

**INITIAL WRITTEN ASSESSMENT for Modification Proposal P222
Provision of EAC and AA data to Distributors**

Prepared by ELEXON

For Review	Date of Issue	8 February 2008	Version Number	1.0
For Attention Of	BSC Parties and other interested parties			
Overview or Purpose of Document:				
<p>P222 seeks to ensure that Distribution System Operators receive Estimated Annual Consumption and Annualised Advance information through placing a specific obligation on the Supplier (via their Non Half-Hourly Data Collector) to send a D0019 flow. This modification proposal follows on from work undertaken as part of Issue 31 and seeks to implement a solution originally considered under Modification Proposal P043.</p>				
BSCCo's Recommendations				
On the basis of the initial assessment, BSCCo invites the Panel to:				
<ul style="list-style-type: none">• DETERMINE that Modification Proposal P222 should be submitted to the Assessment Procedure;• AGREE the Assessment Procedure timetable such that an Assessment Report should be completed and submitted to the Panel for consideration at its meeting of 8 May 2008;• DETERMINE that the P222 Modification Group be formed from members of the VASMG supplemented by members with expertise in Distribution; and• AGREE the Modification Group Terms of Reference.				
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Summary of Impacted Parties and Documents

As far as BSCCo has been able to assess, the following parties/documents are potentially impacted by Modification Proposal P222.

Please note that this table represents a summary of the full initial impact assessment results contained in Appendix 2.

Parties		BSC Sections		Code Subsidiary Documents	
Distribution System Operators	<input checked="" type="checkbox"/>	A	<input type="checkbox"/>	BSC Procedures	<input checked="" type="checkbox"/>
Generators	<input type="checkbox"/>	B	<input type="checkbox"/>	Codes of Practice	<input type="checkbox"/>
Interconnectors	<input type="checkbox"/>	C	<input type="checkbox"/>	BSC Service Descriptions	<input type="checkbox"/>
Licence Exemptable Generators	<input type="checkbox"/>	D	<input type="checkbox"/>	Party Service Lines	<input type="checkbox"/>
Non-Physical Traders	<input type="checkbox"/>	E	<input type="checkbox"/>	Data Catalogues	<input checked="" type="checkbox"/>
Suppliers	<input checked="" type="checkbox"/>	F	<input type="checkbox"/>	Communication Requirements Document	<input type="checkbox"/>
Transmission Company	<input type="checkbox"/>	G	<input type="checkbox"/>	Reporting Catalogue	<input type="checkbox"/>
Party Agents		H	<input type="checkbox"/>	Core Industry Documents	
Data Aggregators	<input type="checkbox"/>	I	<input type="checkbox"/>	Ancillary Services Agreement	<input type="checkbox"/>
Data Collectors	<input checked="" type="checkbox"/>	J	<input type="checkbox"/>	Data Transfer Services Agreement	<input type="checkbox"/>
Meter Administrators	<input type="checkbox"/>	K	<input type="checkbox"/>	Distribution Code	<input type="checkbox"/>
Meter Operator Agents	<input type="checkbox"/>	L	<input type="checkbox"/>	Distribution Connection and Use of System Agreement	<input type="checkbox"/>
ECVNA	<input type="checkbox"/>	M	<input type="checkbox"/>	Grid Code	<input type="checkbox"/>
MVRNA	<input type="checkbox"/>	N	<input type="checkbox"/>	Master Registration Agreement	<input type="checkbox"/>
BSC Agents		O	<input type="checkbox"/>	Supplemental Agreements	<input type="checkbox"/>
SAA	<input type="checkbox"/>	P	<input type="checkbox"/>	Use of Interconnector Agreement	<input type="checkbox"/>
FAA	<input type="checkbox"/>	Q	<input type="checkbox"/>	BSCCo	
BMRA	<input type="checkbox"/>	R	<input type="checkbox"/>	Internal Working Procedures	<input type="checkbox"/>
ECVAA	<input type="checkbox"/>	S	<input checked="" type="checkbox"/>	BSC Panel/Panel Committees	
CDCA	<input type="checkbox"/>	T	<input type="checkbox"/>	Working Practices	<input type="checkbox"/>
TAA	<input type="checkbox"/>	U	<input type="checkbox"/>	Other	
CRA	<input type="checkbox"/>	V	<input type="checkbox"/>	Market Index Data Provider	<input type="checkbox"/>
SVAA	<input type="checkbox"/>	W	<input type="checkbox"/>	Market Index Definition Statement	<input type="checkbox"/>
Teleswitch Agent	<input type="checkbox"/>	X	<input type="checkbox"/>	Connection and Use of System Code	<input type="checkbox"/>
BSC Auditor	<input type="checkbox"/>	Z	<input type="checkbox"/>	System Operator-Transmission Owner Code	<input type="checkbox"/>
Profile Administrator	<input type="checkbox"/>			Transmission Licence	<input type="checkbox"/>
Certification Agent	<input type="checkbox"/>				
Other Agents					
Supplier Meter Registration Agent	<input type="checkbox"/>				
Unmetered Supplies Operator	<input type="checkbox"/>				
Data Transfer Service Provider	<input checked="" type="checkbox"/>				

