



P280 Second Assessment Consultation

Please note this consultation closes on 18 May 2012

P280: Introduction of New Measurement Classes

P280 seeks to introduce new Measurement Classes for Half Hourly-settled customers in the Domestic, Small and Medium Enterprises and Industrial and Commercial 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.



High Impact:
Supplier Volume Allocation Agent (SVAA)



Medium Impact:
Suppliers, Distribution Network Operator (DNOs), Data Aggregators (DAs) & Data Collectors (DCs)



Low Impact:
ELEXON

What stage is this document in the process?

01

Initial Written Assessment

02

Definition Procedure

03

Assessment Procedure

04

Report Phase

P280
Second Assessment
Consultation

30 April 2012

Version 1.0

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About this document:

The purpose of this P280 Assessment Consultation is to invite BSC Parties' and other interested parties' to provide additional detail on the proposed solution to help further understand any impacts that would be incurred if P280 was implemented. The P280 Workgroup will discuss these consultation responses, before making a recommendation to the Panel in June 2012 on whether to approve P280.

There are three parts to this document:

- This is the main consultation document. It contains the specific questions on which the Workgroup seeks your views.
- Attachment A provides information on the D0040 and D0298 flow definitions.
- Attachment B is the Consultation Questions – please use this form to provide your response to the questions.



Any questions?

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1 Purpose of Consultation

Background

The P280 Workgroup issued a consultation on Monday 13th February. They received a wealth of information from respondents on what the impacts would be and the necessary changes that would be needed to comply with the proposed Solution. The Group subsequently met to discuss the consultation responses and how best to proceed with the Modification.

A number of decisions were made based on the feedback received, however the Group acknowledged that the solution should be better quantified in terms of the impacts around market participants receiving specific data flows. Greater detail in this area would help the Group fully assess P280 and better inform their recommendation to the BSC Panel.

In light of the information received and potential options in this area, the Group agreed to consult further to ascertain a clearer picture of what the impacts and benefits will be across the industry.

Original Consultation

Much of the detail of the analysis and Workgroup discussion within the consultation document still stands. However, certain aspects of the Solution have changed, and the changes are detailed in this document. Should you require the original Solution information to respond to the additional consultation questions, you can find this on our [website](#).

Solution

The P280 Proposed Solution is to introduce three new Measurement Classes and associated Consumption Component Classes so that Suppliers of sub 100kW HH Settled customers can be invoiced for Distribution Use of System (DUoS) on an aggregated basis.

As a result of the new Measurement Classes P280 will also introduce system and process changes for HHDCs, HHDAs, DNOs, SVAA and Suppliers. The degree of impact will depend upon the responses we receive and the final design solution.

The P280 solution is effectively a facilitation Modification. Suppliers, together with his HHDC, are able to utilise the new Measurement Classes as and when the Suppliers choose, however the SVAA, HHDAs and the DNOs would need to be able to cater for such use from the implementation date.

Though P280 is optional for Suppliers, if a Supplier that does not support the new Measurement Classes takes on a customer that does use them the Supplier would need to manage the transition, but the impact should be minimal (a process to change to a Measurement Class supported by the Supplier and accepting MDD updates).

Further information

A complete version of the consultation and impact assessment responses received are available on the [P280 page](#) of the ELEXON website.

This section summarises the P280 Proposed Modification, which the Proposer has developed with the Workgroup's assistance. It also captures the detailed requirements of the solution.

Summary

P280 proposes that as of 1st October 2013 the SVAA system will be required to process the data for the new Consumption Component Classes and include it in the D0030 flow that Distributors use for aggregated DUoS billing.

