

# CP1527 'Increase the minimum data storage capacity for Settlement Outstations and mandate specific selectable integration periods for Metering Codes of Practice'

## Contents

<b>1</b>	<b>Why Change?</b>	<b>2</b>
<b>2</b>	<b>Solution</b>	<b>5</b>
<b>3</b>	<b>Impacts and Costs</b>	<b>11</b>
<b>4</b>	<b>Implementation Approach</b>	<b>13</b>
<b>5</b>	<b>Initial Committee Views</b>	<b>14</b>
<b>6</b>	<b>Industry Views</b>	<b>15</b>
<b>7</b>	<b>Recommendations</b>	<b>18</b>
	<b>Appendix 1: Glossary &amp; References</b>	<b>19</b>

## About This Document

This document is the second Change Proposal (CP) Assessment Report for CP1527 which ELEXON will present to the SVG and ISG at their respective meetings on 7 July 2020. The Committees will consider the proposed solution and the responses received to the CP Consultation before making a decision on whether to approve CP1527. The first CP Assessment Report for CP1527 was presented to SVG and ISG on 7 April 2020. Both Committees deferred their decisions to approve or reject CP1527 pending further analysis on the minimum data storage capacity for Settlement Outstations as well as considering the impact of COVID-19 on the implementation date.

There are 9 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 & SVG's initial views on the proposed changes and the views of respondents to the CP Consultation.
- Attachment(s) A-F contain(s) the proposed redlined changes to deliver the CP1527 solution.
- Attachment G contains the Change Proposal Form.
- Attachment H contains the full responses to the CP Consultation



### Committee

Supplier Volume Allocation Group (SVG), Imbalance Settlement Group (ISG)

### Recommendation

Approve

### Implementation Date

30 June 2022 (June 2022 Release)



### Contact

**Andrew Grace**

020 7380 4304

[Andrew.grace@elexon.co.uk](mailto:Andrew.grace@elexon.co.uk)

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



SVG233, ISG231

CP15271527  
CP Assessment Report

30 June 2020

Version 2.0

Page 1 of 20

© ELEXON Limited 2020



## What is the issue?

The Issue 80 [‘Increase in minimum data storage requirements within the relevant Metering CoPs’](#) Proposer, the Association of Meter Operators (AMO), believes that the minimum data storage requirements for Settlement Outstations within the metering Codes of Practice (CoPs) are now 30 years old and reflect the cost of memory and equipment at that time. Meter Operator Agents (MOAs) regard this requirement as unreasonably low. Low memory can result in metered data being overwritten where there are communication line faults and/or sites are difficult to access in order to carry out hand held reads. The Proposer notes that most of the available Settlement Outstations already store far more data than the current minimum data storage capacities required by the CoPs, which are as follows:

Metering CoP	Minimum data storage capacity <sup>1</sup>
CoP1 – circuit rated capacity exceeding 100MVA	10 days
CoP2 – circuit rated capacity not exceeding 100MVA	10 days
CoP3 – circuit rated capacity not exceeding 10MVA	20 days
CoP5 – energy transfers with a maximum demand up to 1MW	20 days
CoP10 – energy for low voltage circuits up to 100kW	20 days

## Background

A Settlement Outstation is a device which stores Half Hourly (HH) metered data (or pulse counts) from one, or more, Settlement Meters. Data Collectors retrieve the HH metered data (or pulse counts) from these Outstations for use in Settlement<sup>2</sup>.

The data storage capacity of an Outstation is limited by the amount of memory that can be allocated to data storage. Once the data storage capacity limit is reached new metered data overwrites the oldest metered data.

The minimum requirements for Settlement Outstations are defined in the relevant metering CoPs.

## Issue 80

The AMO raised Issue 80 on 16 April 2019 to consider whether there is an issue with, and if a change should be made to increase, the current minimum data storage capacity for Settlement Outstations.

The view of the Issue Group is that the current minimum data storage requirements for Settlement Outstations are low and sometimes this causes an issue where an Outstation cannot be read for a period longer than the data storage capacity of the Outstation, resulting in estimated data entering Settlement.

The Issue Group noted that the Imbalance Settlement Period (ISP) is changing to 15 minutes as part of the [Clean Energy Package](#). ELEXON understands that the 15 minute ISP is mandatory from 1 January 2021 unless Ofgem grants an exemption or delay and that

## What is an Outstation?

[Section X Annex X-1](#) defines an **Outstation** as equipment which receives and stores data from a Meter(s) for the purpose, inter alia, of transfer of that metering data to the CDCA or a Data Collector, as the case may be, and which may perform some processing before such transfer and may be one or more separate units or may be integral with the Meter.

<sup>1</sup> per Outstation channel

<sup>2</sup> Pulse counts are converted into energy values using the relevant Pulse Multiplier from the Meter Technical Details.

Ofgem is currently considering an exemption. However, this does not preclude the possibility of moving to 15 minutes in the future, even if an exemption is granted now.

The Proposer believes that a move to a 15 minutes ISP would result in many Outstations needing to be replaced, in the run up to the move to a 15 minutes ISP, if they could not comply with the current minimum data storage requirements. The Proposer believes the industry should prepare for the move to a 15 minutes ISP so that less Outstations require replacing in the future, meaning they can simply be reprogrammed from 30 minutes integration periods to 15 minutes integration periods (either remotely or on site).

The Issue Group concluded that the current minimum data storage capacity requirements for Settlement Outstations should be increased.

