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CP1554 'Future proofing changes to the measurement transformer standards in CoPs 1, 2, 3, 4, 5 and 10'

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About This Document



Not sure where to start? We suggest reading the following sections:

- Have 5 mins? Read section 1
- Have 15 mins? Read sections 1, 4, 5 and 6
- Have 30 mins? Read all sections
- Have longer? Read all sections and the annexes and attachments

The purpose of this CP1554 CP (Change Proposal) Consultation is to invite BSC Parties, Party Agents and other interested parties to provide their views on the impacts and the merits of CP1554. The Imbalance Settlement Group (ISG) and Supplier Volume Allocation Group (SVG) will then consider the consultation responses before making a decision on whether or not to approve CP1554.

There are nine 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 ISG's initial views on the proposed changes.
- Attachment A contains the CP1554 proposal form.
- Attachments B-G contains the proposed redlined changes to deliver the CP1554 solution.
- Attachment H contains the specific questions on which we seek your views. Please use this form to provide your response to these questions, and to record any further views or comments you wish to be considered.

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Why change?

Metering Codes of Practice (CoPs) rely on the British Standard Institution (BSI) / International Electrotechnical Commission (IEC) standards for measurement transformers (i.e. current transformers and voltage transformers).

These standards are reviewed every five years and as a result, could be extended without amendments, amended by an industry expert group, or withdrawn. When they are amended, their reference number may change, creating issues for the relevant Balancing and Settlement Code (BSC) Party or Party Agents.

These issues could lead to the stranding of measurement transformer stocks, which is costly to the BSC Parties and Party Agents.

For the purpose of this paper, metering CoPs 1¹, 2², 3³, 4⁴, 5⁵ and 10⁶ will be referred to as 'the relevant CoPs'.

Solution

This CP seeks to update the relevant CoPs to allow measurement transformer stocks, which refer to the old standard, to be installed once the relevant CoPs are updated with the new standard and to allow newly procured measurement transformers, to the new standard, to be installed, until the relevant CoPs are updated.

Impacts and costs

This CP is expected to impact Registrants, Licensed Distribution System Operators (LDSOs), Central Volume Allocation (CVA) Meter Operator Agents (MOAs), Metering Equipment Manager (MEM) under the Retail Energy Code (REC) and other procurers of measurement transformers for Settlement purposes.

The cost of amending these documents is expected to be less than £3,000.

Implementation

The CP is proposed for implementation on 30 June 2022 as part of the standard June 2022 BSC Release.

British Standards (BS)

British Standards (BS) are the standards produced by the [BSI Group](#) which is incorporated under a [royal charter](#) and which is formally designated as the [national standards body \(NSB\)](#) for the UK.

¹ [Code of Practice 1 'Code of Practice for the metering of circuits with rated capacity exceeding 100MVA for settlement purposes'](#)

² [Code of Practice 2 'Code of Practice for the metering of circuits with a rated capacity not exceeding 100MVA for settlement purposes'](#)

³ [Code of Practice 3 'Code of Practice for the metering of circuit with a rated capacity not exceeding 10MVA for settlement purposes'](#)

⁴ [Code of Practice 4 'Code of Practice for the calibration, testing and commissioning requirements of metering equipment for settlement purposes'](#)

⁵ [Code of Practice 5 'Code of Practice for the metering of energy transfers with max demand of up to \(and including\) 1MW for settlement purposes'](#)

⁶ [Code of Practice 10 'Code of Practice for the metering of energy via low voltage circuits for settlement purposes'](#)



British Standards Institution (BSI)

The British Standards Institution is the national body of the United Kingdom. BSI produces technical standards on a wide range of products and services and also supplies certification and standards related services to businesses.

What is the issue?

This issue has come from [Issue 93 'Review of the BSC metering Codes of Practice'](#) which was raised by the Association of Meter Operators (AMO) in January 2021, to improve the metering CoPs.

The relevant metering CoPs rely on BS/IEC standards for Meters, Current Transformers (CT) and Voltage Transformers (VT). These BS/IEC standards are reviewed every five years and as a result may be extended without new amendments, amended by an industry expert group (e.g. PEL/38 — Instrument Transformers) or withdrawn.

When the standards are amended, their reference number may change (e.g. requirements for CTs, [60044-1](#) was withdrawn and superseded by [61869-2](#) in 2012), creating two issues for the Registrants, Licensed Distribution Operators (LDSOs), Meter Operator Agents (MOAs) and other procurers of Settlement measurement transformers. The issues are:

- i. They may have stocks of measurement transformers under the old standard. This means that the measurement transformers cannot be used once the CoPs are updated with the new standard.
- ii. They may have procured measurement transformers to the new standard, when the CoPs still refer to the previous standard. This means that the measurement transformers cannot be used until the new standard is updated in the CoPs through a CP process in a standard BSC Release.