Summary of main changes from previous consultation

- 6 or 18 new Consumption Component Classes for Export sites registered as being in proposed Measurement Classes F,G,H, each below 100kW but to be aggregated for DUoS reporting: Domestic, Non-Domestic whole current, Non-Domestic CT Metered. The option for 6 CCCs would allow reporting of aggregate F+G+H export only, not each.
- No option to avoid amended flows. Suppliers and Agents would have to use amended D0040 and D0298, although if the supplier or agent had no F,G,H sites, there would be no new data.
- D0030 and D0314 to include data aggregated for F,G,H against Profile Class 0 in a new data section, although PC=0 would not be an MDD value. Broken down by distributor ID / LLFC ID, according to SSC mapping as provided by Distributor.
- A number of possible options for HHDC to DNO flow in respect of new Measurement Classes.

Detailed Requirements

Requirement 1 – Introduction of New Measurement Classes

With effect from 1 October 2013, three new Measurement Classes would be introduced in the BSC for domestic, Small and Medium Enterprises (SME) and Industrial and Commercial (I&C) customers to distinguish HH Settled customers whose network charges would be calculated on an aggregated basis.

New Measurement Classes:

- F Half Hourly aggregated metered (**Domestic**)
- G Half Hourly aggregated metered (**Non domestic whole current**)
- H Half Hourly aggregated metered I&C (**Non domestic CT metered**)¹

This will result in the need for each new Measurement Class and their associated Consumption Component Classes being updated in the Market Domain Data (MDD).

The Supplier Metering Registration Service (SMRS) systems will need to be capable of accepting the new Measurement Classes.

¹ The group agreed that one of the key issues for consultation was the criteria for separating Measurement Classes G and H. Please see Attachment A for group discussions on this.

Suppliers will have the option of utilising the new Measurement Classes. Supplier Agents will need to be able to process the new Measurement Classes for any Suppliers who choose to use them.

Should any site utilising the new Measurement Classes wish to revert to NHH or Site Specific data they will need to revert to one of the pre-existing Measurement Classes.

Export

In the current Half Hourly Settled market, all Export is reported on the same six Consumption Component Classes (i.e. CCC Id 6-8 for actual data and CCC Id 14-16 for estimated data), irrespective of whether the Export Metering System is registered to Measurement Class C or E.

Our previous consultation did not include new Consumption Component Classes for Export. The implication was that Export from Metering Systems registered to the new Measurement Classes would continue to be reported on Consumption Component Classes 6-8 and 14-16 (and any associated DUoS charges would therefore be billed on a site-specific rather than aggregated basis).

The Modification Group now proposes that additional Export Consumption Component Classes be introduced for the new Measurement Classes. Any Export from Metering Systems registered to the new Measurement Classes would be allocated to the new Consumption Component Classes by the HHDA, and reported to Distributors in the D0030 data flow by SVAA.

Question 1

Do you agree that the P280 solution should be extended to Export in this way?

As noted above, Measurement Classes C and E currently share a single set of six Export Consumption Component Classes (6-8 and 14-16). This suggests two possible options for the new Export Consumption Component Classes. The first would be to introduce a single set of six Consumption Component Classes for use with Measurement Classes F, G and H:

CCC Id	MQ Id	Aggregation Type	Metered / Unmetered	Consumption Component Indicator	Actual / Estimate	Consumption Level Indicator
54	AE	H	M	C	A	-
55	AE	H	M	M	A	-
56	AE	H	M	L	A	-
57	AE	H	M	C	E	-
58	AE	H	M	M	E	-
59	AE	H	M	L	E	-

Consumption Component Classes are included for Export Metering Systems with site-specific Line Loss Factor Classes (i.e. Consumption Component Indicator of 'M'). It is unlikely that there will be many such Metering Systems (as site-specific LLFCs are only used at Extra High Voltage, and the new Measurement Classes are more applicable to lower voltages), but it is technically possible and this approach is also consistent with the current approach employed for Consumption Component Classes.