1 Description of Proposed Modification

1.1 *Background*

1.1.1 Modification Proposal P043

In 2001 Western Power Distribution raised P043 'Provision of Annualised Advance and Estimated Annual Consumption Data'. P043 sought to modify the BSC such that Non Half Hourly Data Collectors (NHHDCs) would be required to send Metering System Annualised Advance (AA) and Estimated Annual Consumption (EAC) data to the Distributor.

Prior to business separation of Supplier and Distribution businesses the Distributor System Operators (DSOs) had access to this data. It was suggested that DSOs require an accurate forecast of consumption to enable a more accurate calculation of loading on its network and therefore forecast demand. The Proposer felt that the D0019 'Metering System EAC/AA data' flow was the best source for this data.

Ofgem rejected P043 noting that 'at present'... 'the proposal may lead to additional overall costs and that such costs will have to be borne by other parties' and that 'it is questionable whether the required change necessary to provide such data is warranted relative to the expense that might be incurred'. Ofgem suggested that the provision of such data could be achieved outside the BSC and noted that a change could be proposed to the Distribution Use of System Agreement, to require Suppliers to provide the data. The Ofgem letter is included in Section 5.2 (Reference 1).

1.1.2 Issue 31

In November 2007 Issue 31 was raised to again consider the potential provision of EAC/AA data to DSOs via the D0019 flow. The Proposer advised that, as an Independent Distribution System Operator (IDSO), their Distribution System is connected to that of another host DSO. It is therefore felt necessary for both the IDSO and the host DSO to obtain accurate information regarding how much energy is transported across the boundary between their Systems for the purposes of system planning. In addition it was argued that IDSOs need to understand the demands on a site-by-site basis for network planning and operation reasons.

The Issue 31 Group noted that DSOs receive the D0010 'Meter Readings' data flow, however the Proposer indicated this data may be two years out of date and may need to be cleansed. It was acknowledged that DSOs can request Suppliers to provide information on an ad-hoc basis, but this is likely to be expensive. It is therefore felt that the D0019 is the best source of this data.

The Group noted that the circumstances had changed since 2001 with the emergence of IDSOs and also that when P043 was raised, only the DSO who proposed P043 had undergone business separation. Therefore other DSOs arguably still had access to the required data.

The Issue 31 Group discussed potential alternative solutions that might be considered under the BSC or alternatively under the Distribution Connection and Use of System Agreement (DCUSA). On balance it was felt that the original suggestion was the most appropriate solution to consider under a Modification.

It was observed that the P043 process had not provided costs for the changes proposed nor draft legal text. The Group confirmed that the BSC would need to be revised to ensure the obligation to provide D0019 data to DSOs was clear.

A majority of the Issue 31 Group members supported a Modification Proposal being raised in this area to allow for the costs and benefits to be better understood. The Issue 31 report is tabled at the same Panel meeting as this Initial Written Assessment and is included in Section 5.2 (Reference 2).

1.2 Modification Proposal

P222 was raised on 1 February 2008 by The Electricity Network Company Limited ('the Proposer'). P222 seeks to ensure that DSOs receive EAC or AA data for Metering Systems located within their Distribution Network. It is proposed that this information be provided by the NHHDC sending a D0019 flow to the relevant DSO only.

The Proposal builds upon the discussions of the Issue 31 Group, which are summarised in Section 1.1 and the Issue 31 Report (Reference 2). P222 proposes that the receipt of the D0019 flow will provide the required site specific consumption data for Non Half Hourly metered sites.

It is suggested that the lack of site specific consumption data inhibits the accuracy of planning the loading of DSO networks, which can lead to:

- network overloading; or
- customers suffering from voltage complaints or interference; or
- inefficient or inappropriate reinforcement of the Distribution System.