Unless subject to a Metering Dispensation (for example [D/477](#)) under [BSCP32 'Metering Dispensations'](#).

Background

Reference number changed due to amendments of standards

The BS/IEC standards referred to in the CoPs are examples of some of the standards published by the BSI and IEC. BSI standards are used in the United Kingdom (UK). IEC standards can be adopted by international countries. Some IEC standards are adopted as European Normative (EN) standards and then as British Standards.

According to the BSI website, their standards are the basis of which machines, apparatus, materials and the installation should be designed, manufactured and tested. This is to ensure efficiency and function safety according to the United Kingdom (UK) Electrical Industry British Standard.

The notion of future proofing changes to the BS/IEC standards in the relevant CoPs originally stemmed from a previously implemented change [CP1508 'Updating standards in the CoPs and BSCP601'](#). This change was raised to reflect the current BS EN/IEC standard at that time and to ensure that any changes (amendments) to these standards did not need to be reflected in the relevant metering CoP documents. The notion was further discussed at the [second meeting of Issue 93](#) where a decision was made to update the relevant metering CoP documents so that it is future proofed for future changes to the BS/IEC measurement transformer standards.

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This Change seeks to incorporate the principle of D/505 in the applicable CoPs and as such, end date the D/505 Metering Dispensation. However, it will be applicable to measurement transformers.

Proposed solution

This CP proposes to update Section 5.1 'Measurement Transformers' of the relevant CoPs to allow measurement transformer stocks, which refer to the old standard number, to be installed after the relevant CoPs are updated with the new standard.

It will also allow newly procured measurement transformers, to the new standard, to be installed, until the relevant CoPs are updated.

This is subject to the accuracy classes and the error limits remaining the same in both old and new standards.

Proposer's rationale

This change will prevent stranding of measurement transformer stocks as existing ones can be utilised even though the CoPs have been updated and newly purchased stocks used even when the CoPs haven't yet been updated.

Additionally, by incorporating the principles of Metering Dispensation [D/515](#) in the relevant CoPs, it will become clearer to purchasers of stocks that they can use their stock stamped with different standard numbers. Therefore, time is saved as they would not need to contact Elexon to confirm if they need a Metering Dispensation because it already exist in the CoPs and they would not have to look for the Statement of Generic Metering Dispensations on the Elexon Website

CP Consultation Question

Do you agree with the CP1554 proposed solution?

Please provide your rationale.

We invite you to give your views using the response form in Attachment H

Proposed redlining

The proposed redlining to deliver this CP can be found in Attachments B-G of this paper.

CP Consultation Question

Do you agree that the draft redlining delivers the CP1554 proposed solution?

If 'No', please provide your rationale.

We invite you to give your views using the response form in Attachment H

4 Impacts and Costs

BSC Party & Party Agent impacts and costs

Participant impacts

BSC Party & Party Agent Impacts	
BSC Party/Party Agent	Impact
Distribution System Operator (DSO)	They will need to update their processes to ensure only stock that meets the criteria can be used where the badged measurement transformer BS EN/IEC standard is different from the current standard or one quoted in the relevant CoP.
Meter Operator Agents (MOAs)	If they purchase low voltage current transformers they will need to update their processes to ensure only stock that meets the criteria can be used where the badged measurement transformer BS EN/IEC standard is different from the current standard or one quoted in the relevant CoP.
Suppliers and Registrants	They will need to update their processes to reflect this change.

Costs	
BSC Party/Party Agent	Impact
Distribution System Operator (DSO)	Cost and resources associated with updating their processes to ensure only stock that meets the criteria can be used where the badged measurement transformer BS EN/IEC standard is different from the current standard or one quoted in the relevant CoP.
Meter Operator Agents (MOAs)	
Suppliers and Registrants	

Central impacts and costs

Central impacts

The solution in this CP only affects BSC documentation. Therefore, no BSC Central Systems will be impacted.

