

What stage is this document in the process?

01 Initial Written Assessment

02 Definition Procedure

03 Assessment Procedure

04 Report Phase

Stage 01: Initial Written Assessment

P280 Introduction of new Measurement Classes

P280 seeks to introduce new Measurement Classes for Half Hourly-settled customers in the Domestic and SME markets, and a requirement for the Supplier Volume Allocation Agent to provide Distributors with aggregated Half Hourly consumption data for Metering Systems registered to these new Measurement Classes.

P280 would enable Distributors to charge Suppliers on an aggregated basis rather than site-specific basis only.

 ELEXON recommends
A 4 month Assessment Procedure

 High Impact:
Supplier Volume Allocation Agent (SVAA)

 Medium Impact:
Suppliers, Distribution Network Operator (DNOs)

 Low Impact:
ELEXON

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About this document:

This document is an Initial Written Assessment (IWA), which ELEXON will present to the Panel on 8 December 2011. The Panel will consider the recommendations and agree how to progress P280.

Further information is available in the P280 Modification Proposal which is which is **Attachment A** to this document.



Any questions?

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1 Why Change?

Background

Measurement Classes

The Measurement Class of a Metering System reflects how it is settled i.e. Half Hourly (HH), Non Half Hourly (NHH) or HH elective.

There are currently five Measurement Classes A, B, C, D and E:

- **Measurement Class 'A':**

Is the predetermined Measurement Class for NHH Settled meters. For Measurement Class 'A', suppliers have set performance levels they must adhere to within the Settlement process. These performance levels are determined by the proportion of consumption through NHH Metering Systems that should be settled on actual Meter Advances (rather than estimates) at each of the Supplier Volume Allocation runs.

Reconciliation Run	Performance Level
SF	N/A
R1	30%
R2	60%
R3	80%
RF	97%

- **Measurement Class 'B'**

NHH Unmetered supplies are classified as Measurement class 'B'. These are any electronic equipment that draws a current and is connected to the Distribution Network without a meter recording its energy consumption.

- **Measurement Class 'C':**

100kW or above Metering Systems are classified as Measurement Class 'C' (unless they are "unmetered" in Class D), and below 100kW Metering Systems that have elected for HH settlement can be classified as Measurement Class 'C' or 'E'.

Measurement Class C Metering Systems must submit 99% actual Meter reading data by the initial settlement (and all subsequent Reconciliations). Where actual Meter reading is unavailable, Data Collectors must provide estimated data.

- **Measurement Class 'D':**

Is the HH equivalent of Measurement Class 'B'.

- **Measurement Class 'E':**

Measurement Class 'E' is a Measurement Class for metering systems that would fall under the 100kW limit, and therefore would be settled NHH under Measurement Class A, but their Supplier elects to be settled HH.

The difference in Settlement terms between Measurement Class 'C' and 'E' is that for those metering systems that are HH elective in Measurement Class 'E' the supplier need only get 99% actual data by RF.

Distribution Changes

Distribution network charges (also known as DUoS charges) are calculated for each HH settled customer by Distributors on a site specific basis.

With the introduction of smart meters into the NHH settled market, more NHH sites will have the ability to be settled on a HH basis. This could significantly increase the amount of sites where distributors will have to calculate site specific DUoS charges.

A DCUSA Change Proposal (DCP103) was raised in July this year to help facilitate the move from NHH settled market into the HH settled market by attempting to ensure that DUoS charges would remain the same for NHH customers electing to be settled HH under Measurement Class E. In conducting this work the DCUSA consultation concluded that the industry would be better served settling HH customers on an aggregated basis rather than on a site specific basis, but this was deemed outside of the scope of the DCUSA change proposal.

Currently, the only option available to the distributors is to settle each and every customer on a site specific basis. Should this remain the only option available, based on the analysis conducted under DCP103, the Proposer believes that the resulting cost to the industry (in the event that Half Hourly settlement is widely adopted for smart metered customers) would be in the tens of millions of pounds.

