**Balancing and Settlement Code**

**THE PROVISION OF SAMPLING DATA TO THE PROFILE ADMINISTRATOR**

**BSCP510**

**Version 6.3**

**Date:**

**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 6.3 relating to The Provision of Sampling Data to the Profile Administrator.

3. This BSC Procedure is effective from

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

|  |
| --- |
| Intellectual Property Rights, Copyright and Disclaimer  The copyright and other intellectual property rights in this document are vested in Elexon or appear with the consent of the copyright owner. These materials are made available for you for the purposes of your participation in the electricity industry. If you have an interest in the electricity industry, you may view, download, copy, distribute, modify, transmit, publish, sell or create derivative works (in whatever format) from this document or in other cases use for personal academic or other non-commercial purposes. All copyright and other proprietary notices contained in the document must be retained on any copy you make.  All other rights of the copyright owner not expressly dealt with above are reserved.  No representation, warranty or guarantee is made that the information in this document is accurate or complete. While care is taken in the collection and provision of this information, Elexon Limited shall not be liable for any errors, omissions, misstatements or mistakes in any information or damages resulting from the use of this information or action taken in reliance on it. |

**AMENDMENT RECORD**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version** | **Date** | **Description of Changes** | **Changes Included** | **Mods Panel 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 |

**CONTENTS**

**[1.](#_Toc52870504)****[Introduction](#_Toc52870504)** [6](#_Toc52870504)

**[1.1](#_Toc52870505)****[Scope and Purpose of the Procedure](#_Toc52870505)** [6](#_Toc52870505)

**[1.2](#_Toc52870506)****[Main Users of Procedure and their Responsibilities](#_Toc52870506)** [6](#_Toc52870506)

**[1.3](#_Toc52870507)****[Use of the Procedure](#_Toc52870507)** [9](#_Toc52870507)

**[1.4](#_Toc52870508)****[Balancing and Settlement Code Provision](#_Toc52870508)** [9](#_Toc52870508)

**[1.5](#_Toc52870509)****[Associated Balancing and Settlement Code Procedures](#_Toc52870509)** [10](#_Toc52870509)

**[1.6](#_Toc52870510)****[Acronyms and Definitions](#_Toc52870510)** [10](#_Toc52870510)

**[2.](#_Toc52870511)****[No Longer Used](#_Toc52870511)** [11](#_Toc52870511)

**[3.](#_Toc52870512)****[Interface and Timetable Information](#_Toc52870512)** [12](#_Toc52870512)

**[3.1](#_Toc52870513)****[Sample Creation and Maintenance](#_Toc52870513)** [12](#_Toc52870513)

**[3.2](#_Toc52870514)****[Provision of Profile Capable Metering Systems](#_Toc52870514)** [14](#_Toc52870514)

**[3.3](#_Toc52870515)****[Data Collection](#_Toc52870515)** [16](#_Toc52870515)

**[3.4](#_Toc52870516)****[Supplier Rebate](#_Toc52870516)** [17](#_Toc52870516)

**[3.5](#_Toc52870517)****[Change of Supplier](#_Toc52870517)** [18](#_Toc52870517)

**[3.6](#_Toc52870518)****[Review of Sample Participant details (e.g. change of tenant)](#_Toc52870518)** [19](#_Toc52870518)

**[4.](#_Toc52870519)****[Appendices](#_Toc52870519)** [20](#_Toc52870519)

**[4.1](#_Toc52870520)****[Information exchange between the PrA and Suppliers](#_Toc52870520)** [20](#_Toc52870520)

**[4.2](#_Toc52870521)****[Sampling Specification](#_Toc52870521)** [29](#_Toc52870521)

**[4.3](#_Toc52870522)****[Minimum metering requirements](#_Toc52870522)** [30](#_Toc52870522)

**[4.4](#_Toc52870523)****[Data Validation](#_Toc52870523)** [30](#_Toc52870523)

[[RCC]](#_Toc52870524)**[4.5](#_Toc52870524)****[SMRA report of MSIDs registered by Supplier](#_Toc52870524)** [31](#_Toc52870524)

**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 Panel, on two separate occasions annually, a report containing all MSIDs registered by a Supplier in each GSP Group covered by that Supplier Meter Registration 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.

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.

**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 Meter Operator Agent (MOA), a Non Half Hourly Data Collector (NHHDC) and Non Half Hourly Data Aggregator (NHHDA).

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, 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;

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.

**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.

**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 |
| BSCP514 | SVA Meter Operations for 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**

[RCC]**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 |
| 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.

**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**

**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 |
| 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 |

**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, 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, 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 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 BSCP514. | Supplier | MOA | Sample Participant details and information required in accordance with paragraphs 4.1.2 and 4.3 of the appendices and BSCP514. | 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 |
| 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 BSCP514 as required. | Supplier | MOA | Sample Participant details and information required in accordance with BSCP514. | Email or other electronic means |

**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]](#footnote-1),[[2]](#footnote-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]](#footnote-3)  Resubmit validated half hourly data where appropriate. | Supplier2 | 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 |

**3.4 Supplier Rebate**

| **REF** | **WHEN** | **DESCRIPTION** | **FROM** | **TO** | **INFORMATION REQUIRED** | **METHOD** |
| --- | --- | --- | --- | --- | --- | --- |
| 3.4.1 | By 10th WD in June[[4]](#footnote-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 |

**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]](#footnote-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 |

**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]](#footnote-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 |

**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]](#footnote-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](https://www.elexon.co.uk/guidance-note/profiling-samples-candidate-selection/) on the [BSC Website](https://www.elexon.co.uk/).

**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 |

**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 |  |  |

**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 |

**4.1.1.4 No Longer Used.**

**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]](#footnote-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)

**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**

‘Trrrrrrrrssssssssssss’ where the first character is ‘T’, the ‘rrrrrrrr’ value is the total number of records within the file, including the header and trailer. The ‘ssssssssssss’ 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 ‘rrrrrrrr’ and ‘ssssssssssss’ values shall be padded to the left with zeros.

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

|  |  |  |  |
| --- | --- | --- | --- |
| **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]](#footnote-9),[[10]](#footnote-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. |

**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)

**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.

**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.

**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.

[RCC]**4.5 SMRA report of MSIDs registered by Supplier**

The report provided by the SMRA shall contain the following data items:

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 EDMS 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.

1. If the Supplier changes agents it must inform the PrA. [↑](#footnote-ref-1)
2. This may be provided either by the Supplier or the relevant agent. [↑](#footnote-ref-2)
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. [↑](#footnote-ref-3)
4. The first rebate following implementation of Modification P223 will not take effect until June 2011. [↑](#footnote-ref-4)
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. [↑](#footnote-ref-5)
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. [↑](#footnote-ref-6)
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. [↑](#footnote-ref-7)
8. Either Settlement Data (EAC/AA) or billing data may be used in the calculation of the annual consumption. [↑](#footnote-ref-8)
9. This format supports up to three streams of interval data for each interval (kWh, lag and lead). [↑](#footnote-ref-9)
10. All data should be returned in GMT to avoid losing data on clock change days. [↑](#footnote-ref-10)