Additionally, the Issue Group noted that CoPs 1 and 2 are the only CoPs that require selectable integration periods (i.e. 30, 20, 15, 10 and 5 minutes), yet there is currently no test for this requirement in [BSCP601](#)<sup>3</sup>. CoPs 3, 5 and 10 only require 30 minutes integration periods.

As few BSC Parties were involved with Issue 80, ELEXON agreed to raise CP1527 on behalf of the Issue Group and the AMO.

### Further Issue Group Considerations

In addition to increasing the minimum Outstation data storage capacity requirements the Issue Group also considered for the following change to be made to the CoP requirements:

#### **Mandate the number of Outstation channels to be used for data storage for Settlements purposes as follows:**

- Six channels for Supplier Volume Allocation (SVA) sites
- Four channels for Central Volume Allocation (CVA) sites
- Six channels where there is a split between SVA/CVA i.e. follow SVA requirements

The WG agreed the above change subject to checking potential impacts with the National Electricity Transmission System Operator (NETSO)/Transmission System Owners and Licensed Distribution System Operators (LDSOs) and their requirements for Reactive Energy Measurement Quantities and Demand Values for Use of System (UoS) charging.

ELEXON is in the process of engaging with LDSOs and the NETSO and will raise a Change Proposal after assessing impacts of the proposed change.

### Initial Assessment Report Feedback

The first CP1527 Assessment Report was presented to SVG and ISG on 7 April (at [SVG230](#) and [ISG228](#)). Both Committees deferred their decisions to approve or reject CP1527 pending further analysis on the minimum data storage capacity for Settlement Outstations as well as considering the impact of COVID-19 on the implementation date. ISG specifically asked ELEXON to suggest what an appropriate minimum data storage capacity would be without considering a move to [Market-Wide Half Hourly Settlement](#) or 15 minute integration periods. The initially presented Assessment Report recommended a minimum data storage capacity of 250 days, as advised by the Issue 80 workgroup, to coincide with



#### **What is an integration period?**

An integration period is a time interval over which instantaneous power measurements (e.g. kilowatts) are converted ('integrated with respect to time') into energy measurements (e.g. kilowatthours).

<sup>3</sup> 'Metering Protocol Approval and Compliance Testing'

the expected final Settlement Run for Market Wide Half Hourly Settlement and to facilitate 15 minute Settlement. The Issue 80 Group did not believe the cost for increasing the memory would be significantly different whether a high number (e.g. 1000) or low number (e.g. 20) of days was chosen, because memory is now relatively cheap.

### Proposed solution

The Issue 80 Group concluded that a CP should be raised to increase the minimum data storage capacity requirements for Settlement Outstations. In addition, the Issue Group noted that CoPs 1 and 2 are the only CoPs that require selectable integration periods (i.e. 30, 20, 15, 10 and 5 minutes), yet there is currently no test for this requirement in [BSCP601](#)<sup>4</sup>.

This Change Proposal proposes two changes:

- Increase the minimum data storage capacity for Settlement Outstations to 90 days per channel, at 30 minutes integration periods, for CoPs 1, 2, 3, 5 and 10,
  - The Issue 80 group originally proposed 250 days per channel but this has been updated following requested analysis (see below) by ISG and SVG; and
- Mandate specific, selectable, integration periods for CoPs 3, 5, and 10 and add a test for this requirement (and for CoPs 1 and 2) into BSCP601.

### Proposer's rationale

The Issue 80 Workgroup (WG) believed the main benefit of increasing the minimum data storage requirements for Settlement Outstations is that it would reduce the risk of estimated data entering Settlement caused by metered data being overwritten when the Outstation data storage capacity is exceeded.

The rationale for increasing the minimum data storage capacities for Settlement Outstations is that:

- all new and significantly modified Outstations are more resilient to data loss in the event of communications/access issues;
- some Outstation manufacturers are currently producing Outstations that meet the proposed requirements;
- the Issue Group did not believe the costs associated with increasing the minimum data storage requirement for Settlement Outstations would be significant;
- changing the CoPs will improve and simplify industry standards; and
- this change will ensure data storage requirements for Settlement Outstations keep pace with technology and are not barriers to future innovation.

The rationale for mandating specific, selectable, integration periods (i.e. 30, 20, 15, 10 and 5 minutes) for CoPs 3, 5, and 10, to align with CoPs 1 and 2, and adding a test for this requirement into BSCP601 (for CoPs 1, 2, 3, 5 and 10) is:

- it will ensure consistency across all the CoPs;
- it will future proof CoPs 3, 5 and 10 if 15 minutes integration periods are required; and

---

SVG233, ISG231

CP15271527  
CP Assessment Report

---

30 June 2020

---

Version 2.0

---

Page 5 of 20

---

© ELEXON Limited 2020

---

<sup>4</sup> 'Metering Protocol Approval and Compliance Testing'

- confirming this requirement, as part of the BSCP601 process, for CoPs 1, 2, 3, 5 and 10 Outstations will provide assurance that all Outstations do indeed comply with this requirement.