To avoid this, there needs to be an alternative that enables Distributors to charge Suppliers on an aggregated (rather than site-specific) basis.

What is the Issue?

The BSC and the current defect

The BSC contains a number of provisions for providing Distributors with the metered data they need for charging purposes:

- General provisions in L5.2.4;
- SVAA requirements in S2.7.7; and
- HHDC requirements in Annex S-2, 3.3.2(g).

The defect in these arrangements is that they don't provide any mechanism for distinguishing between HH-settled customers whose network charges should be calculated on a site-specific basis, and those whose network charges should be calculated on an aggregated basis.

Currently, HHDA's for sites in Measurement Classes 'C' and 'E' send the data flow D0040 to the SVAA. The D0040 flow includes Consumption Component Classes (CCC). It is the CCC which details the aggregated data instead of the Site Specific data. However, the DNOs only receive the site specific data via the D0036 and D0275 flows. They receive this information from the HHDC.

As only around 10% of the market is Settled HH the fact that there is no mechanism to aggregate billing has not had much of an impact on Suppliers. However, with the roll out of Smart metering, and other industry changes, there is a concern that the percentage of the market Settled HH could increase substantially. Without any mechanism to for DNOs to utilise and bill Suppliers on a Aggregated basis it will force Suppliers and Distributors to use site-specific billing for domestic and SME customers, where it will be disproportionately expensive.



DUoS Charges

The DUoS charge covers the cost of receiving electricity from the national transmission system and feeding it directly into homes and businesses through the regional distribution networks. These networks are operated by Distribution Network Operators (DNOs)



DCUSA

It was established in October 2006 as a multi-party contract between the licensed electricity distributors, suppliers and generators of Great Britain. It is concerned with the use of the electricity distribution systems to transport electricity to or from connections to them. The DCUSA replaced numerous bi-lateral contracts, giving a common and consistent approach to the relationships between these parties in the electricity industry.

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Summary

P280 proposes to introduce new Measurement Classes (as yet undefined) for Half Hourly-settled customers in the Domestic and SME markets, and to require the Supplier Volume Allocation Agent (SVAA) to provide Distributors with aggregated Half Hourly consumption data for Metering Systems registered to those new Measurement Classes.

The proposer believes this can be achieved with the introduction of two new Measurement Classes one for Domestic Customers and one for Non-Domestic Customers below an agreed size threshold (as yet to be defined).

The use of these new Measurement Classes would not be mandatory but Distributors and the SVAA need to be system and process ready for those Suppliers (and their agents) who wish to take advantage of the new Measurement Classes.

Applicable Objectives

The Proposer believes that P280 will better facilitate the achievement of:

- **Applicable BSC Objective (c)**. By allowing for a more cost effective solution for handling smart metering HH data. Additionally, it ensures that those ready to move into this market have the necessary systems and processes in place.

3 Things to consider

In this section we highlight areas which we believe the Panel should consider when making its decision on how to progress this Modification Proposal.

If P280 goes into the Assessment Procedure, then we recommend that the areas below form the basis of the Workgroup's Terms of Reference.

Distributor impacts/benefits

A study by the Profiling and Settlement Review Group (PSRG) and ELEXON conducted earlier this year found that the cost to industry would be in the tens of millions of pounds should site specific billing remain the only available option for Distributors. The benefit of this Modification is a substantial saving for Distributors and also increased efficiency in the implementation and administration of the balancing and settlement arrangements.

Interaction with DCUSA

The P280 Workgroup should confirm whether it is satisfied with the analysis undertaken by the DCUSA DCP103 Working Group¹, or whether any further analysis of costs, impacts and benefits is required.

The Group should also be mindful of additional DCUSA changes which will be required to oblige Distributors to calculate and invoice DUoS charges using aggregated data from SVAA (rather than site-specific data from Half Hourly Data Collectors) for Metering Systems registered to the new Measurement Classes.

