG and SVG. No Central System changes are required for this CP.

| Central Impacts | | |
|---|----------------|--|
| Document Impacts | System Impacts | |
| • CoP 1 'Code of Practice for the metering of circuits with a rated capacity exceeding 100MVA for Settlement purposes' | • None | |
| • CoP 2 'Code of Practice for the metering of circuits with a rated capacity not exceeding 100MVA for Settlement purposes' | | |
| • CoP 3 'Code of Practice for the metering of circuits with a rated capacity not exceeding 10MVA for Settlement purposes' | | |
| • CoP 4 'Code of Practice for the calibration, testing and commissioning requirements of Metering Equipment for Settlement purposes' | | |
| • CoP 5 'Code of Practice for the metering of energy transfers with a maximum demand of up to (and including) 1MW for Settlement purposes' | | |
| • CoP 10 'Code of Practice for metering of energy via low voltage circuits for Settlement purposes' | | |
| BSCP601 'Metering protocol approval and compliance testing' | | |

Central costs

The central implementation costs for CP1508 will be approximately £1,750 (7 working days) to implement the necessary document changes.

BSC Party & Party Agent impacts and costs

| BSC Party & Party Agent In | ipacts | |
|----------------------------|--|-------------|
| BSC Party/Party Agent | Impact | 28 August 2 |
| Generator | | Version 1.0 |
| | We anticipate that these BSC Parties will be impacted as | Page 6 of 1 |
| Supplier | they procure and may install Metering Equipment in | © ELEXON |

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| BSC Party & Party Agent Impacts | | |
|---------------------------------|--|--|
| BSC Party/Party Agent | Impact | |
| Distributor | accordance with the CoPs. | |
| System Operator | | |
| Transmission Operator | | |
| Meter Operator Agents (MOAs) | We anticipate that MOAs will be impacted as they procure and install Metering Equipment in accordance with the CoPs. | |

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4 Implementation Approach

Recommended Implementation Date

CP1508 is proposed for implementation on 27 June 2019 as part of the June 2019 BSC Release.

The June 2019 Release is the next available BSC Release that can incorporate the document changes required for this CP.

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5 Proposed Progression

Progression timetable

The table below outlines the proposed progression plan for CP1508:

| Progression Timetable | | |
|---|-----------------------------|--|
| Event | Date | |
| CP Progression Paper presented to ISG for information | 21 Aug 18 | |
| CP Progression Paper presented to SVG for information | 4 Sep 18 | |
| CP Consultation | 10 Sep 18 – 28 Sep 18 | |
| CP Assessment Report presented to ISG for decision | 23 Oct 18 | |
| CP Assessment Report presented to SVG for decision | 30 Oct 18 | |
| Proposed Implementation Date | 27 Jun 19 (June 19 Release) | |

CP Consultation questions

| Standard CP Consultation Questions | |
|--|--|
| Do you agree with the CP1508 proposed solution? | |
| Do you agree that the draft redlining delivers the CP1508 proposed solution? | |
| Will CP1508 impact your organisation? | |
| Will your organisation incur any costs in implementing CP1508? | |
| Do you agree with the proposed implementation approach for CP1508? | |

In addition to the standard CP Consultation questions for CP1508, we intend to ask an additional question as outlined below.

Additional CP Consultation Questions

Will this CP leave your organisation with stranded assets that cannot be installed compliantly?

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6 ISG Initial Views

CP1508 was presented to the ISG on 21 August 2018 ($\underline{ISG208/07}$) for information in advance of the CP consultation.

An ISG Member questioned whether ELEXON had a view on whether any BSC Parties would have unusable Metering Equipment if this change were to be approved. ELEXON advised the initial view is that Parties are unlikely to have Metering Equipment tested and stamped to the older standards currently referenced in the CSDs. This is because the newer standards have been published for some time and have been updated in other industry codes, such as the <u>Connection and Use of System Code (CUSC)</u>. However, ELEXON noted an additional question in the CP consultation that will ask whether this change will leave organisations with stranded assets that cannot be installed compliantly.

An ISG Member highlighted that standards are likely to be further updated in the future. ELEXON advised that relationships with the BSI and IEC have been established to ensure that future updates to standards are communicated. A CP can then be raised at an appropriate time in relation to the publication of the relevant standard.

The ISG noted the proposed progression of CP1508 and didn't provide any further comments.

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7 Recommendations

We invite you to:

- **NOTE** that CP1508 has been raised;
- NOTE the proposed progression timetable for CP1508;
- NOTE the ISG's initial comments on CP1508; and
- **PROVIDE** any comments or additional questions for inclusion in the CP Consultation.

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Acronyms

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

| Acronyms | |
|----------|---|
| Acronym | Definition |
| BS | British Standard |
| BSC | Balancing and Settlement Code |
| BSCP | Balancing and Settlement Code Procedure |
| BSI | British Standard Institution |
| BS EN | British Standard European Normative |
| СоР | Code of Practice |
| СР | Change Proposal |
| CPC | Change Proposal Circular |
| CSD | Code Subsidiary Document |
| CUSC | Connection and Use of System Code |
| IEC | International Electrotechnical Commission |
| ISG | Imbalance Settlement Group |
| SVG | Supplier Volume Allocation Group |
| ТАА | Technical Assurance Agent |

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 | BSC Code of Practice | https://www.elexon.co.uk/bsc-and- codes/bsc-related-documents/codes-of- practice/ |
| 2 | BSC Procedures | https://www.elexon.co.uk/bsc-and- codes/bsc-related-documents/bscps/ |
| 2 | Statement of generic Metering Dispensations | https://www.elexon.co.uk/guidance- note/statement-generic-metering- dispensations/ |
| 2 | SVG meeting 201 documents | https://www.elexon.co.uk/meeting/svg- 201/ |
| 2 | ISG meeting 199 documents | https://www.elexon.co.uk/meeting/isg- 199/ |

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