

## Final CP Report

### CP1554 'Future proofing changes to the measurement transformers standards in the CoPs'

#### Contents

|    |                                    |    |
|----|------------------------------------|----|
| 1. | Summary                            | 3  |
| 2. | Why Change?                        | 5  |
| 3. | Solution                           | 7  |
| 4. | Impacts and Costs                  | 8  |
| 5. | Implementation Approach            | 11 |
| 6. | Initial Committee Views            | 12 |
| 7. | Industry Views                     | 13 |
| 8. | Final Committee Views and Decision | 14 |
|    | Appendix 1: Glossary & References  | 15 |



#### Contact

Stanley Dikeocha

020 7380 4063

[stanley.dikeocha@elexon.co.uk](mailto:stanley.dikeocha@elexon.co.uk)

[BSC.change@elexon.co.uk](mailto:BSC.change@elexon.co.uk)

#### 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 8
- Have 30 mins? Read all sections
- Have longer? Read all sections and the annexes and attachments

This document is the CP1554 Final Change Proposal (CP) Report which Elexon has published following the final decision from the ISG and SVG to approve CP1554.

There are nine parts to this document:

- This is the main document. It provides details of the solution, impacts, costs, and implementation approach. It also summarises the ISG's and SVG's views on the proposed changes and the views of respondents to the CP Consultation, along with the final decision to approve this change.
- Attachment A contains the CP proposal form.
- Attachments B-G contain the proposed redlined changes to deliver the CP1554 solution.

CP1554

Final CP Report

12 January 2022

Version 1.0

Page 1 of 17

© Elexon 2022

- Attachment H contains the full responses received to the CP Consultation.

## 1. Summary



### 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

### Why change?

The 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 <sup>1</sup>, <sup>2</sup>, <sup>3</sup>, <sup>4</sup>, <sup>5</sup> and <sup>10</sup> will be referred to as 'the relevant CoPs'.

### Solution

CP1554 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

CP1554 is expected to impact Registrants, Licensed Distribution System Operators (LDSOs), Central Volume Allocation (CVA) Meter Operator Agents (MOAs), Metering Equipment Managers (MEM) under the Retail Energy Code (REC) and other procurers of measurement transformers for Settlement purposes.

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

### Implementation

CP1554 is proposed for implementation on 30 June 2022 as part of the standard June 2022 BSC Release.

CP1554

Final CP Report

12 January 2022

Version 1.0

Page 3 of 17

© Elexon 2022

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

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

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

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

<sup>5</sup> [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'](#)

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

---

## Committee Decision

---

The **ISG** and **SVG** has:

- **APPROVED** the proposed changes to CoPs 1, 2, 3, 4, 5 and 10 for CP1554; and
- **APPROVED** CP1554 for implementation on 30 June 2022 as part of the standard June 2022 Balancing and Settlement Code (BSC) Release.

## 2. Why Change?



### 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 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.

CP1554

Final CP Report

12 January 2022

Version 1.0

Page 5 of 17

© Elexon 2022

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.

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

### 3. Solution

---

#### Proposed solution

CP1554 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

CP1554 will prevent stranding of measurement transformer stocks as existing ones can be utilised even though the CoPs have been updated and allow newly purchased stocks to be used even when the CoPs haven't yet been updated.

Additionally, by incorporating the principles of Metering Dispensation [D/505](#) 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

---

#### Approved redlining

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

## 4. Impacts and Costs

### BSC Party & Party Agent impacts and costs

#### Participant impacts

CP1554 will impact Licensed Distribution System Operators (LDSOs), Meter Operator Agents (MOAs) and Registrants of the Metering System. These Participants will be expected to update their processes to accommodate the outcome of this change.

#### BSC Party & Party Agent Impacts

| BSC Party/Party Agent                        | Impact  |
|--|---|
| Licensed Distribution System Operator (LDSO) | 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.  |

#### Participant costs

LDSOs, MOAs and Registrants of the Metering System will be impacted by the cost and resources associated with updating their processes.

