BSC Procedure 510 relating to the Provision of Sampling Data to the Profile Administrator

1. Reference is made to the Balancing and Settlement Code for the Electricity Industry in Great Britain and in particular, to the definition of "BSC Procedure".

2 This is BSC Procedure 510, Version 7.0 relating to The Provision of Sampling Data to the Profile Administrator.

3. This BSC Procedure is effective from 1 September 2021

4. This BSC Procedure has been approved by the ~~BSCCo~~ ~~Panel.~~ ~~BSCCo~~.

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1. Introduction

1.1 Scope and Purpose of the Procedure

The electricity trading arrangements require the use of Profiles to derive half hourly demands of Active Energy for Metering System Identifiers (MSIDs) being traded either as a Non Half Hourly Metering System or as a Non Half Hourly Unmetered Supply. A Profile represents a particular pattern of energy consumption over a given period. Profiles are required to represent the half-hourly pattern of average consumption for each of a number of distinct customer populations known as Profile Classes.

To support the electricity trading arrangements eight Profile Classes have been identified for the Non Half Hourly market, as follows:-

a) Code 01 - Domestic Unrestricted;

b) Code 02 - Domestic Economy 7;

c) Code 03 - Non-Domestic Unrestricted;

d) Code 04 - Non-Domestic Economy 7;

e) Code 05 - Non-Domestic with Maximum Demand (MD) recording capability and with a Load Factor (LF) of less than or equal to 20%;

f) Code 06 - Non-Domestic with MD recording capability and with LF of less than or equal to 30% and greater than 20%;

g) Code 07 - Non-Domestic with MD recording capability and with LF of less than or equal to 40% and greater than 30%; and

h) Code 08 - Non-Domestic with MD recording capability and with LF of greater than 40%.

The Profile Administrator (PrA) has been appointed to obtain energy consumption data from a representative sample of customers in Great Britain in Profile Classes one to four in order to derive the Profile to be applied for that Profile Class.

This BSCP sets out the procedures involved with the provision of customer information to the PrA to enable Active Energy Profile data to be gathered for each Profile Class in accordance with the required sample sizes. These sample sizes are specified in the BSCCo contract with the PrA, the "Profile Administrator Agreement", and are outside the scope of this BSCP.

1.2 Main Users of Procedure and their Responsibilities

This BSCP should be used by Supplier Meter Registration Agents, Suppliers, ~~the Panel,~~ BSCCo and the PrA. These Parties shall exchange information and data via the BSC Service Desk.

Supplier Meter Registration Agents (SMRAs) are responsible for providing to the BSCCo~~PanelBSCCo~~, on two separate occasions annually, a report containing all MSIDs registered by a Supplier in each GSP Group covered by that Supplier Meter Registration

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Service. The report contains data items for other uses within BSCCo, and shall, for the purposes of this BSCP, contain the data items outlined in paragraph 4.5 of the Appendices.

BSCCo~~, on behalf of the Panel,~~ will receive a report relating to Settlement Days 15 January and 15 July each year from each SMRA.

The PrA shall confirm the Sample Participants provided by the Supplier meet the requirements set out in paragraphs 4.1.1 and 4.2.2 of the Appendices and keep Suppliers informed of the approved Sample Participants.

1.2.1 Sample Creation

BSCCo shall inform the PrA of the target Sample size (broken down by GSP Group, Profile Class, and Stratum etc.). The PrA shall then provide BSCCo with details of existing Sample Participants within each category of the Sample as specified by BSCCo.

BSCCo shall determine the number of additional Sample Participants required to meet the Sample target, by Supplier (by Market Participant Identifier (MPID)), and provide this to the PrA.

The PrA shall then request the required number of additional Sample Participants from relevant Suppliers in accordance with paragraph 4.1.1 of the Appendices, using a dedicated point of contact provided by each Supplier. The PrA shall also request confirmation from Suppliers whether they shall appoint agents of their choice (for both Non Half Hourly (NHH) settlement purposes and the provision of half hourly data for load research) or require the PrA to nominate agents for Meter Operation, Data Collection, Data Aggregation and collect half hourly data for load research (see paragraph 1.2.2). The PrA may nominate itself to perform these functions. Where the PrA nominates itself to perform the functions of an SVA Meter Operator then it shall be qualified in accordance with the Retail Energy Code Qualification and Maintenance Schedule. For the avoidance of doubt the appointment of SVA Meter Operator Agents will take place in accordance with the Retail Energy Code Metering Operation Schedule.

