

## Issue 93 Digital Meeting Etiquette

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- Welcome to the Issue 93 Workgroup meeting 8 – we'll start shortly
- No video please to conserve bandwidth
- Please stay on mute unless you need to talk – use IM if you can't break through
- Talk – pause – talk
- Lots of us are working remotely – be mindful of background noise and connection speeds

# ELEXION

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**Issue 93 - Metering Code of Practice  
Review**

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Meeting 8

18 May 2022

# Meeting Agenda

Agenda Item	Lead
1. Welcome and Meeting objectives	Iain Nicoll (Chair)
2. Update on Actions	Stanley Dikeocha (Lead Analyst)
3. Updates on all reviewed aspects	Iain Nicoll
4. End-dating CoPs 6 to 9	Stanley Dikeocha
5. A_16 Obsolete Metering Equipment	Elexon Metering Team
6. AOB Items	Iain Nicoll
7. Next steps & Meeting close	Stanley Dikeocha

## Meeting Objectives

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Objectives for this meeting:

- Confirm the recommendation for “End-dating” CoPs 6 to 9
- To review and confirm the next steps for Aspect 16 ‘Obsolete Metering Equipment’
- Update the Work group on the timeline for the remaining aspects



# ACTION UPDATE

## Action Update

Owner	Action description	Captured from	Update
Elexon	Contact Central Volume Allocation (CVA) Meter Operator Agents (MOAs) to retrieve Calibration testing data/reports	WG6 – Calibration checks for Main and Check Meters	We have received no response from the CVA MOAs
Elexon	Contact Supplier Volume Allocation (SVA) MOAs to retrieve data, which will confirm if Calibration checks were performed on Prometer R/W Meter types	WG6 – Calibration checks for Main and Check Meters	We have received no response from the SVA MOAs
Elexon	Retrieve test reports from Voltage Transformer (VT) and Current Transformer (CT) manufacturers that demonstrates accuracy versus burden/rated current	CT Ratio and Minimum burden Subgroup	We received response and data from two manufacturers
Elexon	Confirm if the BSC requires funding to facilitate the creation of “test reports” for accuracy tests on CTs with burdens less than 25% and rated current less than 5% or 1%	CT Ratio and Minimum burden Subgroup	Confirmed that funding to carry out testing would have to be approved by ISG/SVG as owners of the CoPs
Elexon	Elexon to investigate the possibilities of creating a national private APN, which will be mandated for all Advanced HH Meters	Remote Communications Subgroup	Elexon to provide an update at the final WG meeting
Elexon	Speak to BEIS to confirm if Meters above 100kW are subject to the National survey certification testing, or does it rely on the Balancing and Settlement Code (BSC)	WG6 – Calibration checks for Main and Check Meters	Received an explanation from BEIS



# ASPECT UPDATE

## Aspect Update – CP/Mod raised, recommendation confirmed

Aspect number	Description	Progress	Status
A_09	Tightening the minimum accuracy classes for Meters (CoP5) and CTs (CoPs 3, 5 and 10)	CP1553 raised to address the issue. To be implemented in the June 2022 standard BSC Release.	Closed (CP pending implementation)
A_12	Future proofing changes to the IEC standards	CP1554 raised to address the Issue. To be implemented in the June 2022 standard BSC Release.	Closed (CP pending implementation)
A_15	Monitoring of Voltage failure alarms	CP1550 raised to address the issue in this aspect. To be implemented in the June 2022 standard BSC Release.	Closed (CP pending implementation)
A_11	Determining the relevant CoP for embedded circuits	CP to be raised in June 2022	Awaiting CP
A_07	Consideration of DMP vs AMP	CP to be raised in June 2022, which will effect the recommendation in options 1 and 3  Mod to be raised in July/August 2022, which will effect the recommendation in options 2 and 4	Awaiting CP
A_14	Requirement to provide SLDs for HV and EHV site	Recommendation confirmed and agreed with the Proposer. CP to be raised in July 2022	Awaiting CP

## Aspect Update – CP/Mod raised, recommendation confirmed

Aspect number	Description	Progress	Status
A_06	MWh vs kWh	Recommendation confirmed and agreed with the Proposer.	Closed, recommendation confirmed.
A_05	De-energised circuits	Recommendation confirmed and agreed with the Proposer.	Closed, recommendation confirmed.
A_02	HH vs NHH requirements	Recommendation confirmed and agreed with the Proposer.	Closed, recommendation confirmed.