This option minimises the proliferation of Consumption Component Classes, but does not allow Distributors to distinguish between Export from the three new Measurement Classes. The alternative approach would be to introduce a separate set of six new Consumption Component Classes for each new Measurement Class:

CCC Id	MQ Id	Aggregation Type	Metered / Unmetered	Consumption Component Indicator	Actual / Estimate	Consumption Level Indicator
54	AE	H	M	C	A	F
55	AE	H	M	M	A	F
56	AE	H	M	L	A	F
57	AE	H	M	C	E	F
58	AE	H	M	M	E	F
59	AE	H	M	L	E	F
60	AE	H	M	C	A	G
61	AE	H	M	M	A	G
62	AE	H	M	L	A	G
63	AE	H	M	C	E	G
64	AE	H	M	M	E	G
65	AE	H	M	L	E	G
66	AE	H	M	C	A	H
67	AE	H	M	M	A	H
68	AE	H	M	L	A	H
69	AE	H	M	C	E	H
70	AE	H	M	M	E	H
71	AE	H	M	L	E	H

Question 2

Should the three new Measurement Classes share a single set of six Export Consumption Component Classes, or should each one have its own set of six Export Consumption Component Classes?

Requirement 2 – Amending the D0040 and D0298 data flows

At present HHDAs send aggregated HH data to SVAA. The level of aggregation is Supplier, GSP Group and CCC. In order to support reporting of aggregated data by SVAA for Measurement Classes 'F' to 'H', this data will also need to be broken down by:

- Distributor Id, in order that SVAA can report the data to the correct Distributor; and
- Line Loss Factor Class Id, in order that SVAA can provide separate values of aggregated consumption for different Line Loss Factor Classes. This will support different tariffs for different voltage levels or Measurement Classes (if required by the relevant Charging Methodology).

Our previous consultation proposed that new data flows (based on the D0040 and D0298) would be introduced for use with the new Measurement Classes. Use of the new flows would be optional (avoiding the need for HHDAs to upgrade their systems if they did not wish to support the new Measurement Classes).

The Modification Group has now concluded that this optionality would introduce significant complexity. HHDAs who did not wish to support the new Measurement Classes would require exception processing to identify if they were erroneously appointed to a Metering System in one of these Measurement Classes, and to resolve the issue with the relevant Supplier. To avoid this complexity, the Group now proposes, based on significant support from the consultation, that all HHDAs should be required to support the new Measurement Classes (and be able to submit data to SVAA should they appointed to one).

Question 3

Do you agree that all HHDAs should be required to support the new Measurement Classes?

Therefore, to support this requirement, the D0040 and D0298 data flows will be amended to include new record types for the new MCs. These new record types will be similar to the existing D0040/D0298 data, but the consumption will be broken down by Distributor ID and LLFC ID (in addition to Supplier Id, GSP Group and Consumption Component Class).

Because the new record types introduced into the D0040/D0298 apply only to the new Measurement Classes, a Supplier who is not using them will receive a D0040/D0298 that does not contain any of the new records. This is intended to minimise the impact on Suppliers who are not using the new Measurement Classes (i.e. it is proposed that the additional information included will not be visible on the flows for the older Measurement Classes).

This requirement will be mandatory for Data Aggregators to ensure that Distributors receive data for all Metering Systems.

Requirement 3 – Processing the amended D0040/ D0298 data into the existing D0030 and D0314 data flows

This requirement is unchanged from our previous consultation, except that the Group has now agreed that the new data on the D0030 will be reported against Profile Class zero, rather than a Profile Class specified by the Supplier. This ensures that aggregated HH data (for Measurement Classes 'F' to 'H') can be clearly distinguished from NHH data.

Note that Profile Class zero will not be added to Market Domain Data. This is consistent with existing practice (in which a Profile Class of zero is used on data flows relating to the Half Hourly market, even though this value is not included in the list of valid Profile Classes in MDD).