Suppliers shall randomly select Sample Participants from their customer base and provide these to the PrA in accordance with paragraph 4.1.2 of the Appendices. The Supplier may choose to provide additional Sample Participants for the Sample within the constraints of the request at this point in case any of the Sample Participants provided are found to be unsuitable at a later date. The Supplier shall also confirm whether it shall appoint agents of its choice (for both NHH settlement purposes and the provision of half hourly data for load research) or appoint the PrA's nominated NHH agents for Meter Operation, Data Collection, Data Aggregation and require the PrA to collect half hourly data. Where the PrA nominates itself to perform the functions of an SVA Meter Operator then it shall be qualified in accordance with the Retail Energy Code Qualification and Maintenance Schedule. For the avoidance of doubt the appointment of SVA Meter Operator Agents will take place in accordance with the Retail Energy Code Metering Operation Schedule.

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1.2.2 Provision of Profile Capable Metering Systems and agent responsibilities

In order to ensure that Metering equipment meets Settlement and half hourly data collection requirements for the Sample, the Supplier must; either install and maintain Profile Capable Metering Systems (as Settlement Meters that also collect half hourly data) for approved Sample Participants; or request the PrA to do so.

Where the Supplier has requested the PrA to install and maintain Profile Capable Metering Systems, it shall also request the PrA to nominate NHH agents (the PrA may nominate itself) for Settlement purposes in relation to that Metering System. The PrA shall nominate the following agents: a SVA Meter Operator Agent (MOA), a Non Half Hourly Data Collector (NHHDC) and Non Half Hourly Data Aggregator (NHHDA). For the avoidance of doubt the appointment of SVA Meter Operator Agents will take place in accordance with the Retail Energy Code Metering Operation Schedule.

Where the PrA installs and maintains the Profile Capable Metering System, it shall be responsible for undertaking half hourly data collection for the Sample with respect to that Metering System. The PrA can fulfil this requirement either through itself, its nominated NHHDC or a third party. The Supplier shall appoint the PrA's nominated NHH agents (or different NHH agents of its choice) in accordance with existing industry processes. The Supplier can opt to appoint either a PrA nominated or Supplier chosen NHH agent for each MSID.

Where the Supplier has chosen to appoint one or more NHH agents of its choice for the purposes of Settlement, the Supplier shall be responsible for collecting and providing half hourly data for the profiling Sample, e.g. via its appointed NHHDC, a third party or itself, for those NHH agents.

Where the Supplier changes its agents (NHH and half hourly) it must inform the PrA.

1.2.3 Data Collection

Once the Supplier has appointed agents (NHHDC, NHHDA, SVA MOA), either of its own choice or those nominated by the PrA, the relevant agent shall carry out the NHH processes for Settlement and collect and provide actual half hourly data to the PrA. For the avoidance of doubt, the Supplier cannot provide estimated data to the PrA.

Where the PrA finds that it has not received half hourly data as expected, the PrA shall investigate the cause of the missing data.

1.2.4 Supplier Rebate

The PrA shall pay to each Supplier the Profile Sum incurred by that Supplier in providing data for the Sample, where the Supplier has opted to use agents of its choice (other than where it has chosen the PrA's nominated agents).

The PrA shall pay the Supplier annually based on the average annual cost per Sample Participant incurred by the PrA for the following:

a) Procurement and installation of Metering Equipment for new Sample Participants that did not previously have Profile Capable Metering Systems installed and any necessary replacement of Metering equipment for the first time only;

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b) Annual maintenance of a Profile Capable Metering System. Where the Supplier (or its agents) have maintained the Profile Capable Metering System for less than 365 days, the PrA shall only rebate 50% of the cost; and

c) Annual half hour data collection costs incurred in addition to NHH Settlement Data Collection e.g. airtime contracts and data collection. Where the Supplier (or its agents) have collected data for less than 365 days, the PrA shall only rebate 50% of the cost.

The PrA shall submit its Profile Sum calculation for each Supplier to BSCCo for approval prior to paying the Supplier.

1.2.5 Change of Supplier

Where the PrA has not received expected data, it shall investigate the cause of missing data and retire the relevant Sample Participant where a change of Supplier has occurred. Where, after investigation, the PrA cannot identify the cause of missing data, it shall contact the Supplier or relevant agent to investigate.

Where the Supplier is aware of a Change of Supplier event, it may inform the PrA at any time before it receives a request from the PrA to investigate.

1.2.6 Review of Sample Participant details

Changes in Sample Participants may result in changes to patterns of consumption, which need to be considered by the PrA.

To confirm whether such changes have occurred, the PrA shall provide each Supplier with a list of Sample Participants who are customers of the Supplier, on an annual basis.

The Supplier shall confirm whether any change of details (e.g. change of tenant) have occurred and if so, provide the PrA with the relevant details.

Where the Supplier is aware of any change of details (e.g. change of tenant), it may inform the PrA at any time before it receives a request from the PrA to confirm whether any changes have occurred.

