

Compliance Testing and Protocol Approvals – The EM-Lite EMP1 (integral Outstation) Meter type

Supplier Volume Allocation Group (SVG)

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Summary In August 2021, EM-Lite Ltd, a Meter manufacturer, applied for Compliance Testing of the EMP1 (integral Outstation) Meter type (EMP1). This was against Code of Practice 10 Issue 2. In March 2022, TMA Data Management Ltd (TMA), and Stark Software International Ltd (Stark), Half Hourly Data Collectors, applied for Protocol Approval of the EMP1. We invite the SVG to note that, as a result of successful Compliance and Protocol Approval testing, we have issued a Certificate of Compliance to EM-Lite Ltd, and Certificates of Protocol Approval to TMA (MPIDs: UDMS, ASLH and SPOW) and Stark (MPID: SSIL) for the EMP1.

1. Balancing and Settlement Code (BSC) requirements

- 1.1 [BSCP601](#)¹ sets out the processes for Meter manufacturers, Meter Operator Agents, Suppliers, Half Hourly (HH) Data Collectors and other HH Metering Equipment users to apply for compliance testing and protocol² approval. It covers:
- the application process;
 - submission of Metering Equipment;
 - communications with the Compliance and Protocol Testing Agents;
 - amendments to existing approvals; and
 - issuing and removing Certificates of Compliance or Protocol Approval.
- 1.2 Each HH [Code of Practice](#) (CoP) (i.e. CoPs 1, 2, 3, 5, 6 and 10) requires Meters and Outstations to be tested for compliance in accordance with BSCP601. BSC Parties can apply, under [BSCP32](#)³, for a Metering Dispensation from any departure from the requirements of a CoP.
- 1.3 Each HH CoP also requires Outstation data to be to a format and protocol approved by the BSC Panel⁴ in accordance with BSCP601.

¹ 'Metering Protocol Approval and Compliance Testing'

² A protocol, in the context of an Outstation, is the set of rules (or language) governing the communication of data between the Outstation and any other device connected to it. The manufacturer of the Outstation usually designs the protocol.

³ 'Metering Dispensations'

⁴ Under the BSC Baseline Statement, the BSC Panel has delegated responsibility for BSCP601 to its BSC Panel Committees, the Supplier Volume Allocation Group and the Imbalance Settlement Group. Under BSCP601, since [CP1174](#) was implemented in June 2007, if compliance testing or protocol approval testing is successful, Elexon can issue a Certificate of Compliance or Protocol Approval to an applicant. Prior to June 2007 Elexon had to seek a decision from the relevant BSC Panel Committee before issuing Certificates of Compliance or Protocol Approval to an applicant.

2. Compliance Testing

- 2.1 In August 2021, EM-Lite Ltd (EM-Lite), a Meter manufacturer, applied for Compliance Testing of the EMP1 (integral Outstation) Meter type. This was against [Code of Practice \(CoP\) 10](#) Issue 2⁵. The EMP1 is a three phase whole current Meter.
- 2.2 SGS UK Ltd (a Compliance Testing Agent) carried out compliance testing of the EMP1, with firmware version v1.06.5, between 23 August 2021 and 23 September 2021.
- 2.3 In October 2021, following successful testing, we reviewed the Compliance Testing report and confirmed the EMP1 passed all the relevant tests for CoP10 Issue 2. As a result, we produced a Certificate of Compliance for EM-Lite Ltd for the EMP1, using firmware version v1.06.5.
- 2.4 For the purpose of updating the '[Code of Practice \(CoP\) Compliance and Protocol Approvals](#)' list on the BSC Website, EM-Lite Ltd confirmed that, for the EMP1:
 - it would like to use 'EM2' for the Energy Market Data Specification data item J0471 'Outstation Type'; and
 - the J0432 'Pulse Multiplier' can only be '1'.

3. Firmware update for the EMP1

- 3.1 In November 2021 EM-Lite notified us of an amendment to the compliance tested firmware (Attachment A). It confirmed that:
 - the amended firmware (version v1.06.6) did not impact previously tested Settlement functionality; and
 - the metrology was not impacted.
- 3.2 The manufacturer also confirmed, via email, that the protocol (communication language) the EMP1 uses, has not been impacted.
- 3.3 As a result, we produced another Certificate of Compliance for EM-Lite Ltd for the EMP1, using firmware version v1.06.6.

4. Protocol Approvals – TMA and Stark

- 4.1 On 7 March 2022, TMA Data Management Ltd (TMA), a Half Hourly Data Collector (HHDC), applied for protocol approval of the EMP1 for the following Market Participant Ids (MPIDs):
 - UDMS;
 - ASLH; and
 - SPOW
- 4.2 On 30 March 2022, following successful protocol approval testing, and witnessing (by Elexon), we issued TMA with a Certificate of Protocol Approval for the EMP1.
- 4.3 On 24 March 2022, Stark Software International Limited (Stark), a Half Hourly Data Collector (HHDC), applied for protocol approval of the EMP1 for their MPID (SSIL).
- 4.4 On 31 March 2022, following successful protocol approval testing, and witnessing (by Elexon), we issued Stark with a Certificate of Protocol Approval for the EMP1.

5. Updates and notifications

- 5.1 In April 2022, we:
 - published an updated version of the 'CoP Compliance and Protocol Approval' list to include:
 - the EM Lite EMP1; and
 - the protocol approvals for the EMP1, using TMA (UDMS, ASLH and SPOW) and Stark (SSIL) as HHDCs;
 - published an updated version of the '[List of Valid Outstation Types](#)' with 'EM2' for the EMP1; and
 - issued a Newscast article notifying BSC Parties and BSC Party Agents of the successful compliance testing and protocol approvals for the EMP1.

⁵ 'Code of Practice for the metering of energy via low voltage circuits for Settlement purposes'

6. Recommendations

6.1 We invite the SVG to:

- a) **NOTE** we issued EM-Lite Ltd, a Meter manufacturer, with an updated Certificate of Compliance for the EMP1 integral Outstation Meter type, against Code of Practice 10 Issue 2;
 - b) **NOTE** we issued Certificates of Protocol Approval to TMA Data Management Ltd and Stark Software International Limited, as Half Hourly Data Collectors, for the EMP1 integral Outstation Meter type;
 - c) **NOTE** we updated the 'CoP Compliance and Protocol Approval' list to include the EMP1 integral Outstation Meter type (both firmware versions) and the protocol approvals;
 - d) **NOTE** we updated the 'List of Valid Outstation Types' to include EM2 for the EMP1 integral Outstation Meter type.
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Attachment

Attachment A (CONFIDENTIAL) – Firmware update letter for the EMP1 integral Outstation Meter type

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