In order to allow SVAA to report HH data in the existing D0030 format, Distributors will need to inform the SVAA what Standard Settlement Configuration (SSC) to report so that the correct data can be associated with each Line Loss Factor Configuration (LLFC). It will be mandatory for DNOs to provide this information, as the SSC, TPR and PC are mandatory items in the D0030 data flow. However, Distributors who aren't interested in mapping consumption to Time Pattern Regimes (e.g. because their billing systems do not use the VMR group) can just provide simple default data (e.g. map all LLFCs to the unrestricted SSC 0393).

The SVAA will need to aggregate the data accordingly when they produce the report. Each DNO should provide the SSC for reporting each relevant LLFC. They should also provide a default SSC for reporting of any consumption that comes in on other (unexpected) LLFCs.

For example, suppose that a hypothetical Distributor had established new Line Loss Factor Classes as follows:

- LLFCs 200 and 400 for Measurement Class 'F' (to be billed on a single-rate tariff);
- LLFC 201 for Measurement Class 'G' (to be billed on a two-rate tariff); and
- LLFC 401 (for Measurement Class 'H' (to be billed on a two-rate tariff).

It could be that the Distributor uses a billing system that assumes no link between tariff and SSC (and bills Suppliers using the profiled Half Hourly data on the SPX record of the D0030 data flow). In this case it would not matter which SSC the consumption was reported against, and the Distributor could submit a single row of standing data instructing SVAA to report all aggregated HH data against a dummy SSC (such as the unrestricted SSC 0393):

Input LLFC		Effective Date	Output SSC
Distributor	LLFC		
XXXX		31-03-2013	0393

Alternatively, the Distributor may use a billing system that assumes a link between the DUoS tariff time bands and the SSC selected by the Supplier (because it bills Suppliers using data aggregated to time band level on the VMR record of the D0030 data flow). In this case the Distributor would need SVAA to aggregate the Half Hourly data for each LLFC into appropriate time bands. The Distributor would enable this by specifying an appropriate SSC for each LLFC in the standing data provided to SVAA:

Input LLFC		Effective Date	Output SSC
Distributor	LLFC		
XXXX	200	31-03-2013	0393
XXXX	201	31-03-2013	0154
XXXX	400	31-03-2013	0393
XXXX	401	31-03-2013	0154
XXXX		31-03-2013	0154

In the above example, the Distributor has specified SSC 0154 for LLFCs 201 and 401 because the Time Pattern Regimes of SSC 0154 (i.e. 23:30 – 06:30 and 06:30-23:30) match his billing requirements. The standing data tells SVAA to produce a D0030 data flow that (for these LLFCs) contains separate VMR records for each TPR:

- VMR records for Time Pattern Regime 00039 will contain the total consumption for time band 23:30 – 06:30; and
- VMR records for Time Pattern Regime 00221 will contain the total consumption for time band 06:30 – 23:30.

LLFCs 200 and 400 are associated with the unrestricted SSC 0393, and so data for these LLFCs will be reported against the single unrestricted Time Pattern Regime 00001. The row with no LLFC specified is a default, and indicates that any consumption on 'unexpected' LLFCs (for Measurement Classes 'F', 'G' or 'H') should also be reported against SSC 0154.

The Distributors would have the option to specify a unique SSC Id to the LLFC Id associated with each of the new Measurement Classes. This would facilitate the SVAA system aggregating the daily HH data into the number of time-periods defined by the SSC.

The Group have agreed that the SSC chosen by the DNO for reporting purposes should be a clock time SSC with switching times on half hour boundaries. Note that this restriction only applies to how the data is aggregated for reporting on the D0030. Suppliers are still free to use SSCs with switching times in GMT or not on half hour boundaries.

The SVAA system will be amended to include a new database table that holds the mapping from LLFC to SSC. This will be populated via Manual data entry. BSCP508 will be amended to include a paper form, which Distributors would fax or email to SVAA. SVAA would then type the data into a new data entry screen.