The PrA shall then review target requirements for the next BSC year based on the change details provided by the Supplier and inform BSCCo of any required changes to the target Sample (as part of the sample creation process in section 1.2.1).

1.3 Use of the Procedure

Throughout this procedure, timetables reflect the number of Working Days (WD) by which an activity should be completed.

The remaining sections in this document are:

Section 2 – No longer used.

Section 3 – Interface and Timetable Information: this section defines in detail the requirements of each business process.

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1.4 Balancing and Settlement Code Provision

This BSC Procedure has been produced in accordance with the provisions of the Balancing and Settlement Code (the Code). In the event of an inconsistency between the provisions of this BSC Procedure and the Code, the provisions of the Code shall prevail.

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1.5 Associated Balancing and Settlement Code Procedures

BSCP504	Non Half Hourly Data Collection for SVA Metering Systems Registered in SMRS
BSCP505	Non Half Hourly Data Aggregation for SVA Metering Systems Registered in SMRS
Code of Practice 5	The Metering of Energy transfers with a Maximum Demand of up to (and including) 1MW for Settlement purposes
Code of Practice 8	The Metering of Import Active Energy via Low Voltage Circuits for Non Half Hourly Settlement purposes
Code of Practice10	Whole Current Metering of Energy via Low Voltage Circuits for Settlement Purposes

1.6 Acronyms and Definitions

1.6.1 Acronyms

The terms used in this BSCP are defined as follows:

BSCP	Balancing and Settlement Code Procedure
EMDS	Energy Market Data Specification
Id	Identifier
kW	kilo-watts
LF	Load Factor
MD	Maximum Demand
MSID	Metering System Identifier
MOA	Meter Operator Agent
NHHDA	Non Half-Hourly Data Aggregator
NHHDC	Non Half-Hourly Data Collector
Code	the Balancing and Settlement Code
REC	Retail Energy Code
PrA	Profile Administrator
SMRA	Supplier Meter Registration Agent
SMRS	Supplier Meter Registration Service
SSC	Standard Settlement Configuration
UTC	Co-ordinated Universal Time

Full definitions of the above acronyms are, where appropriate, included in the Code.

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1.6.2 Definitions

Customer Type This indicates the usage type of the premises e.g. an industrial customer or a commercial customer.

Sample	A group of electricity consumers drawn randomly from a Profile Class designed to be representative of the population of the Profile Class.
Sample Participant	A consumer of electricity whose consumption of electricity is being measured by the Profile Administrator.
Stratum	A sub-division of the Sample included in the Sample design that is defined by criteria such as annual consumption, GSP Group or Customer Type.
Super Stratum	Super Strata are a sub-division of the Sample that is defined by the annual consumption band in KWh from which Sample Participants must be drawn.

2. No Longer Used

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3. Interface and Timetable Information

3.1 Sample Creation and Maintenance

REF	WHEN	DESCRIPTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.1.1	By 1 October	Provide PrA with target breakdown.	BSCCo	PrA	Total Sample Participants required by GSP Group, Profile Class and Stratum.	via the BSC Service Desk
3.1.2	By 1 November	Provide existing Sample Participant details.	PrA	BSCCo	Existing Sample Participant details by GSP Group, Profile Class and Stratum.	via the BSC Service Desk
3.1.3	Within 10 WD of 3.1.2	Provide Sample Participant request by Supplier.	BSCCo	PrA	Sample Participant request by Supplier, MPID, GSP Group, Profile Class and Stratum.	via the BSC Service Desk
3.1.4	Within 5 WD of 3.1.3	Request random selection of Sample Participants by Supplier and request confirmation for each MSID of whether the Supplier shall appoint agents of its choice (for NHH Settlement purposes) and provide half hourly data or appoint the PrA's nominated agents for NHH Settlement purposes. Where the PrA's nominated NHH agents are used, the PrA shall also be responsible for half hourly data collection as described in section 1.2.2. Where the Supplier has customers in the Sample as Sample Participants, provide Supplier with details of these Sample Participants as part of the Sample Participant request. Provide details of PrA's agents.	PrA	Supplier(s)	Dedicated point of contact for Supplier. Sample Participant request in accordance with paragraph 4.1.1 of the appendices. Details of existing Sample Participants that are customers of the Supplier. PrA agent details by MPID.	via the BSC Service Desk