The benefits of P222 are indicated as being that DSOs will have a better understanding of the loading of their network which should allow for better facilitation of Applicable BSC Objective (c) *'promoting effective competition in the generation and supply of electricity'*:

- better assessment of potential locations for distributed generation; and
- lower use of system charges for consumers and generators (through effective and economic development of the network).

The Proposer also believes that P222 should help facilitate a move away from the requirement for boundary metering when IDSOs connect their networks to the DSOs. All DSOs currently receive aggregated data via the D0030 'Non Half Hourly DUoS Report' data flow. The site specific data provided in the D0019 may help support billing using the D0030 flow.

2 Areas for Consideration in Progressing Modification Proposal

An initial assessment of P222 has identified the following areas which BSCCo recommends should be considered further during the progression of the Modification Proposal (it is proposed that the P222 Modification Group should build upon the work of the Issue 31 Group):

- Confirm the proposed solution considering;
 - How NHHDCs will ensure only data for the 'Relevant DSO' is provided
 - What validation will be required by DSOs and how will suspect data be managed
 - Whether changes are required to the D0019 file structure and sequencing

- The perceived benefits of P222 to types of participant and whether these better meet the Applicable BSC Objectives (including some quantification of the benefits suggested to distributed energy and DUoS charges);
- The associated changes to the MRA and Data Transfer Network/Catalogue;
- The requirements of data from the D0019 over current data flows available to DSOs;
- The system impacts and estimated costs of changes to DSO and NHHDC systems (and costs to other Parties);
- Establish what has changed since P043 and whether the P043 Authority comments still have merit; and
- Any alternative solutions (which may include non-BSC solutions).

3 Rationale for BSCCo's Recommendations to the Panel

BSCCo believes that further consideration of P222 by a Modification Group is required in order to further consider, and consult upon, the areas raised by this IWA. As the proposed solution and areas for consideration are sufficiently defined, BSCCo recommends that P222 proceed to the Assessment Procedure. It should be noted that, as this solution has previously been considered under P043 and rejected, the Modification Group's conclusions will be dependent upon evidence of clear costs and benefits provided by the industry.

BSCCo recommends that P222 be submitted to a 3-month Assessment Procedure.

It is estimated that progression of P222 will require:

- 4 Modification Group meetings;
- 1 industry consultation;
- 1 BSC Agent impact assessment;
- 1 Party/Party Agent impact assessment;
- 1 Core Industry Document Owner impact assessment (MRASCo);
- 1 BSCCo impact assessment; and
- 1 request for Transmission Company analysis.

The proposed timetable and estimated costs for the progression of P222 are shown in Appendix 3.

BSCCo recommends that the P222 Modification Group be formed from members of the VASMG, supplemented by members with expertise in Distribution.

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.

4 Terms Used In This Document

Other acronyms and defined terms take the meanings defined in the Code.

Acronym/Term	Definition
AA	Annualised Advance
D0010	Meter Readings – this flow contains raw Meter reading data and is used in the creation of a D0019.
D0019	Metering System EAC/AA Data – information in this flow is derived using data from current and previous Meter reads (D0010) and the profiles over the read period to create an annual consumption for a metering point. The D0019 is then passed into the Non Half Hourly Data Aggregator.
D0030	Non Half Hourly DUoS Report – this flow contains the total profiled consumption for all Metering Systems (but not per Metering Systems) for a particular DSO.
DSO	Distribution System Operator
EAC	Estimated Annual Consumption
IDSO	Independent Distribution System Operator
MRASCO	Master Registration Agreement Service Company
NHHDC	Non Half-Hourly Data Collector

5 Document Control

5.1 Authorities

Version	Date	Author	Reviewer	Reason for Review
0.1	06/02/08	David Jones	Design Authority/Change Delivery	For peer and technical review
0.2	07/02/08			For quality review
1.0	08/02/08	Change Delivery		For Panel decision

5.2 References

Ref.	Document Title	Owner	Issue Date	Version
1	P043 Authority Decision	Ofgem	22/03/02	1.0
2	Issue 31 Report	ELEXON	08/02/08	1.0

