

INITIAL WRITTEN ASSESSMENT for Modification Proposal P230 'Enabling Interoperability through the use of CoP10 and CoP5 Metering'

Prepared by: ELEXON Limited¹

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This document has been distributed in accordance with Section F2.1.10 of the Balancing and Settlement Code.²

P230 seeks mandate the use of relevant Codes Of Practice in those circumstances where Suppliers are obliged to use advanced metering by the Electricity Supply Licence. This will ensure consistency of metering requirements and mitigate issues surrounding interoperability of advanced meters in the market.

BSCCO'S RECOMMENDATIONS

On the basis of the initial assessment, BSCCo invites the Panel to:

- **DETERMINE that Modification Proposal P230 should be submitted to the Assessment Procedure;**
- **AGREE the Assessment Procedure timetable such that a 1 month Assessment Report should be completed and submitted to the Panel for consideration at its meeting of 12 February 2009;**
- **DETERMINE that the P230 Modification Group be formed from members of the Volume Allocation Standing Modification Group (VASM); and**
- **AGREE the Modification Group Terms of Reference.**

Potential impacts:

- **Parties:** Suppliers, NHH Data Collector, SVA NHH Meter Operator Agent

¹ ELEXON Ltd fulfils the role of the Balancing and Settlement Code Company ('BSCCo'), pursuant to Annex X-1 of the Balancing and Settlement Code (the 'Code').

² The current version of the Code can be found at <http://www.elexon.co.uk/bscrelateddocs/BSC/default.aspx>.

Purpose of this document:

This document is an Initial Written Assessment (IWA), which ELEXON will present to the Panel on 15 January 2009. The Panel will consider the recommendations and agree how P230 should be progressed.

Further information is available in the P230 Modification Proposal form, which is an appendix to this document.

CONTENTS TABLE

1 Why Change?3

2 Proposed solution4

3 Group Considerations4

3.1 Measuring Instrument Directive..... 4

3.2 Flexibility of Solution..... 4

3.3 Effective Dates..... 5

4 Terms of Reference.....5

5 Recommendations to the Panel.....5

6 Proposed timetable and estimated costs.....6

7 Terms used in this document.....6

8 References6

Appendix 1: Modification Proposal7

Appendix 2: Initial Assessment of Impacts of Modification Proposal10

Appendix 3: Timetable for Progression.....11

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1 WHY CHANGE?

The Electricity Supply Licence sets out the requirements for parties who wish to partake in the supply of electricity within the UK. Proposed amendments to the standard conditions of the Electricity Supply Licence have been proposed by Ofgem, along with a similar provision for the Gas Supply Licence.

The proposed amendments to the Electricity Supply Licence read as follows:

"Advanced meters for Non-Domestic Premises [electricity]

*12.17 This paragraph has effect on and after **6 April 2009** and applies where the licensee installs or arranges for the installation of an Electricity Meter at Non-Domestic Premises where the metering point falls within profile class 5, 6, 7 or 8 as defined in the Balancing and Settlement Code (for this condition only, "relevant premises").*

12.18 If paragraph 12.17 applies, the Electricity Meter installed at the relevant premises must be an advanced meter.

12.19 For the purposes of this condition, an advanced meter is an Electricity Meter that, either on its own or with an ancillary device, and in compliance with the requirements of any relevant Industry Code, is able:

- (a) to provide measured electricity consumption data for multiple time periods, and at least half-hourly; and*
- (b) to provide the licensee with remote access to such data.*

12.20 The licensee must ensure that a Customer supplied with electricity at relevant premises through an advanced meter, or that Customer's nominated agent, is able to have timely access, on request, to the data provided by that meter.

12.21 As from 6 April 2014, the licensee must not supply electricity to any relevant premises other than through an advanced meter.

12.22 The prohibition imposed by paragraph 12.21 does not apply where the licensee is unable to install or arrange for the installation of an advanced meter at the relevant premises in question despite taking all reasonable steps to do so."

