Balancing and Settlement Code

BSC PROCEDURE

SVA METER OPERATIONS FOR METERING SYSTEMS REGISTERED IN SMRS

BSCP514

Version 38.0

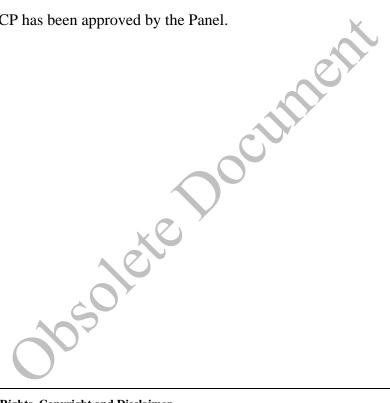
Date: 24 June 2021

BSC PROCEDURE 514

relating to

SVA Meter Operations for Metering Systems Registered in SMRS

- 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 514 Version 38.0 relating to SVA Meter Operations for Metering Systems registered in SMRS.
- This BSC Procedure is effective from 24 June 2021. 3.
- 4. This BSCP 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 noncommercial purposes. All copyright and other proprietary notices contained in the document must be retained on any copy you

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 | Date Description of Changes | | Mods Panel Ref |
|---------|----------|---|---|----------------------------------|
| 1.0 | 10/04/03 | Introduction of new BSCP | CP854 | P/60/015 SVG/26/306 |
| 2.0 | 28/08/03 | August 2003 SVA Document Batch Release | | |
| 3.0 | 28/09/03 | Incorporates changes for Modification P81 | P81 | SVG/31/414 |
| 4.0 | 04/11/04 | SVA November 2004 Release | CPs 955, 1025 | SVG/43/003 |
| 5.0 | 23/02/05 | SVA February 2005 Release and BETTA 6.3 | CP1064, CP1091 and BETTA 6.3 | SVG/47/004 |
| 6.0 | 03/11/05 | SVA November 2005 Release | + | |
| 7.0 | 29/06/06 | June 2006 Release | CP1143, CP1144, CP1145 | SVG/64/02 |
| 8.0 | 02/11/06 | November 2006 Release | CP1138 | SVG/56/003 |
| 9.0 | 22/02/07 | February 2007 Release | CP1159, CP1176 | SVG/66/04 |
| 10.0 | 28/06/07 | June 2007 Release Updated terminology in preparation for P197 Release | CP1162, CP1173 P197 | SVG/66/05, SVG/70/03 |
| 11.0 | 01/11/07 | November 2007 Release | CP1183 v2.0, CP1184 v2.0 and CP1200 | SVG74/03 |
| 12.0 | 28/02/08 | February 2008 Release | CP1166 v.3.0, CP1180, CP1213 | SVG79/02 SVG80/03 SVG81/01 |
| 13.0 | 26/06/08 | June 2008 Release | CP1192 v2.0 | SVG81/01 |
| 14.0 | 06/11/08 | November 2008 Release | CP1225 | SVG85/02 |
| | | | CP1234 | ISG87/01 SVG87/02 PAB87/09 |
| 15.0 | 26/02/09 | February 2009 Release | CP1261 | ISG93/02 SVG93/02 |
| 16.0 | 25/06/09 | June 2009 Release | CP1274 | SVG97/01 |
| 17.0 | 05/11/09 | November 2009 Release | CP1248 v2.0 | SVG97/01 |
| 18.0 | 25/02/10 | February 2010 Release | CP1298 | SVG102/01 |