Appendix 1: Modification Proposal

Modification Proposal – BSCP40/03	MP No: 222 (mandatory by BSCCo)
Title of Modification Proposal <i>(mandatory by originator):</i> Provision of EAC and AA data to Distributors	
Submission Date <i>(mandatory by originator):</i> 1 February 2008	
Description of Proposed Modification <i>(mandatory by originator)</i> This proposal seeks to implement a solution where DSOs receive estimated annual consumption (EAC) or annualised advance (AA) information for non half hourly sites where use of system charges are settled on an aggregated basis (i.e. where consumption data is provided by the D0030 flow). It is proposed that this information be provided by the non half-hourly data collector sending a D0019 flow to the relevant DSO. This modification proposal follows on from work undertaken as part of Issue 31. A report on Issue 31 is expected to be submitted to the BSC Panel meeting of 14 February 2008.	
Description of Issue or Defect that Modification Proposal Seeks to Address <i>(mandatory by originator)</i> Currently AA and EAC data are provided by Data Collectors to Suppliers and Data Aggregators through use of the DTC data flow D0019. Providing this information to DSOs would enable them to more easily and better understand the loading of their networks. Where DSOs receive consumption information for non half hourly sites in an aggregated form they do not receive site specific consumption data for sites settled under profile class 1 to 4. (we understand that only 2 DSO groups (ENW and SSE) undertake site specific billing for profile classes 5 to 8 in the NHH market). Although DSOs receive copies of meter readings via the D0010 'Meter Readings' flow, the data may be 14 months old, and often requires significant cleansing and processing before it has value. Difficulties in processing and using the D0010 data were recognised by other DSOs. Where DSOs do not receive site specific consumption data it is more difficult for them to assess the loading of their networks. This can lead to networks being overloaded, or customers suffering from voltage complaints or interference. Alternatively, it could lead to inefficient or inappropriate reinforcement of the distribution system. In moving towards more dynamic management of networks it will become increasingly important for distributors to understand the loading of their network. Having such information will be important in assessing potential locations for distributed generation. Additionally, effective and economic development of the network will result in lower DUoS charges for consumers and generators. Also, new licensed electricity distributors have entered the market. Typically, such distributors connect their networks to the distribution systems of the ex-PES DSOs. Trading arrangements for IDSOs were determined through BSC Modification Proposal P62. Ex PES DSOs and IDSOs are exploring solutions that avoid the use of boundary metering to ascertain use of system charges. One such solution involves the IDSO providing settlement data, aggregated by settlement class (data contained within the D0030 flow), to the ex-PES DSO. This in essence replicates the current process for billing of suppliers. However, whilst this may provide data for DUoS billing; it does not provide data to facilitate system planning and operation because it does not allow the IDSO to determine the consumption across each DSO/IDSO boundary.	

Modification Proposal – BSCP40/03

MP No: 222
(mandatory by BSCCo)

Impact on Code *(optional by originator)*

See section 4.2 of "Report on Issue 31 'Provision of Annualised Advance and Estimated Annual Consumption Data to LDSO'

We understand that this report will be submitted for the BSC Panel meeting of 14 February 2008

Impact on Core Industry Documents or System Operator-Transmission Owner Code *(optional by originator)*

None foreseen.

Impact on BSC Systems and Other Relevant Systems and Processes Used by Parties *(optional by originator)*

None foreseen.

Impact on other Configurable Items *(optional by originator)*

See section 4.2 of "Report on Issue 31 'Provision of Annualised Advance and Estimated Annual Consumption Data to LDSO."

We understand that this report will be submitted for the BSC Panel meeting of 14 February 2008

Justification for Proposed Modification with Reference to Applicable BSC Objectives *(mandatory by originator)*

DSOs need to understand the loading on their networks so that they can ensure economic and efficient operation of their respective distribution systems.

Consumption data provides a useful proxy for demand. Providing DSOs and IDSOs with site specific consumption information will better enable them to plan and operate their distribution systems. In gaining a better understanding of the loading of the networks DSOs and IDSOs will be better able to facilitate the connection of demand and generation customers.

In the future it is envisaged that distributed generation will play a much bigger role in the operation of the UK electricity industry. In order to accommodate future solutions IDSOs and DSOs will require site specific demand and generation information to manage their distribution networks. If future solutions rely on the netting off of generation and demand at different distribution nodes then such information will be essential. Therefore, this Proposed Modification will assist in developing competition in generation.

It is believed that this proposal satisfies BSC Objective set out in Condition 3, paragraph 3(c) of the Transmission Licence; namely the "*promoting of effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase (as defined in the Transmission Licence) of electricity*"

Whilst DSOs receive copies of meter readings the data is likely to be out of date and may require significant cleansing. Although the DCUSA places obligations on suppliers to provide LDSOs with relevant information on request, by their very nature handling these specific request is likely to be more expensive.