#### Costs

| BSC Party/Party Agent | Impact |
|-----------------------|--------|
|-----------------------|--------|



|  |   |
|--|---|
| Licensed Distribution System Operator (LDSO) | 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 CoPs. |
| Meter Operator Agents (MOAs)                 |   |
| Suppliers and Registrants                    |   |

---

## Central impacts and costs

---

### Central impacts

---

This is a document only change, therefore no changes required to the BSC central systems.

| Central Impacts  |                  |
|--|------------------|
| Document Impacts   | System Impacts   |
| <a href="#">Code of Practice 1 'The Metering of Circuits with a Rated Capacity Exceeding 100MVA for Settlement Purposes'</a>               | No System Impact |
| <a href="#">Code of Practice 2 'The Metering of Circuits with a Rated Capacity not exceeding 100 MVA for Settlement Purposes'</a>          |                  |
| <a href="#">Code of Practice 3 'The Metering of Circuits with a Rated Capacity not Exceeding 10 MVA for Settlement Purposes'</a>           |                  |
| <a href="#">Code of Practice 4 'The Calibration, Testing and Commissioning Requirements of Metering Equipment for Settlement Purposes'</a> |                  |
| <a href="#">Code of Practice 5 'The Metering of Energy Transfers with Max Demand of up to (and including) 1MW for Settlement Purposes'</a> |                  |
| <a href="#">Code of Practice 10 'The Metering of Energy via Low Voltage Circuits for Settlement Purposes'</a>                              |                  |

---

## Impact on BSC Settlement Risks

### Impact on BSC Settlement Risks

Elexon anticipates no impact on Settlement Risks

---

## Central costs

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

## 5. Implementation Approach

---

### Approved Implementation Date

---

CP1554 will be implemented on 30 June 2022 as part of the standard June 2022 BSC Release.

## 6. Initial Committee Views

---

### ISG's initial views

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

---

### SVG's initial views

CP1554 was also presented to the SVG at its meeting on [Tuesday 2 November 2021](#), with no comments received from the SVG members.

## 7. Industry Views

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

We received three responses to CP1554, two Distributors and a Trade Body. All respondents were in favour of progressing CP1554 and agreed with the proposed solution. Although none of the Parties indicated a cost impact, one of the Distributors noted a low impact on their organisation.

---

### Implementation Date

One of the Distributors disagreed with the implementation approach for CP1554, however no rationale was provided. Elexon contacted the respondent to better understand the reason for disagreeing with the implementation approach. At the time of drafting the paper, Elexon is still trying to make contact with the Distributer to better understand their thoughts

#### Summary of CP1553 CP Consultation Responses

| Question   | Yes | No | Neutral/No Comment | Other |
|--|-----|----|--------------------|-------|
| Do you agree with the CP1554 proposed solution?                      | 2   | -  | 1                  | -     |
| Do you agree that the draft redlining delivers the intent of CP1554? | 2   | -  | -                  | -     |
| Will CP1554 impact your organisation?                                | 1   | 2  | -                  | -     |
| Will your organisation incur any costs in implementing CP1554?       | -   | 3  | -                  | -     |
| Do you agree with the proposed implementation approach for CP1554?   | 2   | 1  | -                  | -     |
| Do you have any further comments on CP1554?                          | 2   | 1  | -                  | -     |

---

### Comments on the proposed redlining

No comments were provided by the respondents.

## 8. Final Committee Views and Decision

---

### ISG's final views

---

The CP1554 Assessment Report (ISG249/09) was presented to the ISG at its meeting on [Tuesday 11 January 2022](#), with no questions received from the ISG members.

---

### SVG's final views

---

The CP1554 Assessment Report (SVG251/09) was presented to the SVG at its meeting on [Tuesday 11 January 2022](#), with comments received from one SVG member.