| Version | Date | Description of Changes | Changes Included | Mods Panel Ref |
|---------|----------|-------------------------------|---------------------|------------------------|
| 19.0 | 24/06/10 | June 2010 Release | CP1309 | SVG105/02 |
| | | | CP1317 | ISG107/01 SVG107/01 |
| 20.0 | 01/11/10 | November 2010 Release | CP1325 ¹ | SVG111/01 |
| | 04/11/10 | November 2010 Release | CP1338 | SVG116/05 |
| 21.0 | 01/07/11 | June 2011 Release | CP1334 ² | SVG114/02 |
| 22.0 | 03/11/11 | November 2011 Release | CP1335 | ISG114/01 SVG114/02 |
| 23.0 | 23/02/12 | February 2012 Release | P266 | SVG130/01 |
| | | | CP1353 | SVG129/02 |
| | | | CP1350 | SVG129/08 |
| 24.0 | 28/06/12 | June 2012 Release | CP1366 | SVG134/02 |
| 25.0 | 29/11/12 | November 2012 Release | CP1377 | SVG140/04 |
| 26.0 | 07/11/13 | November 2013 Release | CP1384 | SVG144/01 SVG146/06 |
| | | | CP1385 | SVG144/01 SVG146/06 |
| 27.0 | 06/11/14 | November 2014 Release | CP1405 | SVG157/06 |
| 28.0 | 26/02/15 | February 2015 Release | CP1395 | P217/07 |
| | | | CP1419 | SVG165/03 |
| 29.0 | 25/06/15 | June 2015 Release | CP1409 | SVG160/06 |
| | | 3 | CP1411 | SVG160/08 |
| | | O | CP1416 | SVG163/04 |
| | | | CP1429 | SVG170/03 |
| 30.0 | 05/11/15 | November 2015 Release | CP1440 | SVG173/05 |
| | | | CP1439 | SVG174/04 |
| | | | CP1444 | SVG176/05 |
| 31.0 | 30/06/16 | June 2016 Release | P302 | Panel 239/06 |
| | | | CP1456 | SVG182/03 |
| 32.0 | 03/11/16 | November 2016 Release | CP1458 v2.0 | SVG187/05 |
| 33.0 | 23/02/17 | February 2017 Release | CP1465 | SVG187/04 |
| | | | CP1472 | SVG191/05 ISG190/03 |

_

 $^{^{\}rm 1}$ CP1325 was implemented as part of the November 2010 Release on 01 November 2010

² CP1334 was implemented as part of the June 2011 Release on 01 July 2011

| Version | Date | Description of Changes | Changes Included | Mods Panel Ref |
|---------|----------|-------------------------------|---------------------|----------------|
| 34.0 | 29/06/17 | June 2017 Release | CP1469 | SVG188/03 |
| | | | CP1474 | SVG191/03 |
| | | | CP1475 | SVG191/04 |
| 35.0 | 01/11/18 | November 2018 Release | CP1495 | SVG204/04 |
| | | | CP1496 | SVG204/05 |
| | | | CP1497 | SVG204/06 |
| 36.0 | 27/06/19 | June 2019 Release | CP1514 | SVG216/05 |
| | | | CP1515 | SVG218/02 |
| | | | CP1518 | SVG220/02 |
| 37.0 | 25/02/21 | February 2021 Release | CP1534 | SVG235/04 |
| 38.0 | 24/06/21 | June 2021 Release | CP1530 | SVG238/05 |
| | Ĉ | osolete D | ocili | |