The Group should also keep abreast of a further DCUSA change required to the Common Distribution Charging Methodology (CDCM) to introduce suitable tariffs for the new Measurement Classes. This is a separate issue, which is already being discussed under DCUSA governance² and dependent upon the outcome may result in further work in this area. This BSC Modification is intended to facilitate these new tariffs, but does not depend upon them.

¹ DCUSA Change Proposal DCP103 ('DUoS Charges for sub 100kW HH settled sites') was raised by British Gas Trading in July 2011 (see <http://www.dcusa.co.uk/public/cp.aspx?id=123>)

² Appropriate DUoS changes are already being considered by the DCP103 Working Group and the Methodology Issues Group (MIG).

Number of Measurement Classes and thresholds

The Proposer believes that two new Measurement Classes would be appropriate; one for Domestic Customers and one for Non-Domestic Customers below an agreed size threshold. The Groups should consider if this is a sensible approach.

The Groups should also consider what threshold the new Measurement Classes should apply to. The Proposer believes that one option would be to use the absence of measurement transformers as the criterion i.e. the new Measurement Classes would be open only to customers with whole current metering. They believe that this supports the National Terms of Connection (DCUSA Schedule 2B) where the use of measurement transformers require a different set of terms one of which is the requirement for a maximum capacity. This then links to Profile Class 5-8 where a maximum capacity is also required. This ensures that there is no overlap with the work on P272 (Mandatory Half Hourly Settlement for Profile Classes 5-8).

Impact on Data Transfer Catalogue

Changes will be required to the MRA DTC to support reporting of aggregated data for the new Measurement Classes. These will be raised once the changes have been identified, but are likely to include:

- Amend the D0030 flow, or create an alternative flow, to report consumption for those customers to Distributors on an aggregated basis;
- Amend the D0040/D0298 to include LLFCs and Distributor Ids; and
- Amend Measurement Class Id (J1161) to include the new values and ensure that the Measurement Class Description (J0311) matches that of the new Measurement Class Id when selected.

Implementation Approach

The Proposer believes that P280 should have an implementation date of 2013. This date takes into consideration other industry change proposals such as the DTC changes to be raised, approved and implemented. It is expected that this modification should be completed by the summer of 2012.

4 Proposed Progression

Terms of Reference

We recommend that P280 follows a four month Assessment Procedure conducted by the Volume Allocation Standing Modification Group (VASMG), whilst drawing on the experience of Settlement Standing Modification Group (SSMG) and supplemented with any other relevant experts and interested parties.

As identified in section 3 we recommend the workgroup considers:

P280 Terms of Reference	
01	Development of the P280 proposed solution.
02	Changes to BSC documentation, systems and processes needed to support P280 implementation.
03	Any alternative approach.
04	Assessment of P280 against the Applicable BSC Objectives.
05	Materiality of the issue identified by P280.
06	Quantification of P280 costs and benefits where possible (where not already covered by DCUSA).
07	Impact on industry participants.

Timetable

Proposed progression timetable for P280 Assessment Procedure	
Activity	Date
Present IWA to Panel	8 December 2011
Workgroup meeting 1	Week commencing 9 January
Issue P280 for Impact Assessment (15 WD)	Week commencing 16 January
Workgroup meeting 2	Week commencing 13 February
Issue P280 for industry consultation (15 WD)	Week commencing 20 February
Workgroup meeting 3	Week commencing 19 March
Present Assessment Report to Panel	06 April 2012

Estimated Progression Costs

Estimated progression costs based on timetable for P280	
Meeting costs (including Workgroup member expenses)	£1,500 (based on three Workgroup meetings)
Non-ELEXON legal and expert costs	Zero
ELEXON resource	65 man days, equating to approximately £15.6k

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The ELEXON resource cost is an estimate of how much time and effort it will take us to progress P280 through the Assessment Procedure and Report Phase. It includes time spent supporting industry groups, drafting documentation and producing legal text.