The recommendation for each Aspect will be accurately reflected in the Issue Report, which will be shared with the Issue Group for review and feedback.

## Aspect Update – in progress, awaiting recommendation

Aspect number	Description	Progress/update	Status
A_03	Duplicate communications paths for Metering Equipment within CoPs 1 and 2	Subgroup session held on Monday 25 April. Elexon to confirm the Issue Group's view on the proposed solution	Recommendation to be confirmed
A_13	Security of using public IP addresses for Communications to Metering Systems	Subgroup session held on Monday 25 April. Elexon to confirm the Issue Group's view on the proposed solution	Recommendation to be confirmed
A_10	Reactive only sites	The conclusion from Workgroup 4 was that a statement should be added to the relevant CoP to guide customers on what to do when they operate outside of the Overall Accuracy points for %1r, and at low power factors.	Recommendation to be confirmed

## Aspect Update – in progress, awaiting recommendation

Aspect number	Description	Progress/update	Status
A_08	Measuring elements on neutral and earth conductors	Use text from 5.3 'Meters' in 5.1 'Measurement Transformers' and provide guidance on neutral and earth conductors. Remove neutral and/or earth conductors sentence in 5.3.	Considered by the Issue Group
A_04	Calibration checks for Main and Check Meters	The progression of this aspect is subject to the data we receive from SVA and CVA MOAs regarding the test report.	Considered by the Issue Group
A_17	Minimum burden requirements and CT ratio vs circuit/agreed capacity	The WG concluded that an appropriate CT ratio is used to ensure accuracy. Low burdens may not present an issue to accuracy if the appropriate CT ratio is specified. Received responses from four manufacturers.	Considered by the Issue Group
A_01	Consolidation of the CoPs	To be finalised in June 2022	Considered by the Issue Group

# Aspect Update – Not considered by the Issue Group

Aspect number	Description	Progress	Status
A_18	Clarify DMP for LV supplies	To be considered in Workgroup 9 [June]	Not Started



# RECOMMENDATIONS ON REVIEWED ASPECTS



ASPECT 13  
'SECURITY OF  
PUBLIC IP  
ADDRESSES FOR  
COMMUNICATIONS'

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## Recommendation/Update – Security of using public IP addresses for communications

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### Issue/Background

- Many of the communications technologies mentioned in the CoPs are outdated and will soon need to be replaced with the newer emerging technologies such as NB-IoT or LTE-M.
- There is no clear requirements in the CoPs as to whether IP based communications methods should operate on a public or private basis. This can lead to interoperability issues within the Private IP space and security concerns within the public IP space.

### Progression

- This was discussed and debated at the Issue 93 Communications Subgroup.

### Our Recommendation

- The creation of a “Communications Guidance Note”.
- A new process (potentially in BSCP601) for the approval of communications methods. These methods (once approved) could then be added to either the CoPs or the new Guidance Note. This will also facilitate the removal of ageing and defunct Communications types (such as PSTN, Paknet, etc).
- An RFI to canvass views on Public vs Private IP communications methods.
- Elexon to investigate the establishment of a “national APN” to be required to be placed on all Advanced Metering Sims to resolve interoperability issues with Private APN.



ASPECT 3  
'DUPLICATE  
COMMUNICATIONS  
PATHS FOR  
METERING  
EQUIPMENT'

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## Recommendation/Update – Duplication communications paths in CoPs 1 and 2

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### Issue/Background

- CoP1 and CoP2 have slight differences in wording around the requirements for “duplicate communication paths”
- CoP2 first suggests that “one Outstation System shall be provided”. However it then goes on to state:
  - *Metering Systems comprising Meters with integral Outstations need not store data from the associated main or check Meter providing that each Outstation has separate communications*
- Whilst CoP1 is clear that separate independent communications are required to each Outstation System, CoP2 could be interpreted to also require duplicate communications (and Outstation Systems) for Meters with integral Outstations. This is in contrast to the requirement that in CoP2 that only one Outstation System need be provided

### Progression

- This was discussed and debated at the Issue 93 Communications Subgroup

### Our Recommendation

- It is proposed to review the wording in both CoP1 & 2 to create some wording which sets out the requirement in more generic terms which are not defined or restricted by a technical solution but will deliver the intended intention of not having a single point of failure



# ‘ASPECT\_10 REACTIVE POWER SERVICES’

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## Recommendation/Update – Reactive Power Services

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### Issue/Background

- Currently, there is lack of clarity on the requirement related to reactive only sites that is currently being proposed by National Grid