CONTENTS

| 1 | Introduction | 9 |
|---------|---|-----------|
| 1.1 | Purpose and Scope of the Procedure | 9 |
| 1.2 | Main Users of Procedure and their Responsibilities | 10 |
| 1.3 | Use of the Procedure | 11 |
| 1.4 | Balancing and Settlement Code Provision | 12 |
| 1.5 | Associated BSC Procedures | 13 |
| 1.6 | Acronyms and Definitions | 14 |
| 1.6.1 | Acronyms | 14 |
| 1.6.2 | Definitions | 15 |
| 2 | Meter Operator Agent Obligations | 16 |
| 2.1 | General Obligations | 16 |
| 2.1.1 | Systems and Processes | 16 |
| 2.1.2 | Recording Devices | 16 |
| 2.2 | Registration Obligations | 18 |
| 2.2.1 | Recording of Details | 18 |
| 2.2.2 | Termination of Appointment of Meter Operator Agent | 18 |
| 2.2.3 | Recording Devices Registration Obligations Recording of Details Termination of Appointment of Meter Operator Agent Bulk Non Half Hourly Change of Agent Metering Obligations Energisation of Meters Installation, Removal and Re-programming of Meters | 19 |
| 2.3 | Metering Obligations | 19 |
| 2.3.1 | Energisation of Meters | 19 |
| 2.3.2 | Installation, Removal and Re-programming of Meters | 19 |
| 2.4 | Interface to Other Party Agents and Suppliers | 21 |
| 2.4.1 | Information to Data Collectors and Suppliers | 21 |
| 2.4.2 | Meter Fault Reporting | 22 |
| 2.5 | Service Levels | 22 |
| 3 | Interface and Timetable Information | 23 |
| 4 | Not Used | 24 |
| 5 | Interface and Timetable Information - Half Hourly | 25 |
| 5.1 | Market Data Activities | 25 |
| 5.1.1 | Market Domain Data | 25 |
| 5.2 | Registration Activities | 27 |
| 5.2.1 | Change of HHMOA (No Change of Metering System or Change of Supplier) | 27 |
| 5.2.2 | New Connection - Installation | 30 |
| 5.2.2. | New Connection – Commissioning of Meter Systems that include Measurement Transformers that owned by the LDSO | are 35 |
| 5.2.2.1 | New Connection – Commissioning of Meter Systems that include Measurement Transformers that not owned by a LDSO | are 37 |
| 5.2.3 | Change of HHDC for an existing Metering System | 38 |
| 5.2.4 | Concurrent Change of Supplier and HHMOA (No change to Metering System) | 39 |
| 5.2.5 | Registration Transfers from CMRS to SMRS | 42 |
| 5.2.6 | Registration Transfers from SMRS to CMRS | 45 |
| 5.2.7 | Change of Supplier for an Existing Metering System (No Change of Agent) | 46 |
| | | |

| BSCP | SVA Operations for Metering Systems Registered in SMRS | Version 38.0 |
|---------------|---|--------------|
| 7.2 .0 | | 10 |
| 5.2.8 | Change of Meter Asset Provider (No change to Metering System) | 48 |
| 5.3 | Metering Activities | 51 |
| 5.3.1 | Energise a Metering System De energise a Metering System | 51 |
| 5.3.2 | De-energise a Metering System | 53 |
| 5.3.3 | Removal of a Metering System | 57 |
| 5.3.4 | Reconfigure or Replace Metering System (No Change of Measurement Class) | 60 |
| 5.3.5 | LDSO Replaces MS (For Safety Reasons / Urgent Metering Services) | 65 |
| 5.3.6 | Change of Feeder Status – Energise Feeder | 68 |
| 5.3.7 | Change of Feeder Status – De-energise Feeder | 69 |
| 5.4 | Meter Operation Activities | 71 |
| 5.4.1 | Half Hourly Metering System Investigation Process | 71 |
| 5.5 | Proving a Metering System, | 76 |
| 5.5.1 | Proving of a Metering System by Method 1, | 76 |
| 5.5.2 | Proving of a Metering System by Method 2, | 78 |
| 5.5.3 | Proving of a Metering System by Method 3, | 80 |
| 5.5.4 | Proving of a Metering System by Method 4, | 82 |
| 5.5.5 | Issuing Results of Proving Test (All Methods of Proving) | 84 |
| 6 | Interface and Timetable and Information – Non Half Hourly | 87 |
| 6.1 | Market Data Activities | 87 |
| 6.1.1 | Market Domain Data | 87 |
| 6.2 | Registration Activities | 89 |
| 6.2.1 | Change of NHHMOA (No change of Metering System or Change of Supplier) | 89 |
| 6.2.2 | New Connection | 91 |
| 6.2.3 | Change of NHHDC for an existing Metering System | 95 |
| 6.2.4 | Concurrent change of Supplier and NHHMOA | 96 |
| 6.2.5 | Change of Supplier (No Change to Metering System or Change of NHHMOA) | 99 |
| 6.2.6 | Change of Supplier – No Meter | 101 |
| 6.3 | Metering Activities | 103 |
| 6.3.1 | Energise a Metering System | 103 |
| 6.3.2 | De-energise a Metering System | 105 |
| 6.3.3 | Removal of a Metering System | 108 |
| 6.3.4 | Reconfigure or Replace Metering System (No Change of Measurement Class) | 111 |

Meter Operation Activities

serviced Metering Systems.

serviced Metering Systems.