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REF	WHEN	DESCRIPTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.1.5	Within 20 WD of 3.1.4	Provide Sample Participant details and confirm for each MSID whether the Supplier shall appoint agents of its choice (for NHH Settlement purposes) and provide half hourly data or appoint the PrA's nominated agents for NHH Settlement purposes. Where the Supplier appoints the PrA's nominated NHH agents, the PrA shall be responsible for half hourly data collection as described in section 1.2.2. The Supplier may provide additional Sample Participants for the Sample within the constraints of the request at this point in case any of the Sample Participants provided are found to be unsuitable at a later date. Confirm details of any existing Sample Participants provided by the PrA. in 3.1.4.	Supplier(s)	PrA	Randomly selected Sample Participants and Sample Participant details in accordance with paragraphs 4.1.2 and 4.2 of the appendices. Confirmed details of all Sample Participants. Confirmation of agents to appoint by MPID.	via the BSC Service Desk
3.1.6	Within 5 WD of 3.1.5	Review Sample Participants and request replacement Sample Participants where proposed Sample Participants are not suitable.	PrA	Supplier(s)	Sample Participant request in accordance with paragraph 4.1 of the appendices.	via the BSC Service Desk
3.1.7	Within 5 WD of 3.1.6	If replacement Sample Participants requested, provide Sample Participants.	Supplier(s)	PrA	Randomly selected Sample Participants by GSP Group, Profile Class, Stratum, Consumption Level and Customer Type in accordance with paragraphs 4.1 and 4.2 of the appendices.	via the BSC Service Desk
3.1.8	By 10th WD in January	Confirm Sample Participants.	PrA	Supplier/ BSCCo	Confirmation of agreed Sample Participants.	via the BSC Service Desk

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3.2 Provision of Profile Capable Metering Systems

REF	WHEN	DESCRIPTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.1	Once Sample Participants confirmed	If all Sample Participants have the required Profile Capable Metering Systems (as Settlement meters that also collect half hourly data) and all agents (NHHDC, NHHDA, SVA MOA) are appointed, proceed to Ref (3.3.1) otherwise continue on to Ref (3.2.2).	Supplier	-	Sample Participant details.	-
3.2.2	By 10th WD in February	Ensure that all agents (NHHDC, NHHDA, SVA MOA) are appointed, whether these are the PrA's nominated agents, or agents of the Supplier's own choice. Confirm appointment of agents (at MSID level) and that the Supplier is able to provide half hourly data.	Supplier	PrA	For the appointment of Settlement agents only (NHHDC, NHHDA and SVA MOA) Confirmation of appointed agents at MPID level in accordance with paragraphs 4.1.3 of the appendices.	Industry methods and the BSC Service Desk
3.2.3	By 10th WD in March	For confirmed Sample Participants and as required, replace existing equipment with Profile Capable Metering Systems in accordance with existing industry processes as set out in the REC.	Supplier	SVA MOA	Sample Participant details and information required in accordance with paragraphs 4.1.2 and 4.3 of the appendices and the REC.	Email or other electronic means
3.2.4	By 10th WD in March	Confirm Metering equipment replaced successfully. If Metering equipment not replaced successfully, propose replacement Sample Participants.	Supplier	PrA	Confirmation of successful installation or proposed replacement Sample Participants in accordance with paragraphs 4.1 and 4.2 of the appendices. Confirmation of successful installation in accordance with paragraph 4.1.4 of the appendices.	via the BSC Service Desk
3.2.5	Within 2 WD of 3.2.3	Confirm proposed replacement Sample Participants.	PrA	Supplier	Confirmation of final Sample Participants.	via the BSC Service Desk

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REF	WHEN	DESCRIPTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.6	By 31 March	For confirmed Sample Participants replace existing equipment with Profile Capable Metering Systems in accordance with existing industry processes as set out in the REC as required.	Supplier	MOA	Sample Participant details and information required in accordance with the REC.	Email or other electronic means

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3.3 Data Collection

REF	WHEN	DESCRIPTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.3.1	By 10th WD in March	Instruct the relevant agent to begin half hourly data collection (or begin half hourly data collection if this will be conducted by the Supplier or PrA itself).	Supplier or PrA	agent	Sample Participant details.	Email or other electronic means
3.3.2	By 10th WD following the end of each month.	Provide validated half hourly data for the previous month.	Supplier[1],[2]	PrA	half hourly data file (1 file for all MSIDs) with validation in accordance with paragraphs 4.1.5 and 4.4 of the Appendices.	via the BSC Service Desk
3.3.3	Within 10th WD of any problems identified	If a Supplier is unable to provide validated half hourly data for a Sample Participant, the Supplier shall inform the PrA as appropriate and investigate and rectify the problem.[3] Resubmit validated half hourly data where appropriate.	Supplier[2]	PrA	Sample Participant details and problem details. Validated half hourly data where appropriate.	via the BSC Service Desk
3.3.4	Within 5 WD of 3.3.2 or 3.3.3	Acknowledge receipt of validated half hourly data and notify Supplier of any discrepancies.	PrA	Supplier	Acknowledgement of validated half hourly data and details of any discrepancies.	via the BSC Service Desk
3.3.5	Within 10 WD of 3.3.4	Resolve any discrepancies reported by the PrA.	Supplier	PrA	Details of any discrepancy and revised validated half hourly data.	via the BSC Service Desk