## Proposed redlining

CP1527 will require amendments to:

- [CoP1 'Code of Practice for the metering of circuits with a rated capacity exceeding 100MVA for Settlements purposes'](#)
- [CoP2 'Code of Practice for the metering of circuits with a rated capacity not exceeding 100MVA for Settlements purposes'](#)
- [CoP3 'Code of Practice for the metering of circuits with a rated capacity not exceeding 10MVA for Settlements purposes'](#)
- [CoP5 'Code of Practice for the metering of energy transfers with a maximum demand of up to \(and including\) 1MW for Settlement purposes'](#)
- [CoP10 'Code of Practice for metering of energy via low voltage circuits for Settlement purposes'](#)
- [BSCP601 'Metering Protocol Approval and Compliance Testing'](#)

Minor Housekeeping changes have been made to all the above documents.

Redlined changes to these documents can be found in Attachments A-F. The redlining reflects our recommended change following the analysis requested by ISG and SVG on 7 April 2020.

## Further analysis of minimum storage capacity

Following instruction from SVG & ISG in April 2020, ELEXON has carried out further analysis to determine an appropriate minimum data storage capacity without considering a move to Market-Wide Half Hourly Settlement or 15 minute integration periods. The SVG and ISG requested this because they were concerned that 250 days could reduce the number of Outstations available to buy or install, leaving only a few manufacturers to choose from. This could detrimentally impact competition and could cause prices to rise.

## Outstation manufacturer market analysis

ELEXON obtained data on 36 Outstations throughout the Issue 80 process by contacting manufacturers and researching via the internet where no response was received. This consisted of 10 separate manufacturers with multiple records for Outstations if they had types with different storage capacities e.g. Manufacturer A, Outstation type X, Storage Capacity 128kb and 512kb would be counted as two separate Outstations.

Data items captured:

- Manufacturer Name
- Outstation type
- Version (if applicable)

---

SVG233, ISG231

CP15271527

CP Assessment Report

---

30 June 2020

Version 2.0

---

Page 6 of 20

© ELEXON Limited 2020

- Capacity per channel/number of days
  - If not stated, data was estimated for purpose of analysis to show capacity for 6 channels e.g. If Outstation had 1 channel with a capacity of 300 days this was estimated to be 50 days at six channels.
- Code of Practice's Outstations applicable for (CoP1, CoP2, CoP3, CoP5, CoP10)
  - Some Outstations comply with multiple CoPs.
- Is the Outstation still on sale? (Yes/No)
- Is the Outstation being phased out? (Yes/No)

In order to carry out analysis against a consistent set of data, and to be relevant for the CP, we reduced the number of Outstations by applying the following criteria:

- Removed any Outstations we did not have knowledge on their capacity/per channel
- Removed any Outstations that are no longer on sale
- Removed any Outstations that are being phased out by manufacturers

This left 21 Outstations across six manufacturers. Of the manufacturers no longer considered; one did not have data available on the capacity per channels and three no longer have Outstations available for sale.

The below table breaks down the number of Outstations and manufacturers available at each CoP following the above criteria being applied.

	CoP1	CoP2	CoP3	CoP5	CoP10	Total
<b>Outstations</b>	11	13	11	6	11	<b>21</b>
<b>Manufacturers</b>	5	6	5	4	4	<b>6</b>

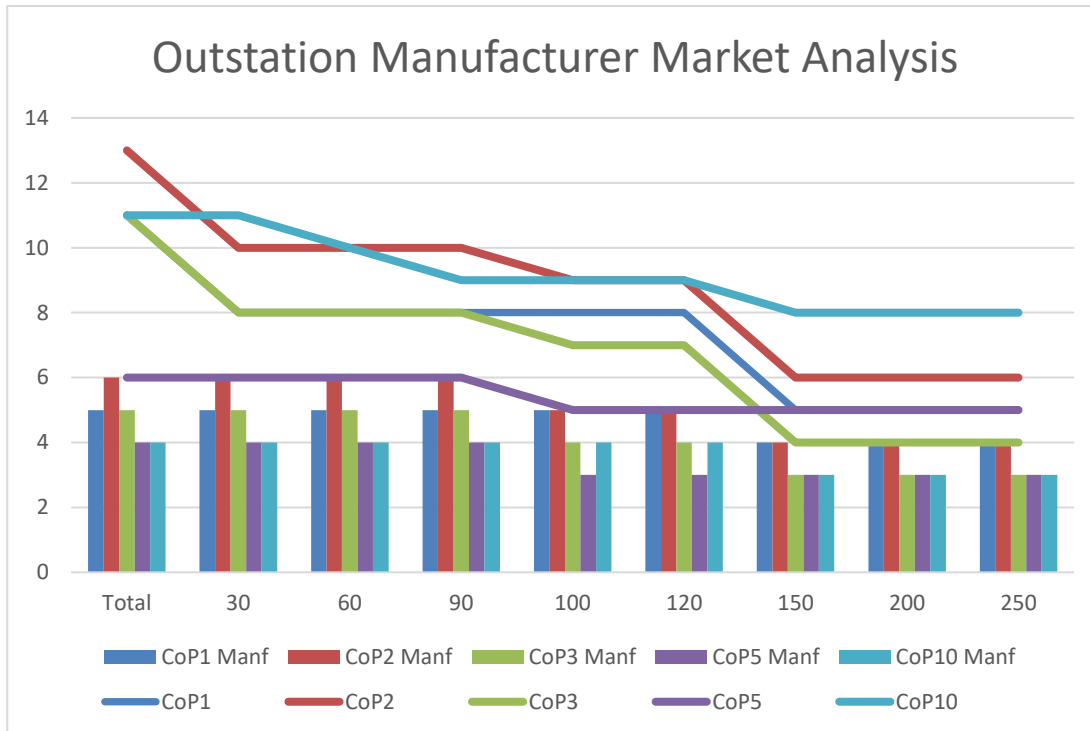
**Note:** Totals are not a sum of the Outstations or Manufacturers available at each CoP due to some Outstations being available on multiple CoP's.