Following the announcement of these potential amendments an expert group (Advanced Metering Interoperability Review Group) was set up to determine an approach to enable Suppliers to demonstrate compliance with the proposed Electricity Supply Licence condition and to facilitate effective market operation and interoperability for Profile Classes 5 to 8, i.e. to establish a consistent approach to metering within the UK.

The group concluded that the requirements in paragraphs 12.17 and 12.18 of the Electricity Supply Licence should be met by installing CoP10 or CoP5 compliant meters into premises affected by the licence change. These meters would be capable of providing Half Hourly interval data, even though Metering Systems would continue to be settled under the Non Half Hourly arrangements, unless the Supplier chooses otherwise.

Furthermore, the group noted that the Electricity Supply licence does not prescribe which types of advanced metering shall be used, leaving the metering installed dependent on Suppliers' interpretation of the licence condition. This leaves a risk of interoperability issues as different types of metering (for example, multi-register) could be deemed to meet the licence condition.

This Modification has been raised to mandate the use of relevant Codes of Practice in those circumstances where Suppliers are obliged to use advanced metering by the Electricity Supply Licence. This will ensure consistency of metering requirements and mitigate issues surrounding interoperability of advanced meters in the market.

It should be noted that advanced metering technology is being introduced into the market independently of the proposed changes to the Electricity Supply Licence. Irrespective of the Electricity Supply Licence amendment this modification would still be required in order to ensure that the issues associated with interoperability are resolved in a market where the number of these meters is increasing.

2 PROPOSED SOLUTION

P230 aims to add requirements to the Code to mandate that premises affected by the licence change should use CoP10 or CoP5 compliant meters. This will necessitate a Modification to the BSC together with related changes to the relevant CoP's. The actual legal drafting of the changes will need to be discussed by the P230 Modification Group.

3 GROUP CONSIDERATIONS

P230 raises various issues that will need to be considered by the P230 Modification Group. These issues are highlighted below:

3.1 Measuring Instrument Directive

The Measuring Instrument Directive (MID) came into force in March 2004 and was enacted into UK Legislation (via The Measuring Instruments (Active Electrical Energy Meters) Regulations 2006 (SI 2006 No. 1679)).

The MID is concerned with devices for legal measurements such as, electricity and gas Meters, and its primary aim is to create a single market for measuring instruments across EU countries i.e. Meters can be put on the market and used in any EU country irrespective of where in the EU the MID approval was given. The MID establishes requirements which all Meters for use at premises below 100kW must comply with.

Concern has arisen in respect of National requirements that have the potential to frustrate the intention of the MID i.e. to create a single market for the use of Meters across the EU. The European Commission has indicated that metering requirements which Member States have in place, or intend to introduce, may be in contravention of the MID and are eager for the development of European and international metering standards rather than Member States introducing requirements other than those set out in the MID. Accordingly this may impact on metering requirements set out in the BSC and its subsidiary documents including those relevant to advanced metering. The National Weights and Measures Laboratory (the government body responsible for legal metrology) are currently in discussion with the European Union in respect of these issues.

It is important that the Modification Group is aware of this background issue and takes note of it within its discussions and proposed solution. The Modification Group shall not be tasked with resolving any issues associated with the MID, however the Group shall ensure that DECC and Ofgem are involved during the assessment of P230.

3.2 Flexibility of Solution

Although the proposed changes to the Standard Conditions of the Electricity Supply Licence refers specifically to Profile Classes 5-8, the Modification group should be mindful not to draft legal text which could either preclude or mandate the solution from being relevant to other areas of the market.

The rationale for this view is that if future changes occurred within the supply licence necessitating the use of advanced metering in other profile classes, it would not be efficient to continually modify the BSC in order to address these changes.

Similarly, the Modification Group should ensure that any legal text that is drafted in terms of P230, shall not prevent or restrict Parties from complying with any of the other CoP's.