[1] If the Supplier changes agents it must inform the PrA.
[2] This may be provided either by the Supplier or the relevant agent.
[3] If a Sample Participant site has been disconnected or if the Supplier has confirmed site disconnection the PrA shall retire the Sample Participant. If it has been de-energised and the Supplier has appointed the PrA's agents, the Supplier shall appoint new NHH agents. The PrA shall retire that Sample Participant.

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3.4 Supplier Rebate

REF	WHEN	DESCRIPTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.4.1	By 10th WD in June[4]	Calculate Supplier Metering and data collection rebate (Profile Sum) in accordance with paragraph 1.2.4 and submit calculation to BSCCo. Where no Metering Systems have been installed or no half hourly data has been collected, a rebate shall not be required.	PrA	BSCCo	Number of meters installed by Supplier, number of months data collection has taken place.	via the BSC Service Desk
3.4.2	Within 5 WD of 3.4.1	Review submitted calculation. Approve calculation or request changes.	BSCCo	PrA	Profile Sum calculation.	via the BSC Service Desk
3.4.3	If change requested: within 5 WD of 3.4.2	Submit revised calculation.	PrA	BSCCo	Revised Profile Sum calculation.	via the BSC Service Desk
3.4.4	Within 5 WD of 3.4.3	Approve revised calculation.	BSCCo	PrA	Revised Profile Sum calculation.	via the BSC Service Desk
3.4.5	Within 10 WD of 3.4.2 or 3.4.4	Pay Suppliers by BACS or other agreed means.	PrA	Supplier	Approved Profile Sum and payment details.	Electronic or other agreed means

[4] The first rebate following implementation of Modification P223 will not take effect until June 2011.

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3.5 Change of Supplier

REF	WHEN	DESCRIPTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.5.1	Within 5WD of expected half hourly data not received.	Investigate cause of missing data and inform the Supplier of the affected MSIDs.	PrA	Supplier	MSIDs of affected Sample Participants.	via the BSC Service Desk
3.5.2	Within 10 WD of 3.5.1	Inform the PrA where: a) a Change of Supplier has occurred[5]; or b) the Supplier's agent cannot collect data. Proceed to Ref (3.3.3).	Supplier	PrA	MSIDs of missing Sample Participants with missing data.	via the BSC Service Desk
3.5.3	Within 5 WD of 3.5.2	If change of Supplier confirmed, retire Sample Participant from sample.	PrA		MSIDs of Sample Participants that have had a Change of Supplier.	via the BSC Service Desk

[5] Where the Supplier is aware of a Change of Supplier event, it may inform the PrA at any time before it receives a request from the PrA to investigate any affected MPANs.

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3.6 Review of Sample Participant details (e.g. change of tenant)

REF	WHEN	DESCRIPTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.6.1	By 1 June	Provide Supplier with list of Sample Participants in Sample to confirm whether any changes have occurred.	PrA	Supplier	Details of current Sample Participants in Sample in accordance with the paragraph 4.1.6 of the Appendices	via the BSC Service Desk
3.6.2	Within 10 WD of 3.6.1	Confirm existing Sample Participant details.[6]	Supplier	PrA	Confirmation of Sample Participant details including date of any changes in accordance with paragraph 4.1.6 of the Appendices.	via the BSC Service Desk
3.6.3	Within 5 WD of 3.6.2	Review target requirements for next BSC year and inform BSCCo.	PrA	BSCCo	Sample Participant information.	via the BSC Service Desk

[6] Where the Supplier is aware of any change of details, it may inform the PrA at any time before it receives a request from the PrA to confirm whether any changes have occurred.

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4. Appendices

4.1 Information exchange between the PrA and Suppliers

4.1.1 PrA's request to Supplier

The PrA shall provide the Supplier with the required number of Sample Participants relating to each of the following data items.

a) MPID

b) Profile Class

c) Super Stratum

d) Stratum

e) Customer Type (depending on Profile Class)[7]

f) GSP Group

Templates for Sample Participant requests can be found below and examples of populated templates can be found in the Profiling Samples Structure and Candidate Selection Guidance on the BSC Website.

[7] The Supplier shall use its best endeavours in determining the Customer Type e.g. whether a Sample Participant is an industrial or commercial customer.