With the data we analysed for each CoP the number of Outstations and Manufacturers that would be available if CP1527 set the minimum data storage capacity for six channels at the following levels:

- Total Outstations available
- 30 days
- 60 days
- 90 days
- 100 days
- 120 days
- 150 days

- 200 days
- 250 days

The below graph shows the breakdown of this analysis:



- The x axis represents the different number of storage capacity days analysed
- The y axis represents volume

The line graphs represent the number of Outstations available and the bar charts represent the number of Manufacturers available at the different storage capacity levels.

The analysis from the graph suggests three different potential solutions:

- 90 days: no impact on available manufacturers. Outstation numbers only decrease between 30 and 90 days for CoP10 (from 11 to 9).
- 120 days: one manufacturer excluded from both CoP2 and CoP5. More than 60% of outstations still available across the CoPs.
- 250 days: at least three manufacturers available for all CoPs. For any CoP, there are at least four Outstations still available.

We believe recommending a minimum storage capacity of 90 days would provide Registrants sufficient choice of Outstation manufacturers to help them make commercial decisions, whilst reducing the risk of data being overwritten resulting in estimated data entering Settlement (assuming Agents do not amend working practices in response to the increase in memory).

The below table displays the percentage of Outstation available for each CoP at each of the analysed level of number of storage capacity days versus the baselined totals:

No. Days	CoP1	CoP2	CoP3	CoP5	CoP10
<b>Total</b>	100%	100%	100%	100%	100%
<b>30</b>	73%	77%	73%	100%	100%



<b>60</b>	73%	77%	73%	100%	91%
<b>90</b>	73%	77%	73%	100%	82%
<b>100</b>	73%	69%	64%	83%	82%
<b>120</b>	73%	69%	64%	83%	82%
<b>150</b>	45%	46%	36%	83%	73%
<b>200</b>	45%	46%	36%	83%	73%
<b>250</b>	45%	46%	36%	83%	73%

The below table displays the percentage of manufacturers available for each CoP at each of the analysed level of number of storage capacity days versus the baselined totals:

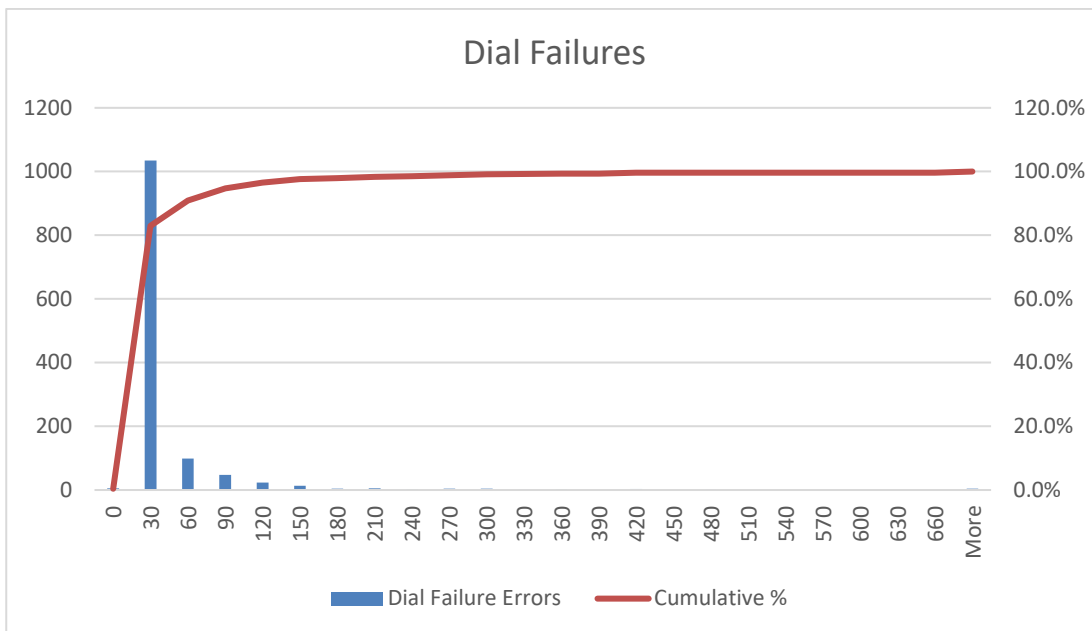
No. Days	CoP1	CoP2	CoP3	CoP5	CoP10
<b>Total</b>	100%	100%	100%	100%	100%
<b>30</b>	100%	100%	100%	100%	100%
<b>60</b>	100%	100%	100%	100%	100%
<b>90</b>	100%	100%	100%	100%	100%
<b>100</b>	100%	83%	80%	75%	100%
<b>120</b>	100%	83%	80%	75%	100%
<b>150</b>	80%	67%	60%	75%	75%
<b>200</b>	80%	67%	60%	75%	75%
<b>250</b>	80%	67%	60%	75%	75%

At every CoP for 90 days the same amount of manufacturers are available although there are drops in the choice of Outstations available at all CoPs apart from CoP5.