Central Impacts	
Document Impacts	System Impacts
Code of Practice 1 'The Metering of Circuits with a Rated Capacity Exceeding 100MVA for Settlement Purposes'	None
Code of Practice 2 'The Metering of Circuits with a Rated Capacity not exceeding 100 MVA for Settlement Purposes'	

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Central Impacts	
Document Impacts	System Impacts
Code of Practice 3 'The Metering of Circuits with a Rated Capacity not Exceeding 10 MVA for Settlement Purposes'	
Code of Practice 4 'The Calibration, Testing and Commissioning Requirements of Metering Equipment for Settlement Purposes'	
Code of Practice 5 'The Metering of Energy Transfers with Max Demand of up to (and including) 1MW for Settlement Purposes'	

Central costs

The central implementation costs for CP1554 will be approximately £3,000 to implement the relevant document changes.

CP Consultation Questions
<p>Will CP1554 impact your organisation?</p> <p><i>If 'Yes', please provide a description of the impact(s) on your organisation and any activities which you will need to undertake between the approval of CP1554 and the CP1554 Implementation Date (including any necessary changes to your systems, documents and processes). Where applicable, please state which of the roles that you operate as will be impacted and any differences in the impacts between each role.</i></p>
<p>Will your organisation incur any costs in implementing CP1554?</p> <p><i>If 'Yes', please provide details of these costs, how they arise and whether they are one-off or on-going costs.</i></p>
<p>We invite you to give your views using the response form in Attachment H</p>

5 Implementation Approach

Recommended Implementation Date

This CP is recommended for implementation on 30 June 2022 as part of the standard June 2022 BSC Release. We have targeted this date because it enables us to batch up this change alongside the other CPs that are raised as a result of the [Issue 93 Work Group](#) recommendations.

CP Consultation Question

Do you agree with the proposed implementation approach for CP1554?

Please provide your rationale.

We invite you to give your views using the response form in Attachment H

ISG's initial views

CP1554 was initially presented to the ISG at its meeting on [2 November 2021](#), with no questions received from the ISG members. One member positively noted that this change was long overdue.

Appendix 1: Glossary & References

Acronyms

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

Acronyms	
Acronym	Definition
AMO	Association of Meter Operators
BS	British Standard
BSC	Balancing and Settlement Code
BSCP	Balancing and Settlement Code Procedure
BSI	British Standard Institution
CoP	Code of Practice
CP	Change Proposal
CT	Current Transformer
IEC	International Electrotechnical Commission
LDSO	Licensed Distribution System Operator
MOA	Meter Operator Agent
UK	United Kingdom
VT	Voltage Transformer

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	Issue 93 'Review of the BSC metering Codes of practice'	https://www.elexon.co.uk/smg-issue/issue-93/
	60044-1	https://shop.bsigroup.com/products/instrument-transformers-current-transformers?pid=000000000030028020
	61869-2	https://shop.bsigroup.com/products/instrument-transformers-additional-requirements-for-current-transformers
	BSCP32 'Metering Dispensations'	https://www.elexon.co.uk/csd/bscp32-metering-dispensations/
	British Standard Institution (BSI)	https://www.bsigroup.com/en-GB/our-services/product-certification/product-certification-schemes/IEC-testing-and-certification/
	Second meeting of Issue 93	https://www.elexon.co.uk/meeting/issue-93-workgroup-2/
5	Code of Practice 1 'The Metering of Circuits with a Rated Capacity Exceeding 100MVA for Settlement Purposes'	https://www.elexon.co.uk/csd/cop-code-of-practice-1/
	Code of Practice 2 'The Metering of Circuits with a Rated Capacity not exceeding 100 MVA for Settlement Purposes'	https://www.elexon.co.uk/csd/code-of-practice-2-the-metering-of-circuits-with-a-rated-capacity-not-exceeding-100-mva-for-settlement-purposes/
	Code of Practice 3 'The Metering of Circuits with a Rated Capacity not Exceeding 10 MVA for Settlement Purposes'	https://www.elexon.co.uk/csd/cop-code-of-practice-3/
	Code of Practice 4 'The Calibration, Testing and Commissioning Requirements of Metering Equipment for Settlement Purposes'	https://www.elexon.co.uk/csd/cop-code-of-practice-4/
	Code of Practice 5 'The Metering of Energy Transfers with Max Demand of up to (and including) 1MW for Settlement Purposes'	https://www.elexon.co.uk/csd/cop-code-of-practice-5/
	Code of Practice 10 'The Metering of Energy via Low Voltage Circuits for Settlement Purposes'	https://www.elexon.co.uk/csd/code-of-practice-10-the-metering-of-energy-via-low-voltage-circuits-for-settlement-purposes/
	5	Metering Dispensation D/505
8	Issue 93 Work Group	https://www.elexon.co.uk/smg-issue/issue-93/