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4.1.1.1 Sample template for Profile Class 2

Supplier	SUPX
MPID	XXXX

Total Requirements	
Profile Class	MSIDs
2	0

Super Stratum 1	0 - 5,999 kWh
Super Stratum 2	6,000 - 13,999 kWh
Super Stratum 3	>14,000 kWh

Requirement by GSP Group

GSP GROUP	Super Stratum	Stratum	Requirement
_C	1	1	0
_J	1	2	0
_H	1	3	0
_L	1	4	0
_A	1	5	0
_B	1	6	0
_E	1	7	0
_K	1	8	0
_D	1	9	0
_M	1	10	0
_F	1	11	0
_G	1	12	0
_C	2	13	0
_J	2	14	0
_H	2	15	0
_L	2	16	0
_A	2	17	0
_B	2	18	0
_E	2	19	0
_K	2	20	0
_D	2	21	0
_M	2	22	0
_F	2	23	0
_G	2	24	0
_C	3	25	0
_J	3	26	0
_H	3	27	0
_L	3	28	0
_A	3	29	0
_B	3	30	0
_E	3	31	0
_K	3	32	0
_D	3	33	0
_M	3	34	0
_F	3	35	0
_G	3	36	0
Total			0

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4.1.1.2 Sample template for Profile Class 3

Supplier	SUPX
MPID	XXXX

Total Requirements	
MSIDs	
Profile Class	Requirement
3	0

Super Stratum 1	0-4,999 kWh
Super Stratum 2	5,000-9,999 kWh
Super Stratum 3	10,000-19,999 kWh
Super Stratum 4	20,000-34,999 kWh
Super Stratum 5	35,000-69,999 kWh
Super Stratum 6	>70,000

Super Stratum	Stratum	Customer Type	Requirement
1	1	commercial	0
1	2	industrial	0
2	3	commercial	0
2	4	industrial	0
3	5	commercial	0
3	6	industrial	0
4	7	commercial	0
4	8	industrial	0
5	9	commercial	0
5	10	industrial	0
6	11	commercial	0
6	12	industrial	0
Total			0

Requirement by GSP Group

GSP GROUP	Requirement		
_C	0		
_J	0		
_H	0		
_L	0		
_A	0		
_B	0		
_E	0		
_K	0		
_D	0		
_M	0		
_F	0		
_G	0		
_N	0		
_P	0		
Total	0		

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4.1.1.3 Sample template for Profile Class 4

Supplier	SUPX
MPID	XXXX
Total Requirements	
Profile Class	MSIDs
4	0
Super Stratum 1	0 - 9,999 kWh
Super Stratum 2	10,000 - 24,999 kWh
Super Stratum 3	25,000 - 49,999 kWh
Super Stratum 4	50,000 - 99,000 kWh
Super Stratum 5	>100,000 kWh

Super Stratum	Stratum	Requirement
1	1	0
2	2	0
3	3	0
4	4	0
5	5	0
Total		0

Requirement by GSP Group

GSP GROUP	Requirement
_C	0
_J	0
_H	0
_L	0
_A	0
_B	0
_E	0
_K	0
_D	0
_M	0
_F	0
_G	0
Total	0

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4.1.1.4 No Longer Used.

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4.1.2 Sample Participant details provided to the PrA by Suppliers

The Supplier shall provide the PrA with the required number of randomly selected Sample Participants relating to the data items specified in paragraph 4.1.1. For each Sample Participant, the Supplier shall provide the following details. The Supplier shall randomly select the required number of Sample Participants in accordance with paragraph 4.2. For each MSID, the supplier can opt to appoint agents of its own choice or the PrA's nominated agents.

MPID	MSID	Will Supplier use PrA's agents? (Y/N)	Sample Participant Name	Site Addr 1	Site Addr 2	Site Addr 3	Site Addr 4	Post code	Sample Participant Contact 1	Sample Participant Contact 2	GSP Group	Profile Class	Super Stratum	Stratum	Annual Consumption[8]	Customer Type D=Domestic I=Industrial C=Commercial	Does Sample Participant have PCMS installed? (Y/N)	SSC	SIC Code
M	M	M	MC	M	M	M	M	M	MC	OC	M	M	M	M	M	M	M	M	O
4 char	13 char	1 char	50 char	50 char	50 char	50 char	50 char	7 char	50 char	50 char	2 char	2 char	2 char	2 char	10 char	1 char	1 char	4 char	8 char

M = Mandatory O = Optional C = Conditional (provide only for non domestic Sample Participants)

[8] Either Settlement Data (EAC/AA) or billing data may be used in the calculation of the annual consumption.

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4.1.3 Confirmation of agent appointment

The Supplier shall provide following details when confirming to the PrA that agents (the PrA's or Supplier's) have been appointed.