Estimate of total industry assessment costs					
Workgroup support	Est #mtgs	Est # att	Est effort	Est rate	Sub-total
	3	8	1.5	605	£29,040
Consultation response support	Est #con	Est # resp	Est effort	Est rate	Sub-total
	2	10	2.5	605	£30,250
Total					£59,290

Workgroup support costs reflect the expected number of Workgroup meetings and the industry effort spent supporting these meetings. The calculation is based upon an anticipated average number of eight members at each meeting putting in an average of 1.5 man days effort per meeting. A standard rate of £605 per man day is applied. Consultation costs represent an estimation of the anticipated industry response to consultations issued to support P280 and the approximate time and effort spent on responses.

The calculation is based upon an anticipated number of 10 responses to the intended two consultations (i.e. the Assessment Procedure and Draft Modification Report consultations), and assumes each response requires 2.5 man days of industry effort. A standard rate of £605 per man day is applied.

5 Likely Impacts

This an initial view of the likely impacts of P280. Impacts will be further assessed as P280 is progressed and the P280 solution is developed.

Impact on BSC Parties and Party Agents

- Supplier Volume Allocation Agent (SVAA) – will need to introduce system changes to aggregate data
- Suppliers – will now have the option of receiving billing based upon Aggregated or Site Specific data and
- Distribution Network Operators – will need to change the way they operate and will likely need new billing systems
- HH Data Aggregators – will need to change the way they generate aggregated data for submission to the SVAA

Impact on Transmission Company

None

Impact on ELEXON

ELEXON will need to raise some MDD Change Requests to enter the new Measurement Classes into MDD

Impact on Code

- Section S to reference revised data collection and provision requirements
- Annex X-1, X-2 and Section W to reference the new Measurement Classes
- Section W will need show which classes are relevant for NHH Trading Disputes
- There may be some consequential impacts on BSCPs that we'll need to look into

6 Recommendations

On the basis of the initial written assessment, ELEXON invites the Panel to:

- **DETERMINE** that Modification Proposal P280 progresses to the Assessment Procedure;
- **AGREE** the Assessment Procedure timetable such that an Assessment Report should be completed and submitted to the Panel at its meeting on 5 April 2012;
- **DETERMINE** that the P280 Workgroup should be formed from members of the Settlement Standing Modification Group (SSMG); and
- **AGREE** the Workgroup's Terms of Reference.

7 Further Information

More information is included in the P280 Modification Proposal form (Attachment A to this document).

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Modification Proposal – BSCP40/03	MP No: P280
Title of Modification Proposal: Introduction of new Measurement Classes	
Submission Date: 25 November 2011	
Description of Proposed Modification: <p>This Modification wishes to introduce new Measurement Classes for Half Hourly-settled customers in the Domestic and SME markets, and to require the Supplier Volume Allocation Agent (SVAA) to provide Distributors with aggregated Half Hourly consumption data for Metering Systems registered to those new Measurement Classes.</p> <p>This Modification stems from ideas previously suggested in the ELEXON Cost Benefit Analysis (CBA) consultation document (distributed earlier this year¹), and from the work of the DCUSA DCP103 Working Group²:</p> <ul style="list-style-type: none"> • The ELEXON CBA proposed new Measurement Classes for Half Hourly-settled Domestic Customers, and for Half Hourly-settled Small and Medium Enterprise (SME) customers. • A number of the industry responses to the DCP103 Request for Information (issued to DCUSA Parties on 16 August 2011) expressed support for the Working Group’s Option 4, which proposed a new Measurement Class for Domestic Customers who are settled Half Hourly. <p>This modification does not intend to make the use of such Measurement Classes mandatory for Suppliers, but distributors and settlement providers (such as SVAA) need to be system and process ready for those Suppliers (and their agents) who wish to take advantage of the new Measurement Classes. This supports the consultation response to the CBA where the Suppliers felt that it was too early to mandate such a requirement.</p> <p>Subject to further discussion at the Workgroup assessing this Modification, we suggest that two new Measurement Classes would be appropriate: one for Domestic Customers and one for Non-Domestic Customers below an agreed size threshold. Non-Domestic Customers above this threshold would fall outside the scope of this Modification, and would continue to be registered to Measurement Classes ‘A’, ‘C’ or ‘E’ as currently. One option (subject to discussion at the Workgroup) would be to use the absence of measurement transformers as the criterion i.e. the new Measurement Classes would be open only to customers with whole current metering. This supports the National Terms of Connection (DCUSA Schedule 2B) where the use of measurement transformers require a different set of terms one of which is the requirement for a maximum capacity. This then links to Profile Class 5-8 where a maximum capacity is also required. This ensures that there is no overlap with the work on P272 (Mandatory Half Hourly Settlement for Profile Classes 5-8).</p>	