## Dial Failures

The Central Data Collection Agent (CDCA) produces a weekly report detailing faults on CVA Outstations. The fault log includes any CVA Metering Systems dialled by the CDCA. This will predominantly include CoPs 1 and 2 Metering Systems, but there will be some CoPs 3 and 5 Metering Systems included. A dial failure is raised by the CDCA if it cannot connect to an Outstation. This could be a main Meter's integral Outstation, a check Meter's integral Outstation or a separate Outstation containing main and check data. For a CoP1 site with separate Outstations you would have a Primary Outstation and a Secondary Outstation each containing main and check Meter data. The data analysed shows the amount of time it took to resolve dial failures that were closed between April 2018 and April 2020. This sampled 1253 instances of reported dial failure errors.

The below graph plots the number of days taken to resolve dial failures (at 30 day intervals) alongside the cumulative resolution percentage increases.



The graph shows that 94.7% of dial failures are resolved within the first 90 days of an error being reported. We believe this lends weight to adjusting the minimum data storage capacity to 90 days as it captures the vast majority of dial failure instances, any increase above this would show diminishing returns for an expected extra cost for Outstation manufacturers.

In order to obtain the comparable data for SVA Outstations (which tend to be integral to the Meter) we would need to issue a Request for Information to HHDC's to understand D0002 (Fault Resolution Report or Request for Decision on Further Action) response times to D0001 (Request Metering System Investigation) requests. ELEXON collected similar data as part of Issue 80, detailing the time it took for D0002 response rates up to July 2018, which identified 93% of 2447 faults were resolved within 90 days. We believe this data is representative of the current market and therefore it would be both cost and time prohibitive to request again.

We are aware from the Issue Group conversation that the time to resolve faults is partially dependent upon meter memory so by increasing these standards there would be more time to attempt data retrieval, potentially providing less urgency for the first read attempt and therefore delaying the discovery time of faults.

### **ELEXON recommendation based on this analysis**

This also aligns with the availability of Outstations and the combination of these two pieces of analysis supports a recommendation to increase the minimum data storage capacity for Settlement Outstations to 90 days per channel, at 30 minute integration periods, for CoPs 1, 2, 3, 5 and 10.

We believe this level will stimulate competition in high-capacity outstations however it takes time for these to come to market. This recommendation balances the current availability of outstations alongside potentially future-proofing the CoPs.

## 3 Impacts and Costs

### Central impacts and costs

#### Central impacts

BSC Document changes are needed to Codes of Practice 1, 2, 3, 5 and 10 and BSCP601 to implement the solution to this CP. BSC Document changes are required as outlined in the table below:

Central Impacts	
Document Impacts	System Impacts
BSCP601 'Metering Protocol Approval and Compliance Testing'	None
CoP1 'Code of Practice for the Metering of Circuits with a Rated Capacity Exceeding 100MVA for Settlement'	
CoP2 'Code of Practice for the Metering of Circuits with a Rated Capacity Not Exceeding 100MVA for Settlement Purposes'	
CoP3 'Code of Practice for the Metering of Circuits with a Rated Capacity Not Exceeding 10MVA for Settlement Purposes'	
CoP5 'Code of Practice for the Metering of Energy Transfers with a Maximum Demand of up to (and Including) 1MW for Settlement Purposes'	
CoP10 'Code of Practice for Whole Current Metering of Energy via Low Voltage Circuits for Settlement Purposes'	

A new CoP, CoP11 is being developed under Modification P375 '[Metering behind the Boundary Point.](#)' If CP1527 and P375 are approved, CoP11 will need updating to reflect the agreed minimum number of days per channel for "Half Hourly Integral Outstation Meters". A CP1527 decision is due well before P375 Implementation. CoP11 can therefore be updated either as part of the P375 Assessment Procedure or as part of the P375 implementation phase, where CP1527 is approved.

#### Central costs

The total BSC implementation costs for CP1527 will be approximately £240 (one ELEXON Working Day) of effort to implement the necessary document changes.

#### Impact on BSC Settlement Risks

##### Impact on BSC Settlement Risks

CP1527 will help mitigate risk under Settlement Risk 005<sup>5</sup> and Settlement Risk 023<sup>6</sup> as it will give Registrants/HHMOAs/CVA MOAs more time to successfully retrieve HH metered data from Outstations that have a comms fault or are on permanent hand held reads and sites where access is difficult to secure, when site visits are required.

SVG233, ISG231

CP15271527  
CP Assessment Report

30 June 2020

Version 2.0

Page 11 of 20

© ELEXON Limited 2020

<sup>5</sup> A fault with SVA Metering Equipment is not resolved, such that metered data is recorded incorrectly or cannot be retrieved

<sup>6</sup> A fault with CVA Metering Equipment is not resolved, such that metered data is recorded incorrectly or cannot be retrieved

## **BSC Party & Party Agent impacts**

BSC Parties (Generators, Suppliers, Transmission Operator and Distributor) and Party Agents (CVA MOA and HH MOA) who purchase and/or install Outstations need to be aware that the CoPs are changing so they purchase/install compliant Outstations if CP1527 is approved. BSC Parties (i.e. Registrants) who register Outstations need to be aware that the CoPs are changing so they register compliant Outstations and do not therefore need to seek Metering Dispensations under [BSCP32](#)<sup>7</sup> if CP1527 is approved. As is normally the case for CoP changes, the changes will not apply retrospectively and will only apply to newly installed Outstations.