One SVG member noted the comment from a respondent which highlighted the lack of clarity on whether there is a timeline for using old standard Current Transformers (CTs) following the implementation of the new standard. Elexon confirmed that there was no timeline for using up the CTs stamped to the previous, subject to the accuracy limits of both old and new standards remaining the same.

---

### Final decision

---

The ISG and SVG have:

- **APPROVED** CP1554 for implementation on 30 June 2022 [as part of the standard June 2022 BSC Release].

### 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'  | <a href="https://www.elexon.co.uk/smg-issue/issue-93/">https://www.elexon.co.uk/smg-issue/issue-93/</a>   |
|         | 60044-1  | <a href="https://shop.bsigroup.com/products/instrument-transformers-current-transformers?pid=000000000030028020">https://shop.bsigroup.com/products/instrument-transformers-current-transformers?pid=000000000030028020</a>   |
|         | 61869-2  | <a href="https://shop.bsigroup.com/products/instrument-transformers-additional-requirements-for-current-transformers/standard">https://shop.bsigroup.com/products/instrument-transformers-additional-requirements-for-current-transformers/standard</a>   |
|         | BSCP32 'Metering Dispensations'  | <a href="https://www.elexon.co.uk/csd/bscp32-metering-dispensations/">https://www.elexon.co.uk/csd/bscp32-metering-dispensations/</a>   |
|         | British Standard Institution (BSI)   | <a href="https://www.bsigroup.com/en-GB/our-services/product-certification/product-certification-schemes/IEC-testing-and-certification/">https://www.bsigroup.com/en-GB/our-services/product-certification/product-certification-schemes/IEC-testing-and-certification/</a>                               |
|         | Second meeting of Issue 93   | <a href="https://www.elexon.co.uk/meeting/issue-93-workgroup-2/">https://www.elexon.co.uk/meeting/issue-93-workgroup-2/</a>   |
| 5       | Code of Practice 1 'The Metering of Circuits with a Rated Capacity Exceeding 100MVA for Settlement Purposes'               | <a href="https://www.elexon.co.uk/csd/cop-code-of-practice-1/">https://www.elexon.co.uk/csd/cop-code-of-practice-1/</a>   |
|         | Code of Practice 2 'The Metering of Circuits with a Rated Capacity not exceeding 100 MVA for Settlement Purposes'          | <a href="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/">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/</a> |
|         | Code of Practice 3 'The Metering of Circuits with a Rated Capacity not Exceeding 10 MVA for Settlement Purposes'           | <a href="https://www.elexon.co.uk/csd/cop-code-of-practice-3/">https://www.elexon.co.uk/csd/cop-code-of-practice-3/</a>   |
|         | Code of Practice 4 'The Calibration, Testing and Commissioning Requirements of Metering Equipment for Settlement Purposes' | <a href="https://www.elexon.co.uk/csd/cop-code-of-practice-4/">https://www.elexon.co.uk/csd/cop-code-of-practice-4/</a>   |



|   |  |   |
|---|--|---|
|   | Code of Practice 5 'The Metering of Energy Transfers with Max Demand of up to (and including) 1MW for Settlement Purposes' | <a href="https://www.elexon.co.uk/csd/cop-code-of-practice-5/">https://www.elexon.co.uk/csd/cop-code-of-practice-5/</a>   |
|   | Code of Practice 10 'The Metering of Energy via Low Voltage Circuits for Settlement Purposes'                              | <a href="https://www.elexon.co.uk/csd/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/</a> |
| 5 | Metering Dispensation D/505  | <a href="https://www.elexon.co.uk/reference/exceptions/metering-dispensations/">https://www.elexon.co.uk/reference/exceptions/metering-dispensations/</a>   |
| 8 | Issue 93 Work Group  | <a href="https://www.elexon.co.uk/smg-issue/issue-93/">https://www.elexon.co.uk/smg-issue/issue-93/</a>   |