3.3 Effective Dates

The effective date for the proposed supply licence amendments is the 6 April 2009. However, affected parties will have until the 6 April 2014 to comply with these changes. The P230 Modification Group should take into consideration these dates when drafting the required solution.

4 TERMS OF REFERENCE

In light of the above issues an initial assessment of P230 has identified the following areas which the BSCCo recommends should be considered further during the progression of the Modification Proposal:

- The Group shall note the current events occurring in relation to the MID and ensure that DECC and Ofgem are involved during the assessment of P230. Please note that the Group shall not be asked to resolve this issue.
- Consider the flexibility and robustness of legal text. The Group shall ensure that legal text is drafted in a manner that:
 - Does not constrain parties or restrict the market in terms of providing appropriate metering solutions;
 - Does not create non-compliance for existing meters; and
 - Is flexible enough to accommodate any future changes to the Supply Licence without the need to raise further Modifications.
- Consider any Alternative Modifications.

It is suggested that the P230 Modification Group consider recommendations highlighted during the Advanced Metering Interoperability Review (Please see attachment: Advanced Metering Operational Framework: Profile Classes 5 to 8).

The Department of Energy and Climate Change (DECC) has championed the introduction of Advanced Metering in an attempt to address issues associated with climate change and energy consumption. It is not anticipated that there will be any additional environmental impacts over and above those addressed by DECC, with this in mind, the P230 Group will not be focusing on environmental impacts.

5 RECOMMENDATIONS TO THE PANEL

As the areas for consideration are well defined, BSCCo recommends a 1 month Assessment Procedure for P230. This time will be used to further consider and consult upon the areas raised in this IWA. Additionally participants will be given a longer period to participate in both the impact assessment and consultation.

It is estimated that progression of P230 will require:

- 2 Modification Group meetings;
- 1 BSCCo impact assessment;
- 1 industry consultation (which will run in parallel with the impact assessment);

- 1 impact assessment by BSC Agents, BSCCo, Parties and Party Agents; and
- 1 request for Transmission Company analysis;

The proposed timetable and estimated costs for the progression of P230 are shown in Appendix 3.

BSCCo recommends that the P230 Modification Group be formed from members of the Volume Allocation Standing Modification Group members.

BSCCo recommends that the areas for consideration raised by this IWA should form the basis of the Modification Group Terms of Reference, along with any additional areas proposed by the Panel.

6 PROPOSED TIMETABLE AND ESTIMATED COSTS

Estimated Costs of Progressing P230 ³	
Meeting Cost	£1,000
Legal/Expert Cost	Legal: £0
Impact Assessment Cost	£0
ELEXON Resource	24 man days £6000

The detailed progression timetable of P230 can be found in Appendix 3.

7 TERMS USED IN THIS DOCUMENT

Other acronyms and defined terms take the meanings defined in Section X of the Code.

Acronym/Term	Definition
VASMG	Volume Allocation Standing Modification Group
EU	European Union

8 REFERENCES

Ref.	Document Title	Owner	Issue Date	Version
1	Advance Metering Operational Framework: Profile Classes 5 to 8	ELEXON	2410/2008	1.0

³ Clarification of the meanings of the cost terms in this appendix can be found on the BSC Website at the following link:
http://www.elexon.co.uk/documents/Change_and_Implementation/Modifications_Process_-_Related_Documents/Clarification_of_Costs_in_Modification_Procedure_Reports.pdf