## **CP Consultation Responses – Impacts and Costs**

Five of the nine CP consultation respondents identified costs that would be incurred to their organisations. Stated costs from MOAs concerned replacing any non-compliant Outstations and potential write-off of stock if required. This CP does not apply retrospectively so costs would only be incurred by MOAs if they have stock in place post the Implementation date.

## **Outstation manufacturers**

As part of the Issue 80 discussions ELEXON engaged with Outstation manufacturers to gauge the impact of changes to minimum Outstation data storage capacity requirements.

Some manufacturers confirmed their Outstations would be able to comply with the proposed change to 90 days (16/21 applicable Outstations could comply). However, some Outstation manufacturers will need time to redesign existing or develop new Outstation types to meet the new requirements so this should feed into the implementation timescale for CP1527.

ELEXON will need to contact current Outstation manufacturers and advise them of the approved changes (and implementation date) and ask them to submit BSCP601 compliance testing applications and confirm compliance with the new requirements (either through a formal letter confirming compliance or through testing).

---

SVG233, ISG231

CP1527/1527  
CP Assessment Report

---

30 June 2020

---

Version 2.0

---

Page 12 of 20

---

© ELEXON Limited 2020

---

<sup>7</sup> 'Metering Dispensations'

## 4 Implementation Approach

### Recommended Implementation Date

We propose this CP be implemented on **30 June 2022** as part of the scheduled June 2022 BSC Release.

The Issue 80 WG recommended a 12 month implementation lead time, originally proposing an implementation date of **24 June 2021**. The logic for this was some Outstation manufacturers will need time to redesign existing or develop new Outstation types to meet the new requirements so this should feed into the implementation timescale for CP1527.

Following consultation responses and concerns raised by industry participants highlighted in Section 6; we recommend the original implementation date of 24 June 2021 be delayed by 12 months to 30 June 2022. This will enable Outstation manufacturers more time to develop products to match the new specifications and ensure that existing Outstation stock can be installed in the intervening period, thus reducing the risk of Metering Equipment becoming redundant.

### COVID-19 Impact on Implementation Date

Both ISG and SVG requested ELEXON to consider the impact of COVID-19 on the proposed implementation date. Given the uncertainty around the ongoing global impact of COVID-19 it is difficult to speculate on proposing a change to the implementation date for CP1527. At the time of writing, the COVID-19 threat level in the UK has been reduced and we understand that some site visits have restarted.

At this stage we feel a nearly two year lead time to implement the CP is an acceptable timeframe given the limited data available to suggest otherwise.

We also believe the nearly two year timeframe before implementation gives sufficient notice for any potential Outstation manufacturers that are developing new products to adapt to the new standards.

### Communication

We are very aware of the importance for timely and clear communication, where CP1527 is approved, on the implementation timeframes and requirements for this CP. We plan to communicate this change, where approved via:

- The normal BSC change distribution list;
- [Newscast](#);
- ELEXON website and social media channels;
- Direct to Outstation manufacturers;
- To Suppliers and Supplier Agents via ELEXON Operational Support Managers; and
- Via the Association of Meter Operator Agents.

---

SVG233, ISG231

CP15271527  
CP Assessment Report

---

30 June 2020

---

Version 2.0

---

Page 13 of 20

---

© ELEXON Limited 2020

## 5 Initial Committee Views

The SVG ([SVG228](#)) and ISG ([ISG226](#)) considered CP1527 on 4 February 2020.

### SVG's Initial Views

The SVG noted the progression paper and provided no comments on the proposed change or identifying any additional questions for consultation.

### ISG's Initial Views

An ISG Member raised concerns about the availability of compliant Outstations if the proposed change is made. There is a risk that less Outstation manufacturers will produce compliant Outstations if other models become non-compliant leaving the industry with less choices. The Member gave an example of an SVA Outstation type (which is a popular choice with HHMOAs) which would not comply with the proposed changes and the manufacturer had indicated it had no plans to modify the Outstation to do so. ELEXON noted the manufacturer feedback/analysis it had undertaken in the Issue 80 Final Report about Outstation compliance and that the Issue 80 WG believes that increasing the minimum data storage capacity requirements in the CoPs may facilitate a more competitive market. The Issue 80 WG did have some concerns about the availability of CT operated Meters with integral Outstations for CoP3 sites.

The Member highlighted that while the majority of Outstations are integral with Meters some Meters are separate from Outstations and that some separate Outstations are nearing end of life. Manufacturers are less likely to change these Outstations to comply with the proposed requirements. The Member wondered whether existing spares for/stocks of these Outstations could be used after the change is implemented. ELEXON expressed its view that replacing Metering Equipment like-for-like<sup>8</sup> constitutes a "material change"<sup>9</sup> to Metering Equipment and therefore replacement Metering Equipment would need to comply with the latest version of the relevant CoP. ELEXON noted that a Registrant could apply for a Metering Dispensation to allow Outstation types (that would become non-compliant) to be used if a "material change" was made to the Outstation at a site.

The Member asked if the proposed change is retrospective. ELEXON confirmed that the proposed change is not retrospective, it will only be effective going forward.

### SVG and ISG views following consultation

Following the CP1527 consultation, the CP1527 Assessment Report was presented to SVG and ISG at their respective meetings on 7 April 2020. Both Committees advise they agreed with the principle of the CP but deferred their decisions to approve CP1527 pending further analysis on the minimum data storage capacity for Settlement Outstations.