Requirement 4 – Changes to the SVAA system

This requirement is unchanged from our previous consultation, except that:

- As explained in requirement 2, data is now received from HHDAs on amended D0040 and D0298 data flows (rather than introducing new data flows and leaving the D0040/D0298 unchanged)
- As explained in requirement 3, the aggregated HH data on the D0030 is now reported against Profile Class zero.

Changes will be required to the SVAA system on how they produce their reports. They will need to be capable of receiving the lookup table from Requirements 2 & 3.

The SVAA will need to be able to produce the report in the new format. For each combination of Supplier Id, GSP Group and LLFC that has HH data (in the Consumption Component Classes corresponding to the new Measurement Classes), SVAA will need to perform the following processing when producing the D0030:

- Look up the appropriate SSC from the new database table (provided each Distributor has specified a default there will always be one).
- Identify the Time Pattern Regimes associated with the SSC, and the Period Time Pattern States associated with each TPR on that Settlement Day. (Period Time Pattern States are the flags indicating whether the TPR is treated as ON or OFF in each Settlement Period).
- For each TPR, include a VMR record, an SPX record and a TOT record in the output D0030:
 - The VMR record will identify the Distributor Id and LLFC, plus the SSC from the lookup table, and the TPR. The Profile Class will be reported as zero. The EAC/AA data² and SPM Default EAC MSID Count will be zero. The SPM Total EAC MSID Count and SPM Total AA MSID Count will be populated from the estimated and actual Data Aggregator HH MSID Counts provided by HHDAs on the new data flows (summing across all HHDAs and all relevant non-losses CCCs).
 - The SPX record will report 46/48/50 HH consumption values. For periods where the Time Pattern Regime is ON, this will be the data provided by the HHDAs (summed across all HHDAs and all relevant CCCs). For periods where the Time Pattern Regime is OFF, this will be zero.
 - The TOT record will have the totals of the values on the SPX record.

Requirement 5 – LDSOs not to issue site-specific invoices for MPANs in the new Measurement Classes

To avoid double charging, there is a need for the DNO not to issue site-specific invoices for MPANs in the new Measurement Classes. Therefore each DNO must ensure that receipt of D0036/D0275 data for an MPAN in one of the new Measurement Classes will not trigger an invoice for site-specific HH charges.

² EAC/AA data (i.e. SPM Total All EACs and SPM Total Annualised Advance Report Value fields) could potentially be populated with aggregated HH data (instead of set to zero) but these data items are defined as holding annualised EAC/AA data; putting daily totals into annualised fields would create a risk of misunderstanding and error. In any case the daily totals of aggregated data will be made available on the TOT record (in the Daily Profiled SPM Total EAC and Daily Profiled SPM Total Annualised Advance fields).

Suppliers would presumably wish to validate that they don't receive site-specific invoices for these MPANs, though this is not a mandatory requirement that would be imposed by implementation of P280.

Potential Requirement

The Workgroup highlighted that the above approach is likely to be expensive (because it may necessitate significant change to DNO HH billing systems) and error-prone (because it relies on the DNO billing system having the same view of Measurement Class data as the Supplier, and any difference will lead to disputed invoices).

Therefore the group considered the potential inclusion of a further requirement in the P280 solution with the aim of reducing the possibility of errors arising. The group would like specific input from industry participants on the usefulness and implementation impact of this further requirement, as set out below.

Requirement 6 – Amending the HHDC-LDSO data flow

The consultation responses received highlighted mixed support for a number of different options.

Below we have compiled the benefits and drawbacks received for each option alongside the views given during the latest working group meeting.

Note that these options potentially apply to both Distributors and Suppliers, but that the same option will not necessarily be appropriate for both. It may be that Suppliers want one option and Distributors want another.