APPENDIX 1: MODIFICATION PROPOSAL

Modification Proposal – BSCP40/03	MP No: P230 (mandatory by BSCCo)
Title of Modification Proposal (mandatory by originator): Enabling Interoperability through the use of CoP10 and CoP5 Metering	
Submission Date (mandatory by originator): 23/12/08	
Description of Proposed Modification (mandatory by originator) This Modification Proposal seeks to introduce new requirements to mandate the use of (at a minimum) CoP10 ⁴ or CoP5 ⁵ metering for sites affected by the proposed modification to the Standard Conditions of the Electricity Supply Licence (see next section). The effective dates and the wording of the Modification will need to reflect the proposed licence change i.e. new connections and meter exchanges from 6 April 2009 but all affected sites by 6 April 2014. The Modification should be worded in such a way that neither precludes nor mandates the solution being used for other areas of the market e.g. Profile Classes 1-4. This would mean that the solution could be extended to include other areas in future, if appropriate, without the need for a further Modification.	
Description of Issue or Defect that Modification Proposal Seeks to Address (mandatory by originator) The need for this Modification Proposal arises from the proposed modification to the Standard Conditions of the Electricity Supply Licence. The wording is as follows: "Advanced meters for Non-Domestic Premises [electricity] 12.17 This paragraph has effect on and after 6 April 2009 and applies where the licensee installs or arranges for the installation of an Electricity Meter at Non-Domestic Premises where the metering point falls within profile class 5, 6, 7 or 8 as defined in the Balancing and Settlement Code (for this condition only, "relevant premises"). 12.18 If paragraph 12.17 applies, the Electricity Meter installed at the relevant premises must be an advanced meter. 12.19 For the purposes of this condition, an advanced meter is an Electricity Meter that, either on its own or with an ancillary device, and in compliance with the requirements of any relevant Industry Code, is able: (a) to provide measured electricity consumption data for multiple time periods, and at least half-hourly; and (b) to provide the licensee with remote access to such data. 12.20 The licensee must ensure that a Customer supplied with electricity at relevant premises through an advanced meter, or that Customer's nominated agent, is able to have timely access, on request, to the data provided by that meter. 12.21 As from 6 April 2014, the licensee must not supply electricity to any relevant premises other than through an advanced meter. 12.22 The prohibition imposed by paragraph 12.21 does not apply where the licensee is unable to install or arrange for the installation of an advanced meter at the relevant premises in question despite taking all reasonable steps to do so." Following the announcement of these changes an expert group was set up to determine a standard approach to	

⁴ Code of Practice for Whole Current Metering of Energy via Low Voltage Circuits for Settlement Purposes

⁵ Code of Practice for the Metering of Energy Transfers with a Maximum Demand of up to (and including) 1MW for Settlement Purposes

Modification Proposal – BSCP40/03	MP No: P230 <i>(mandatory by BSCCo)</i>
<p>enable Suppliers to demonstrate compliance with the proposed Electricity Supply Licence condition and to facilitate effective market operation and interoperability for Profile Classes 5 to 8. An operational framework has been developed to this effect (Attachment A).</p> <p>The framework developed states that the requirements in paragraphs 12.17 and 12.18 should be met by installing CoP10 or CoP5 compliant meters into premises affected by the licence change. These meters would be capable of providing Half Hourly interval data, although Metering Systems will continue to be settled under the Non Half Hourly arrangements, unless the Supplier chooses otherwise. The installation of CoP10 and CoP5 metering in these sites should be mandated as the solutions to interoperability issues detailed in the framework rely on this standard approach.</p>	
Impact on Code <i>(optional by originator)</i>	
Section L Metering, 2.2. Type of Metering Equipment	
Impact on Core Industry Documents or System Operator-Transmission Owner Code <i>(optional by originator)</i>	
None.	
Impact on BSC Systems and Other Relevant Systems and Processes Used by Parties <i>(optional by originator)</i>	
None.	
Impact on other Configurable Items <i>(optional by originator)</i>	
None.	
Justification for Proposed Modification with Reference to Applicable BSC Objectives <i>(mandatory by originator)</i>	
<p>This Modification Proposal will better facilitate the achievement of Applicable BSC Objective (c): <i>"Promoting effective competition in the generation and supply of electricity"</i></p> <p>Mandating the use of CoP10 and CoP5 metering for PC5-8 sites will enable the solutions to interoperability issues related to advanced metering to be implemented effectively. Interoperability aids effective supply competition as it will remove barriers to Supplier and Supplier Agent's ability to service sites.</p>	
Urgency Recommended: Yes / No <i>(delete as appropriate) (optional by originator)</i>	
No.	
Justification for Urgency Recommendation <i>(mandatory by originator if recommending progression as an Urgent Modification Proposal)</i>	
N/A	