---

<sup>8</sup> Post meeting clarification: If spare parts are used, and these don't constitute a "material change" to the Outstation, then the Outstation can continue to be used after the Implementation Date.

<sup>9</sup> Section L3.3 'Material change' defines a material change as 'a change to the Metering Equipment other than a change by way of repair, modification or replacement of any component which is not, in the judgement of the Meter Operator Agent acting in accordance with Good Industry Practice, a substantial part of the Metering Equipment even where an enhanced or equivalent component is used for the repair, modification or replacement rather than an identical component'.

## 6 Industry Views

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

Summary of CP1527 CP Consultation Responses				
Question	Yes	No	Neutral/ No Comment	Other
Do you agree with the CP1527 proposed solution?	6	4	0	0
Do you agree that the draft redlining delivers the intent of CP1527?	7	1	2	0
Will CP1527 impact your organisation?	6	3	1	0
Will your organisation incur any costs in implementing CP1527?	5	3	2	0
Do you agree with the proposed implementation approach for CP1527?	7	2	1	0
Do you have any further comments on CP1527?	5	5	N/A	N/A

In total 10 responses were received for; two Suppliers, one Outstation manufacturer and seven participants representing multiple Supplier Agents including Meter Operators, Data Collectors, Data Aggregators for both Central and Supplier Volume Allocation roles and Half Hourly and Non Half Hourly roles.

### Solution

Six respondents to the consultation agreed with the CP1527 solution, five of the seven Supplier Agents and one Supplier. Respondents believed that the changes would provide Settlement benefits as more data could be retrieved from Outstations in the event of communication issues.

Four respondents disagreed with the CP1527 solution. Concerns were raised around the timescale for implementing CP1527 and what would happen to existing Outstation stock that would not comply with the new CoP requirements following implementation. Following conversations with the Issue 80 proposer, respondents from Supplier Agents and an Outstation manufacturer, we propose to push the implementation of CP1527 back to 30 June 2022. The Supplier agents' agreed a one year extension would decrease the risk of having incompatible Outstations in stock without the ability to install them. The Outstation manufacturer advised this date would give them time to bring a new compatible product to market. An additional Supplier raised this concern but was unavailable for comment to our proposed Implementation Date amendment.

We have also advised participants there is no direct correlation between this CP and any possible prospective change in Settlement Periods. If such a change was to be implemented in the future there would be separate BSC changes to accommodate this.

The Issue 80 Group advised an increase to 250 days per channel in order to future proof against any potential changes around Settlement Periods and Settlement performance,

SVG233, ISG231

CP15271527  
CP Assessment Report

30 June 2020

Version 2.0

Page 15 of 20

© ELEXON Limited 2020

effectively ensuring this would cover a move to four month Settlement performance standards upon a move to Market Wide Half Hourly Settlement (MHHS) and allowing data to be collected for the entire period if a change to 15 minutes Settlement Periods were introduced going forward (and Outstations needed to be programmed to 15 minutes integration periods).

The Outstation manufacturer respondent noted having more data storage in an Outstation is an increased risk that allows for less site visits for manual data collection in the event of communications failure and could result in more estimated data in Settlement in the intervening period. ELEXON advised that existing controls might need to be looked at or additional controls might need to be introduced to counteract this.

Following the further analysis carried out following the deferral of CP1527; the reduction to 90 days from the originally proposed 250 also increases the controls of the risk highlighted by the Outstation manufacturer above.

Following conversation with the Outstation manufacturer we acknowledge potential issues they raised around testing Outstations with larger data storage capacities, e.g. the challenges faced with modern, more secure, Outstations of loading them with 'dummy data' to within 10 (or 20) days of full capacity to ensure newest data overwrites oldest data or the potential risk of getting a 'false positive' by using different integration periods (e.g. 5 minutes) to do so. We also agree that the test proposed in BSCP601 to check for the functionality (only) to select other non-Settlement integration periods (e.g. 15 minutes) does not actually require the Compliance Testing Agent to confirm Outstations accurately allocate energy to 15 minutes 'Demand Value' registers.

However, we propose to contact Outstation manufacturers in the run up to the CP implementation date and ask them to confirm compliance with the proposed CP requirements and additionally suggest they confirm their Outstations do accurately allocate energy when set to 15 min integration periods. This could be done by a Compliance Testing Agent or ELEXON could conduct witness testing performed at the manufacturer's premises using suitably accurate and calibrated energy standards. This will provide assurance to themselves and industry that when the time comes to move to 15 minutes ISPs and, if in turn, this requires 15 minutes integration periods for Outstations, participants will have a 'heads up' on whether those Outstations should continue to be installed, well before the actual move.

## Red-Lining

Following a call with the Outstation manufacturer who raised concerns around an incorrect reference, this was clarified as a misunderstanding.

## Implementation

Following correspondence with ELEXON, the two respondents who did not agree with the implementation approach have confirmed they support the amended Implementation Date of 30 June 2022.

---

SVG233, ISG231

CP15271527  
CP Assessment Report

---

30 June 2020

---

Version 2.0

---

Page 16 of 20

---

© ELEXON Limited 2020



## Other comments

Of the four respondents who originally did not agree with the proposed solution all mentioned the increased capacity to be too large an increase. Two of these four, a Supplier and Outstation Manufacturer, proposed 90 days and 93 days respectively.