MPID	MSID	Appointed NHHMO	NHHMOA Contact	Appointed NHHDC	NHHDC Contact	Appointed NHHDA	NHHDA Contact	GSP Group
M	M	O	O	O	O	O	O	M
4 char	13 char	4char	100char	4char	100 char	100 char	100 char	2 char

M = Mandatory O = Optional (provide if available)

4.1.4 Confirmation of installation

The Supplier shall provide following details when confirming to the PrA that the required Profile Capable Metering Systems have been installed in Sample Participant premises.

MPID	MSID	NHHMO MPID	NHHDC MPID	Installation Date
M	M	M	M	M

M = Mandatory O = Optional

4.1.5 Half hourly data shall be provided to the PrA in the following fixed length file format:

The file shall be for all MSIDs for which data has been collected and shall be named as follows: "MPID_ddmmyyyy" where "ddmmyyyy" is the date.

Header record format

'Hyyyymmddhhmmss' where the first character is 'H' and yyyymmddhhmmss is the GMT creation date and time.

Trailer record format

'Trrrrrrrrsssssssssss' where the first character is 'T', the 'rrrrrrr' value is the total number of records within the file, including the header and trailer. The 'sssssssssss' value is the total of all readings (including any lag/lead values). When calculating the total of all readings, use the integer part of each reading (e.g. if a reading is 1234.567, only use '1234'). Where this total exceeds 12 digits, only the least significant 12 digits are required. Both the 'rrrrrrr' and 'sssssssssss' values shall be padded to the left with zeros.

<LF> shall be used to mark the end of a record.

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Record Position	Item Name	Format	Description
1	Record Identifier	Char (1)	'D'
2-9	Date of Readings	Date	GMT with the format YYYYMMDD
10-11	Source Id	Char (2)	Required for identification, suggested characters "PA" for Profile Administration.
12-24	MSID	Char (13)	
25-224	Register Values	Int (10)	20 instances of register values (optional, leave blank if not collected).
225-1520	kWh/kWh Flag	NUM(7,4)/Text (1) x3	48 recurring instances[9],[10] In all instances this shall be actual data and Text(1) will state 'A'. (for actual data). Each interval (kWh/lag/lead) is 9 characters long (8 characters for the reading, 1 character for the decimal point and 1 character for the text flag). Where no lag and lead channels are collected, these should be left blank after the kWh interval data.

[9] This format supports up to three streams of interval data for each interval (kWh, lag and lead).
[10] All data should be returned in GMT to avoid losing data on clock change days.

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4.1.6 Existing Sample Participant details provided to the Supplier by the PrA:

MPID	MSID	Will Supplier use PrA's Agents? (Y/N)	Sample Participant Name	Site Addr 1	Site Addr 2	Site Addr 3	Site Addr 4	Post code	Sample Participant Contact 1	Sample Participant Contact 2	GSP Group	Profile Class	Super Stratum	Stratum	Customer Type D=Domestic I=Industrial C=Commercial	Does Sample Participant have PCMS installed ? (Y/N)	SSC	SIC Code
M	M	M	C	M	M	M	M	M	C	C	M	M	M	M	M	M	M	O
4 char	13 char	1 char	50 char	50 char	50 char	50 char	50 char	7 char	50 char	50 char	2 char	2 char	2 char	2 char	1 char	1 char		8 char

NHHMOA MPID	**NHHDC MPID**	**Installation Date**	**Date of change of tenancy**
M	M	M	M

(NHHMOA, NHHDC and installation date are provided by MPID following on from the row above)

M = Mandatory O = Optional (provide if available) C = Conditional (required only for non domestic Sample Participants)

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4.2 Sampling Specification

The Supplier shall provide the PrA with randomly selected Sample Participants in accordance with paragraphs 4.2.1 and 4.2.2 below.

4.2.1 Unrestricted and Economy 7 Sample Participants

Where Sample Participants are provided for domestic unrestricted and non-domestic unrestricted Profile Classes (Profile Class 1 and Profile Class 3), the Sample Participants shall have tariffs with a single unit price or tariffs with prices that vary only according to the quantity of units used in a period.

Where Sample Participants are provided for domestic economy 7 and non-domestic economy 7 Profile Classes (Profile Class 2 and Profile Class 4), the Sample Participants shall be restricted to Sample Participants supplied on economy 7 tariffs characterised by a continuous 7-hour night regime within a window between 23:30 and 08:30 Greenwich Mean Time when load is recorded on a low register and a continuous 17-hour period when load is recorded on a normal register.