Additionally, the Electricity Networks Association is facilitating a work group comprising of IDSOs and DSOs to look at alternative solutions to boundary metering. In considering solutions parties

Modification Proposal – BSCP40/03

MP No: 222
(mandatory by BSCCo)

have identified that the provision of the data contained in the D0019 flow would enable the IDSO to determine the consumption at an IDSO/DSO boundary and estimate the maximum demand. Ofgem also attend this industry working group.

P43 was raised by WPD in 2001 and was rejected by the Authority in 2002. At the time of the proposal some DSOs still received consumption information via the PES supply businesses. Business separation means that DSOs no longer have access to site specific consumption for NHH sites. We believe the circumstances and the understanding of the need for such information has developed since the P43 proposal was submitted.

It is believed that providing the information via existing settlement flows offers a more cost effective solution than establishing arrangements where information is provided by suppliers outside the settlement process.

Urgency Recommended: ~~Yes~~ / No *(delete as appropriate) (optional by originator)*

Justification for Urgency Recommendation *(mandatory by originator if recommending progression as an Urgent Modification Proposal)*

Details of Proposer:

Name.....*Mike Harding*.....

Organisation.....*The Electricity Network Company Limited*.....

Telephone Number.....*07920 238095*.....

Email Address.....*mike.harding@gtc-uk.co.uk*.....

Details of Proposer's Representative:

Name.....*As Proposer*.....

Organisation..........

Telephone Number..........

Email address..........

Modification Proposal – BSCP40/03	MP No: 222 (mandatory by BSCCo)
Details of Representative's Alternate:	
<i>Name.....Glenda Simons.....</i>	
<i>Organisation..... The Electricity Network Company Limited.....</i>	
<i>Telephone Number.....01359 243370.....</i>	
<i>Email address.....glenda.simons@gtc-uk.co.uk.....</i>	
Attachments: Yes/ No (delete as appropriate) (mandatory by originator)	
If Yes, Title and No. of Pages of Each Attachment:	

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 P222.

- a Impact on BSC Systems and Processes**
No impact
- b Impact on BSC Agent Contractual Arrangements**
No impact
- c Impact on BSC Parties and Party Agents**
Non Half-Hourly Data Collectors
- d Impact on Transmission Company**
No impact.
- e Impact on BSCCo**

Area of Business	Potential Impact of Proposed Modification
Change Delivery	Change Delivery will be responsible for the Implementation of the changes to the BSC and Code Subsidiary Documents as part of a release, co-ordinated with MRASCo.
Service Delivery	It is anticipated that provision of D0019 data to DSO may result in assistance being required for resolution of queries.

f Impact on Code

Code Section	Potential Impact of Proposed Modification
Section S	Section S, paragraph 2.3.2 (i), and Annex S-2, paragraph 4.3 1 (i), of the BSC require the NHHDC to provide validated Metered Data and Metering System reports to the relevant Supplier and the Relevant DSO. The obligation needs to make clear that NHHDC s should provide D0019 data to the DSO.

g Impact on Code Subsidiary Documents

Document	Potential Impact of Proposed Modification
BSCP504 'Non-Half Hourly Data Collection for SVA Metering Systems Registered in SMRS'	The BSCP would be updated to note the additional interface between NHHDC and DSO for sending the D0019 flow.
PSL120 'Non-Half Hourly Data Collection'	An amendment could be made to PSL120. HOWEVER, this PSL is scheduled for removal at the June 2008 Release and has been out for impact assessment as CP1213. Therefore it is unlikely that change will be necessary.
SVA Data Catalogue Volume 1	This data catalogue would be updated to add the DSO to the list of recipients to the D0019.

h Impact on Core Industry Documents and Other Documents

Document	Potential Impact of Proposed Modification
Master Registration Agreement products	Changes to the Data Transfer Network and Data Transfer Catalogue would be required to indicate that the DSO would be an additional recipient of the D0019 flow and to reconfigure the network gateways to allow the D0019 to be passed from NHHDCs to DSOs. These changes would be progressed only if P222 were approved and the implementation timetable will need to allow an appropriate period for change.

i Impact on Other Configurable Items

No impact

j Impact on BSCCo Memorandum and Articles of Association

No impact.

k Impact on Governance and Regulatory Framework

No impact.

Appendix 3: Costs and Timetable for Progression

ESTIMATED COSTS OF PROGRESSING MODIFICATION PROPOSAL ¹	
Meeting Cost	£ 1,500
Legal/Expert Cost	£ 5,000 ²
Impact Assessment Cost	£ 0
ELEXON Resource	63 man days £17,000

¹ 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

² This figure is provisional and will only be used if external legal support is required.