Option 1

Data Flow	Pros	Cons
No data flow is sent (Data for new Measurement Classes received on D0030 from SVAA, but not from HHDC)	Reduces the need to send significant data flows on a daily basis. (29m/dayx2data flowsx2recipients)	Impacts Distributors ability to reconcile the aggregated bill and use of such data at a site level for network planning
	Avoids any potential double billing by the distributor.	
	Will avoid any data privacy issue of seeing customer HH data.	

Option 2

Data Flow	Pros	Cons
D0010 (in preference to the other data flow options)	Use of an existing data flow allows for all parties to receive the data as they do now, and results in no need to create new or amend existing data flows.	Increase in D0010 volume rather than on an ad hoc basis (29m monthly/quarterly/six monthly or spread over time).
	Receipt of data could be monthly/quarterly thereby reducing significantly the daily data flow traffic of the alternative data flow options (29m/dayx2data flowsx2recipients)	
	Will avoid any data privacy issue of seeing customer HH data.	
	Avoids any potential double billing.	

Option 3

Data Flow	Pros	Cons
D0036/D0275 (i.e. existing D0036/D0275 data flows used to send data for both old and new Measurement Classes)	Those who do not want to use the New Measurement Classes are unaffected since no change to existing data flow structure.	Distributors would have to have validation in place to avoid sending out a site specific bill as well as the aggregated bill for the new measurement classes in order to prevent double billing.
		The RIGS would produce inaccurate reporting unless a change is agreed to the reporting requirements. This would need ofgem approval.
		There may be a data privacy issue since this data will not be used for billing apart from validation of the bill and for network planning.
		Significant daily data flow traffic across the industry (29m/dayx2data flowsx2recipients)
		No means of identifying whether the data in the flow will be billed by the distributor on a site specific or aggregated basis.

Option 4

Data Flow	Pros	Cons
D0036A/D0275A (inclusion within the flow of the measurement Class data item)	Identifies by Measurement Class thereby aids understanding of what will be site specific billing and what will be aggregated billing undertaken by the distributor.	Distributors would have to have validation in place to avoid sending out a site specific bill as well as the aggregated bill for the new Measurement Classes
		The RIGS would produce inaccurate reporting unless a change is agreed to the reporting requirements. This would need ofgem approval.
		There may be a data privacy issue since this data will not be used for billing apart from validation of the bill and for network planning.
		Those who do not want to use the new Measurement Classes will be affected due to the data flow structure changes.
		Significant daily data flow traffic across the industry (29m/dayx2data flowsx2recipients)

Option 5

Data Flow	Pros	Cons
D0036E/D0275E (This provides for equivalent data flow structures of the D0036/D0275 and is used for MC F,G & H. (D0036/D0275 used for MC C&E))	Those who do not want to use the New Measurement classes are unaffected.	There may be a data privacy issue since this data will not be used for billing apart from validation of the bill and for network planning.
	Distributor billing is unaffected since they would not bill on these data flows.	Significant daily data flow traffic across the industry (29m/dayx2data flowsx2recipients)
	The RIGS reporting would not need to be changed.	

Question 4

What are your views on each option? (Please complete the table provided in the response form)

Question 5

What do you believe are the impacts of the prohibition on obtaining and using consumption data within the Smart Metering - data access & privacy - draft distribution licence condition³ (see pg 79) published by DECC?

Once the decision has been made as to what format the data should be sent in, the Workgroup will consider whether participants, where the option allows, should be able to choose to opt in or opt out of receiving such data. Such an optional approach will have an initial impact on HHDCs but equally they will be the beneficiary of not having to send the flows that are not required. Non-receipt of a flow from a participant will not indicate that they have opted out, because the participant may have opted in but the flow is missing. Discussion between the relevant parties will identify and resolve such issues.

Question 6

Where the preferred option allows should participants have the ability to opt in/opt out of receiving data or should it be mandatory that data is sent? (Please complete the table provided in the response form)

³ <http://www.decc.gov.uk/assets/decc/11/consultation/smart-metering-imp-prog/4933-data-access-privacy-con-doc-smart-meter.pdf>