

Confirmation of CoP Compliance and Protocol Approval – Firmware updates to the Elster Vision/A1700/A1700i, A1140 and AS230 integral Outstation Meter Types

Supplier Volume Allocation Group (SVG)

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Summary Honeywell (Elster Metering Limited), a Meter manufacturer, has notified Elexon about historic firmware updates to the Vision (also known as the A1700 and A1700i), A1140 and AS230 (integral Outstation) Meter types. It has confirmed that the firmware updates do not impact compliance with the relevant Code(s) of Practice (CoPs) or the protocols these Meter types use. We invite the SVG to note that we: issued updated Certificates of Compliance to Elster Metering Limited; updated the CoP Compliance and Protocol Approvals list; informed industry via a Newscast article about these updates; and will take a similar information paper to the Imbalance Settlement Group (ISG) for the Vision/A1700/A1700i Meter type.

1. Background

- 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 BSCP32³, 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.

- 1.4 BSCP601, section 2.3, covers amendments to Metering Equipment (or data retrieval systems). Manufacturers of Meters or Outstations are required to notify Elexon of any amendments to Metering Equipment and agree the impact of those amendments. HHDCs are required to notify Elexon of any amendments to data retrieval systems and agree the impact of those amendments.

2. Firmware updates for the Vision, A1140 and AS230 integral Outstation Meter types

- 2.1 In July and August 2021 Honeywell (Elster Metering Limited) notified us of a number of historic amendments to the Elster Vision/A1700/A1700i, A1140 and AS230 Meter types. These Meter types all have integral Outstations. The notification was prompted by Elexon contacting the Meter manufacturer after reviewing draft protocol approval test scripts from a data collector undergoing Qualification as an HHDC. The test scripts contained references to different firmware versions of the Meter types than we were aware of since we, or the BSC Panel Committees, originally⁵ approved them for use in Settlement.
- 2.2 The amendments relate to the firmware in the Meter types being updated through time to accommodate certain hardware changes and to add functionality (Attachments A, B and C).
- 2.3 Honeywell (Elster Metering Limited) has confirmed the following:
- The Elster Vision/A1700/A1700i⁶ Meter type remains compliant with all versions of [CoP2 Issue 4](#)⁷, [CoP3 Issue 5](#)⁸ and [CoP5 Issue 6](#)⁹, with the following firmware versions:
 - 2-01148-AB, 2-01308-A, 2-01333-B/E/H/J/L/M/N/O/P/Q and 2-02004-A/B/C/D
 - The Elster Vision/A1700/A1700i was approved as two Meter types, the PB3 (the three phase four wire variant) and the PB2 (the three phase three wire variant) and that the PB2 Meter type should also be reflected in the CoP Compliance and Protocol Approval list.
 - The Elster A1140¹⁰ Meter type remains compliant with all versions of [CoP10 Issue 2](#)¹¹, with the following firmware versions:
 - 2-01178-N/P/Q, 2-01322-J/K/L, 2-01340-D/E/G/H, 2-01345-A, and 2-01398-A
 - The Elster AS230¹² Meter type remains compliant with all versions of CoP10 Issue 2, with the following firmware versions:
 - 2-01331-K/L/M/N
- 2.4 From a Settlement perspective, the protocol (communication language) each Meter type uses has not been impacted.

3. Updates and notifications

- 3.1 In September 2021, we:
- Published an updated version (v57.0) of the '[CoP Compliance and Protocol Approval](#)' list to include these updated firmware versions; and
 - Issued a [Newscast](#) article ([869](#)) notifying BSC Parties and BSC Party Agents of these updated firmware versions.

⁵ The ABB Metering Systems Vision (the PB3) was originally approved against CoP5 Issue 6 in 2000, the ABB Metering Systems A1700 (Vision) (PB2 and PB3) against Code of Practice 3 Issue 5 in 2001 and the Elster Metering Systems A1700 (Vision) (PB2 and PB3) against CoP2 Issue 4 in 2009. The Elster A1700i is essentially a marketing name for the A1700 (Vision). The A1140 and AS230 were originally approved against CoP10 Issue 2 in 2009.

⁶ A whole current (low voltage) Meter or a current transformer operated low or high voltage Meter.

⁷ 'Code of Practice for the metering of circuits with a rated capacity not exceeding 100MVA for Settlement purposes'

⁸ 'Code of Practice for the metering of circuits with a rated capacity not exceeding 10MVA for Settlement purposes'

⁹ 'Code of Practice for the metering of energy transfers with max demand of up to (and including) 1MW for Settlement purposes'

¹⁰ A whole current (low voltage) Meter or a current transformer operated low voltage Meter.

¹¹ 'Code of Practice for the metering of energy via low voltage circuits for Settlement purposes'

¹² A whole current (low voltage) Meter.

4. Information paper for the Imbalance Settlement Group

- 4.1 The A1140 and AS230 Meter types comply with CoP10 Issue 2 which is only relevant to low voltage circuits that are connected to a Distribution System. Therefore Metering Systems registered against CoP10 must be registered in the Supplier Volume Allocation (SVA) market.
- 4.2 The Vision/1700/A1700i Meter types comply with CoP2 Issue 4, CoP3 Issue 5 and CoP5 Issue 6 and are relevant to low voltage and high voltage circuits connected to a Distribution System or the Transmission System. Therefore, Metering Systems registered against these CoPs can be registered in the SVA market or the Central Volume Allocation (CVA) market.
- 4.3 For this reason, we will take a similar paper to the Imbalance Settlement Group (ISG) for the Vision/A1700/A1700i Meter types. Additionally, the ISG is also solely responsible for the CoP2 document and shares joint responsibility for the CoP3 document with the SVG. The SVG is solely responsible for the CoP5 and CoP10 documents.

5. Recommendations

- 5.1 We invite the SVG to:
- a) **NOTE** we issued Elster Metering Limited, a Meter manufacturer, with updated Certificates of Compliance for the Vision/A1700/1700i, A1140 and AS230 integral Outstation Meter types, against the relevant Codes of Practice;
 - b) **NOTE** we updated the 'CoP Compliance and Protocol Approval' list to include these updated firmware versions;
 - c) **NOTE** we issued a Newscast article notifying BSC Parties and BSC Party Agents of the updated firmware versions; and
 - d) **NOTE** we will take a similar paper to the Imbalance Settlement Group for the Vision/A1700/A1700i integral Outstation Meter types.

Attachments

Attachment A (CONFIDENTIAL) – Confirmation letter for Elster Vision/A1700/A1700i integral Outstation Meter type

Attachment B (CONFIDENTIAL) – Confirmation letter for Elster A1140 integral Outstation Meter type

Attachment C (CONFIDENTIAL) – Confirmation letter for Elster AS230 integral Outstation Meter type

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