4.2.2 Customers that cannot participate in the Sample as Sample Participants

The following customers cannot be selected to participate in the Sample as Sample Participants:

a) customers using or requesting the use of their own agents;

b) customers that use a prepayment meter;

c) customers that already have a smart meter that is not capable of collecting half hourly data;

d) customers that use their own meter;

e) customers whose meters are controlled by the Radio Teleswitch Service (RTS); and

f) where Suppliers are aware of existing access issues.

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4.3 Minimum metering requirements

Profile Capable Metering Systems installed in Sample Participant premises shall meet the following minimum requirements:

a) Comply with Schedule 7 of the Electricity Act;

b) Have the capability for the communications link to be replaced without needing to replace the Meter or invalidating its certification;

c) The relevant agent shall obtain the half hourly data by remote access (e.g. GSM); and

d) Meet the requirements of SMETS or the selected provisions of the current versions of CoP5, CoP8 and CoP10 as shown in the table below:

Area of Requirement	Document	Sections
Accuracy	CoP8 Issue 1	4.2 and 5.2
Measurement Criteria	CoP8 Issue 1	4.1, 5.1 and 6.3.1
Displays	CoP8 Issue 1	6.3
Sealing arrangements	CoP8 Issue 1	5.2.6, 5.2.8 and 7.3
Communications	CoP5 Issue 6 or CoP10 Issue 1	5.6 in CoP5 or 5.5 in CoP10
Security requirements	CoP5 Issue 6 or CoP10 Issue 1	5.6 in CoP5 or 5.4 in CoP10
Data Storage	CoP5 Issue 6 or CoP10 Issue 1	5.5.1 in CoP5 or 5.3.1 in CoP10
Time keeping	CoP5 Issue 6 or CoP10 Issue 1	5.5.2 in CoP5 or 5.3.2 in CoP10
Monitoring Facilities	CoP5 Issue 6 or CoP10 Issue 1	5.5.3 in CoP5 or 5.3.3 in CoP10

Further details on metering requirements can be found in the Sampling Guidance Note on the BSC Website.

4.4 Data Validation

The Supplier shall be responsible for ensuring that the following validation checks. are completed either by itself or its agent. These validation checks are typical half hourly data collection checks.

4.4.1 General validation checks

a) MSID or Outstation ID matches that expected;

b) Outstation number of channels matches expected;

c) Outstation time is within 20 seconds of UTC; and

d) Any alarms should be detected and investigated.

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4.4.2 High/Low Analysis

Check minimum and maximum values by Profile Class. The PrA holds the Profile Class against which maximum and minimum values are applied; Profile Class 2 'High' use can be set at 15kW/half-hour (c30kW demand), if exceeded data would be passed for manual validation.

4.4.3 Consecutive Zero Analysis

Check consecutive zero values. A string of zero values may indicate meter fault or some form of Site Specific de-energisation. These are passed for manual validation.

4.4.4 Meter Advance (Mini MAR)

Conduct a Mini MAR to monitor that the increasing interval values match the total Meter Advance in the period. An imbalance may indicate a Meter fault or communication issue.

4.5 SMRA report of MSIDs registered by Supplier

The report provided by the SMRA shall contain the following data items, definitions of which can be found under the EMDS:

a) GSP Group Id;

b) Supplier Id;

c) Measurement Class Id;

d) Profile Class Id;

e) Standard Settlement Configuration (SSC) Id;

f) Meter / Timeswitch Class Id;

g) Metering System Identifier (MSID);

h) Effective From Settlement Date {REGI};

i) Energisation Status;

j) Data Aggregator Id;

k) Data Collector Id;

l) Meter Operator Id;

m) Line Loss Factor Class Id; and

n) Meter / Timeswitch Class Id.

The data shall be supplied in an EMDS separated ("I") format file in electronic form. The file should contain one record per MSID. The file supplied by BSCCo to the PrA will be in a 'csv' format.

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AMENDMENT RECORD – BSCP510

Version	Date	Description of Changes	Changes Included	Mods ~~Panel~~ BSCCo Ref
D0.1	27 March 2001	Re-Badged		
D0.2	27 March 2001	Incorporates review comments arising from NETA CMC00042	NCR313	
1.0	27 March 2001	Approved for use by the Panel 22/02/01		P/013/008
2.0	BETTA Effective Date	SVA February 2005 Release and BETTA 6.3	CP1091 and BETTA 6.3	SVG/48/004
3.0	1 December 2009	Modification P223	P223	SVG101/03 Panel 144/04
			CP1176 (part)	ISG68/02 SVG67/02
4.0	28 February 2013	February 2013 Release	CP1380	SVG141/07
5.0	26 June 2014	June 2014 Release	CP1394	SVG152/07
6.0	28 June 2018	June 2018 Release	CP1502	SVG206/07
7.0	1 September 2021	1 September 2021 Non-Standard Release	P420	P316/05

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