A Supplier Agent highlighted the lack of available manufacturers available at 250 days which we have demonstrated in the solution section of this document would provide a comparable level of choice as currently available to the market if the capacity is increased to 90 days. We also believe this will cover the final Supplier Agent respondent who stated their Outstations do not hold data for the proposed 250 days period; as the proposed change to 90 days should alleviate these concerns.

## Do we need to re-issue CP1527 for consultation?

BSCP40 allows the SVG and the ISG to amend the CP1527 solution so long as they both unanimously agree with the amendment and there is no material impact on the solution. We are recommending the number of days be reduced from the originally proposed 250 to 90 and to delay the Implementation Date from June 2021 to June 2022. We do not believe it necessary to re-consult because:

- The intent of the solution remains the same (to increase the Outstation memory);
- The majority of respondents supported the change already and all but one that didn't originally support the change, would do, if our recommendations are agreed; and
- The amendment reduces the impact on industry.

## 7 Recommendations

We invite the **SVG** to:

- **AGREE** the amendments to the proposed redlining for BSCP601, CoP3, CoP5 and CoP10 for CP1527 made following the CP Consultation;
- **APPROVE** the proposed changes to BSCP601, CoP3, CoP5 and CoP10 for CP1527;
- **APPROVE** CP1527 for implementation on 30 June 2022 as part of the June 2022 BSC Release; and
- **NOTE** that:
  - The Implementation Date has been extended from 24 June 2021 in response to consultation responses and COVID-19; and
  - CP1527 will also be presented for decision to the ISG on 7 July 2020.

We invite the **ISG** to:

- **AGREE** the amendments to the proposed redlining for BSCP601, CoP1, CoP2 and CoP3 for CP1527 made following the CP Consultation;
- **APPROVE** the proposed changes to BSCP601, CoP1, CoP2 and CoP3 for CP1527;
- **APPROVE** CP1527 for implementation on 30 June 2022 as part of the June 2022 BSC Release; and
- **NOTE** that:
  - The Implementation Date has been extended from 24 June 2021 in response to consultation responses and COVID-19; and
  - CP1527 will also be presented for decision to the SVG on 7 July 2020.

## Appendix 1: Glossary & References

### Acronyms

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

Acronyms	
Acronym	Definition
AMO	Association of Meter Operators
BSC	Balancing and Settlement Code
BSCP	Balancing and Settlement Code Procedure
CDCA	Central Data Collection Agent
CoP	Metering Code of Practice
CP	Change Proposal
CPC	Change Proposal Consultation
CVA	Central Volume Allocation
DWG	Design Working Group
HH	Half Hourly
ISP	Imbalance Settlement Period
LDSO	Licensed Distribution System Operator
MOA	Meter Operator Agent
MHHS	Market-wide Half Hourly Settlement
NETSO	National Electricity Transmission System Operator
RF	Final Reconciliation
SVA	Supplier Volume Allocation
SVG	Supplier Volume Allocation Group
UoS	Use of System (UoS)
WG	Workgroup

## 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		
Description	Page	URL
Issue 80 Webpage on ELEXON Website	2	<a href="https://www.elexon.co.uk/smg-issue/issue-80/">https://www.elexon.co.uk/smg-issue/issue-80/</a>
Clean Energy Package	3	<a href="https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/clean-energy-all-europeans">https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/clean-energy-all-europeans</a>
BSCP601 Webpage	3	<a href="https://www.elexon.co.uk/csd/bscp601-metering-protocol-approval-and-compliance-testing/">https://www.elexon.co.uk/csd/bscp601-metering-protocol-approval-and-compliance-testing/</a>
SVG230	3	<a href="https://www.elexon.co.uk/meeting/svg230/">https://www.elexon.co.uk/meeting/svg230/</a>
ISG228	3	<a href="https://www.elexon.co.uk/meeting/isg228/">https://www.elexon.co.uk/meeting/isg228/</a>
Electricity Settlement Reform Significant Code Review	3	<a href="https://www.ofgem.gov.uk/publications-and-updates/electricity-settlement-reform-significant-code-review-launch-statement-revised-timetable-and-request-applications-membership-target-operating-model-design-working-group">https://www.ofgem.gov.uk/publications-and-updates/electricity-settlement-reform-significant-code-review-launch-statement-revised-timetable-and-request-applications-membership-target-operating-model-design-working-group</a>
CoP1 Webpage on the ELEXON Website	5	<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>
CoP2 Webpage on the ELEXON Website	5	<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>
CoP3 Webpage on the ELEXON Website	5	<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>
CoP5 Webpage on the ELEXON Website	5	<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>
CoP10 Webpage on the ELEXON Website	5	<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>
P375 Webpage	9	<a href="https://www.elexon.co.uk/mod-proposal/p375/">https://www.elexon.co.uk/mod-proposal/p375/</a>
BSCP32 Webpage on the ELEXON Website	10	<a href="https://www.elexon.co.uk/csd/bscp32-metering-dispensations/">https://www.elexon.co.uk/csd/bscp32-metering-dispensations/</a>
ISG226	12	<a href="https://www.elexon.co.uk/meeting/isg226/">https://www.elexon.co.uk/meeting/isg226/</a>
SVG228	12	<a href="https://www.elexon.co.uk/meeting/svg228/">https://www.elexon.co.uk/meeting/svg228/</a>

SVG233, ISG231

CP15271527  
CP Assessment Report

30 June 2020

Version 2.0

Page 20 of 20

© ELEXON Limited 2020