### Progression

- Following the review of this aspect, the WG, at the fourth Issue 93 meeting, concluded that a statement should be added to the relevant CoPs to guide customers who will operate outside of the Overall Accuracy points for less than %1 Ir and the power factor range required by the BSC

### Our Recommendation

- Raise and progress a CP to include a cautionary text in CoPs 1, 2, 3 and 5, which will provide guidance on Active Energy accuracy where Settlement Metering Equipment is being used for a Reactive Energy ancillary service



# ‘END-DATING COPS 6 TO 9’

## Recommendation/Update – End-dating CoPs 6 to 9

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### Issue/Background

- As part of the review of Aspect\_01 'Consolidation of the CoPs', Elexon formed a view that Code of Practice (CoPs) 6 to 9 should be excluded from the newly Consolidated CoPs. We believe that CoPs 6 and 7 are currently redundant, CoPs 8 and 9 will become redundant in the near future due to the rollout of Smart and Automatic Meter Reading (AMR) Meters.
- Additionally, CoPs 6 to 9 are significantly different from the rest of the metering CoPs (which have many synergies between them and are mainly structured in the same way) in terms of the metering equipment in which they provide coverage for.

### Progression

- We Issued a RFI to seek the views of Suppliers and Meter Operator Agents (MOAs) on our intention to retire CoPs 6 to 9. We received responses from five Suppliers and three MOAs, all in favour of retiring CoPs 6 to 9 and consolidating the CoPs.

### Our Recommendation

- Elexon recommends that CoPs 6 to 9 is not included in the Consolidated CoPs



NEW ASPECT

ELEXON



# ASPECT 16 'OBSOLETE METERING EQUIPMENT'

## A\_16 Obsolete Metering Equipment

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### What is the Issue?

- Following BSCP601 Compliance Approval against a particular CoP, Meters are deemed to be compliant going forwards with no process for removal or reconsideration of whether that Compliance is still appropriate following a number of years (as an example)
- As a Meter type ages the manufacturer will eventually pull support for that particular Meter type and cease making that Meter or replacement hardware/software that may be needed to keep the Meter in situ and ensure that it continues to work accurately
- As there is no BSC requirement to change Meters after a regulated time in situ (instead Meters are required to be re-calibrated at certain intervals after install detailed in CoP4 and denoted by CoP), this potentially leads to Meters remaining in situ after that Meter (and its associated protocols) is no longer supported by the manufacturer
- This is potentially compounded by the lack of a requirement to batch test the accuracy of a certain Meter type after a number of years in situ (only new Meter types have sample re-calibration requirements and as has been previously discussed Elexon have not received these sample calibration reports for a number of years). This means that Meters are left on the wall (without support) with little evidence of how that Meter type may perform generally a number of years after install

## A\_16 Obsolete Metering Equipment

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### Potential Solutions

- Elexon to contact manufacturers on an annual basis to ask whether they plan to:
  - a) cease manufacturing a certain Meter type
  - b) cease supporting a certain Meter type and its associated protocols
- A requirement to be added (BSCP 601?, CoP4?) that Meters that are no longer supported must be replaced after an agreed on transitional period from when that support is ceased (2 years?)
- A process to be added to BSCP601 to allow manufacturers to withdraw a compliance certificate for a certain approved Meter/Outstation type
- A process to be added to BSCP601 to allow HHDCs to withdraw a Protocol Approval certificate where they no longer wish/are able to support a certain Meter/Outstation type



# AOB ITEMS AND NEXT STEPS



# AOB ITEMS

- Aspect\_4 'Calibration checks for main and check meters'
  - Issue/Background
    - Currently, it is not clear if the calibration checks, and operation checks, for main and check meters are being carried out
    - Also, there is no way of confirming this, as there is no requirement to report on these checks
  - Progression
    - This aspect was raised to determine if reporting of calibration checks is required and/or whether the requirement for the use of different equipment should be reinstated



# NEXT STEPS

## Next steps

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- Arrange the final Workgroup session to review and confirm the recommendation on the following aspects
  - Aspect\_01 'CoP consolidation'
  - Aspect\_4 'Calibration checks for main and check meters'
  - Aspect\_17 'Minimum burden requirements and CT ratio vs circuit/agreed capacity'
  - Aspect\_18 'Clarify DMP for LV supplies'

W/C 27<sup>th</sup> of June

MEETING CLOSE

# ELEXON

## THANK YOU

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**Stanley Dikeocha**

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