¹ The CBA document was prepared by ELEXON and the Profiling and Settlement Review Group (PSRG), and was issued for consultation on 18 July 2011 (see <http://www.elexon.co.uk/pages/consultations.aspx>).

² DCUSA Change Proposal DCP103 (‘DUoS Charges for sub 100kW HH settled sites’) was raised by British Gas Trading in July 2011 (see <http://www.dcusa.co.uk/public/cp.aspx?id=123>)

Modification Proposal – BSCP40/03

MP No: P280

Description of Issue or Defect that Modification Proposal Seeks to Address:

With the introduction of smart meters into the NHH settled market suppliers are starting to consider how best they can gain market intelligence and introduce more time of day tariffs to this segment of the market.

DCP103 was raised within DCUSA to facilitate the move from NHH settled to the HH settled market using Measurement Class E on the same use of system charges. The DCUSA consultation concluded that the industry would be better served settling these customers on an aggregated basis rather than on a site specific basis but this was deemed outside of the intent of the change proposal.

Currently, the only option available to the industry is to settle each and every customer on a site specific basis. Should this remain the only option available, the resulting cost to the industry (in the event that Half Hourly settlement is widely adopted for smart metered customers) would be in the tens of millions of pounds. To avoid this, there needs to be an alternative that enables Distributors to charge Suppliers on an aggregated (rather than site-specific) basis.

The BSC contains a number of provisions for providing Distributors with the metered data they need for charging purposes:

- general provisions in L5.2.4;
- SVAA requirements in S2.7.7; and
- HHDC requirements in Annex S-2.3.3.2(g).

The defect in these arrangements is that they don't provide any mechanism for distinguishing between HH-settled customers whose network charges should be calculated on a site-specific basis, and those whose network charges should be calculated on an aggregated basis.

This wasn't an issue when HH settlement was restricted to larger customers, but with the rollout of smart metering it will force Suppliers and Distributors to use site-specific billing for domestic and SME customers, where it will be disproportionately expensive.

Impact on Code:

The solution to this defect is to:

- Introduce new Measurement Classes and associated Consumption Component Classes (for domestic and SME customers) to distinguish HH-settled customers whose network charges should be calculated on an aggregated basis; and
- Introduce system and process changes to support aggregated reporting of consumption for these Measurement Classes (although this will primarily affect Configurable Items, as described below, rather than the Code itself).

Modification Proposal – BSCP40/03

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Impact on Core Industry Documents or System Operator-Transmission Owner Code:

DCUSA changes will be required to oblige Distributors to calculate and invoice DUoS charges using aggregated data from SVAA (rather than site-specific data from Half Hourly Data Collectors) for Metering Systems registered to the new Measurement Classes. (A change proposal will be raised at the same time as this to cover off proposed changes).