Modification Proposal – BSCP40/03	MP No: P230 <i>(mandatory by BSCCo)</i>
Details of Proposer:	
Name.....Martin Brandt..... Organisation.....Scottish and Southern Energy..... Telephone Number.....01256 304304..... Email Address.....Martin.Brandt@scottish-southern.co.uk.....	
Details of Proposer’s Representative:	
Name.....Andrew Colley..... Organisation.....Scottish and Southern Energy..... Telephone Number..... 0118 953 4276..... Email address.....Andrew.Colley@scottish-southern.co.uk.....	
Details of Representative’s Alternate:	
Name.....John Sykes..... Organisation.....Scottish and Southern Energy..... Telephone Number.....0118 953 4281..... Email address.....John.Sykes@scottish-southern.co.uk.....	
Attachments: Yes / No <i>(delete as appropriate) (mandatory by originator)</i> Yes	
If Yes, Title and No. of Pages of Each Attachment: Advanced Metering Operational Framework: Profile Classes 5 to 8	

APPENDIX 2: INITIAL ASSESSMENT OF IMPACTS OF MODIFICATION PROPOSAL

An initial assessment has been undertaken by BSCCo in respect of all BSC systems, documentation and processes. The following have been identified as being potentially impacted by P230.

a) Impact on BSC Systems and Processes

None

b) Impact on BSC Agent Contractual Arrangements

None

c) Impact on BSC Parties and Party Agents

BSC Parties will be required to install CoP5 or CoP10 Meters in order to ensure effective operation and interoperability.

d) Impact on Transmission Company

None.

e) Impact on BSCCo and BSCCo Memorandum and Articles of Association

None.

f) Impact on BSC Panel

None.

g) Impact on Code

Code Section	Potential Impact of Proposed Modification
L	Metering

h) Impact on Code Subsidiary Documents

Document	Potential Impact of Proposed Modification
CoP1	Document will need to be updated to reflect any changes within the BSC
CoP2	Document will need to be updated to reflect any changes within the BSC
CoP3	Document will need to be updated to reflect any changes within the BSC
CoP5	Document will need to be updated to reflect any changes within the BSC
CoP10	Document will need to be updated to reflect any changes within the BSC

i) Impact on Core Industry Documents and Other Configurable Items

None.

j) Impact on Governance and Regulatory Framework

None.

APPENDIX 3: TIMETABLE FOR PROGRESSION

Initial Timetable for Progression of P230 (note that the dates of Modification Group meetings are indicative)

ID	Task Name	Start	21 January					11 Feb
			12/01	19/01	26/01	02/02	09/02	
1	IWA presented to Panel	Thu 15/01/09	◆ 15/01					
2	MG meeting 1	Tue 20/01/09		■				
3	Conduct Impact Assessment	Wed 21/01/09		■	■			
4	Conduct Consultation	Wed 21/01/09		■	■			
5	Collate responses	Mon 02/02/09				■		
6	MG Meeting 2	Tue 03/02/09				■		
7	Update Legal text	Tue 03/02/09				■		
8	Draft Assessment Report	Tue 03/02/09				■		
9	Group to review Assessment Report	Wed 04/02/09				■		
10	Update Assessment Report	Thu 05/02/09				■		
11	Internal Paper day	Fri 06/02/09					◆ 06/02	
12	External Paper day	Fri 06/02/09					◆ 06/02	
13	Assessment Report presented to Panel	Thu 12/02/09						◆ 12/