We also envisage a DCUSA change to the Common Distribution Charging Methodology (CDCM) to introduce suitable tariffs for the new Measurement Classes. However, this is a separate issue, which is already being discussed under DCUSA governance³ and dependent upon the outcome may result in further work in this area. This BSC Modification is intended to facilitate these new tariffs, but does not depend upon them.

Changes will be required to the MRA DTC to support reporting of aggregated data for the new Measurement Classes. These will be raised once the changes have been identified, but are likely to include:

- Amend the D0030 flow, BSCP508 and the SVAA software to report consumption for those customers to Distributors on an aggregated basis;
- Amend the D0040/D0298 to recognise LLFCs and Distributor Ids; and
- Amend Measurement Class Id (J1161) to include the new values and ensure that the Measurement Class Description (J0311) matches that of the new Measurement Class Id when selected.

Impact on BSC Systems and Other Relevant Systems and Processes Used by Parties:

Changes will be required to the SVAA system and Half Hourly Data Aggregator (HHDA) systems in order to allow SVAA to provide Distributors with aggregated consumption data for the new Measurement Classes. ELEXON and its service providers have already assessed the required SVAA changes (at the request of the DCP103 Working Group), and should be able to provide this information to the Workgroup assessing this Modification. The required changes include:

- Changing the format of the D0040/D0298 interfaces from HHDA to SVAA to include details of Distributor Id and Line Loss Factor Class Id (so that SVAA knows which Distributor to report the consumption to, and the Distributor knows which tariff to apply); and
- Amending SVAA to report aggregated consumption data (for the Consumption Component Classes associated with the new Measurement Classes) to Distributors and Suppliers. Detailed issues that the Workgroup may wish to consider in relation to this include:
 - Whether this new data is best included in the same D0030 flows as the current Non Half Hourly data, or in new flows.

³ Appropriate DUoS changes are already being considered by the DCP103 Working Group and the Methodology Issues Group (MIG).

Modification Proposal – BSCP40/03	MP No: P280
<ul style="list-style-type: none"> ○ Whether distributors require the HH data on a daily basis or whether there is a requirement to create a monthly aggregated consumption file for each. ○ The appropriate format for providing the data (e.g. whether the aggregated Half Hourly data should be reported against an appropriate SSC Id to facilitate use of existing Non Half Hourly billing systems by Distributors) <p>Changes may also be required to Supplier Meter Registration Service (SMRS) and Half Hourly Data Collector (HHDC) systems to support the new Measurement Classes.</p>	
<p>Impact on other Configurable Items:</p> <p>In order to support the system changes described above, changes will be required to BSC Configurable Items related to SVAA and HHDA. There will also be a requirement to update MDD with the inclusion of these new Measurement Classes.</p>	
<p>Justification for Proposed Modification with Reference to Applicable BSC Objectives:</p> <p>The modification allows for a more cost effective solution for handling smart metering HH data. It ensures that those ready to move into this market have the necessary systems and processes in place.</p> <p>The proposed modification therefore better facilitates Applicable BSC Objective (c) (the promotion of effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity).</p>	
<p>Is there a likely material environmental impact? No</p>	
<p>Urgency Recommended: No</p> <p>There is no urgency but we recognise the need to progress in a timely manner. We therefore suggest an implementation date of April [2013/4] This date is to also cater for other industry change proposals so it is expected that this modification should be completed by the [summer/autumn of 2012] to allow time for DTC changes to be raised, approved and implemented by [April 2013/4].</p>	
<p>Justification for Urgency Recommendation :</p>	
<p>Self-Governance Recommended: No</p>	
<p>Justification for Self-Governance Recommendation: n/a</p>	
<p>Should this Modification Proposal be considered exempt from any ongoing Significant Code Reviews? <i>(mandatory by originator in order to assist the Panel decide whether a Modification Proposal should undergo a SCR Suitability Assessment)</i> No</p>	

Modification Proposal – BSCP40/03

MP No: P280

Details of Proposer:

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Details of Representative’s Alternate:

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Attachments: No