6.4.1 Investigate Inconsistencies

6.4

7

7.1

7.2

7.3

7.4

Change of Measurement Class from NHH to HH for HHDC-serviced Metering System.

Change of Measurement Class from HH to NHH for HHDC-serviced Metering Systems,

Coincident Change of Measurement Class from NHH to HH and Change of Supplier for HHDC-

Coincident Change of Measurement Class from HH to NHH and Change of Supplier for HHDC-

6.3.5 LDSO Replaces MS (For Safety Reasons / Urgent Metering Services)

Interface and Timetable Information - Change of Measurement Class

118

121

121

124

124

130

134

139

| 7.5 | Change of Measurement Class from NHH to HH for Supplier-serviced Metering Systems (no chof MOA). | nange 143 |
|-------|---|---------------|
| 7.6 | Coincident Change of Measurement Class from NHH to HH and Change of Supplier for Supserviced Metering Systems. | plier- 144 |
| 7.7 | Change of Measurement Class from HH to NHH for Supplier-serviced HH Metering Systems. | 146 |
| 7.8 | Coincident Change of Measurement Class from HH to NHH and Change of Supplier for Supserviced Metering Systems. | plier- 148 |
| 8 | Appendices - Half Hourly | 150 |
| 8.1 | Sealing | 150 |
| 8.2 | Key SVA Meter Technical Details. | 150 |
| 8.3 | Proving of Half Hourly Metering Systems | 150 |
| 8.3.1 | Reasons for a Proving Test | 150 |
| 8.3.2 | Methods of Proving | 151 |
| 8.3.3 | Comparison of Data | 152 |
| 8.3.4 | Reporting | 152 |
| 8.3.5 | Proving Test / Re-Test Timescales | 152 |
| 8.4 | Guide to Complex Sites | 154 |
| 8.4.1 | Off-site Totalisation | 156 |
| 8.4.2 | On-site Totalisation | 157 |
| 8.4.3 | Customers on a Licence Exempt Distribution (Private) Networks requiring Third Party Access Supplier of their choice | for a 158 |
| 8.4.4 | Feed Through Sites at the Same Voltage with no Embedded Generation | 161 |
| 8.4.5 | Feed Through Sites at Different Voltages | 162 |
| 8.4.6 | Feed-Through Sites with Embedded Generation | 163 |
| 8.4.7 | Separate Meter Points for Export and Import | 164 |
| 8.4.8 | Network Flows Impacting Settlement Meters | 165 |
| 9 | Appendices - Non Half Hourly | 169 |
| 9.1 | Sealing | 169 |
| 9.2 | Prepayment Meters | 169 |
| 9.3 | Remotely Read Non Half Hourly Meters | 170 |
| 10 | Meter Operator Agent Service Levels | 170 |
| 10.1 | Half Hourly Meter Operator Agent Service Levels | 172 |
| 10.2 | Non Half Hourly Meter Operator Agent Service Levels | 173 |

1 Introduction

1.1 Purpose and Scope of the Procedure

This BSC Procedure (BSCP) defines the processes that both the Half Hourly (HH) and Non Half Hourly (NHH) Meter Operator Agent (MOA) shall use to carry out the work for meter operations (including, appointment changes, market data activities, connections, disconnections, reconfiguration or changes and where required proving (of HH Metering Systems (MS))) for all Supplier Volume Allocation (SVA) MS registered in the Supplier Meter Registration System (SMRS).

This BSCP describes the key interfaces and timetables for sending appropriate SVA MS data to the Associated HH and NHH Data Collector (HHDC and NHHDC), Meter Asset Provider (MAP) and distributor on behalf of the Associated Supplier. In this BSCP, the "Associated Data Collector" is the Data Collector for the relevant SVA Metering System for the time being appointed by the Associated Supplier of the relevant Supplier Agent. "Associated HH Data Collector" and "Associated NHH Data Collector" shall be construed accordingly.

This BSCP also focuses on the interfaces between the MOA and other agencies seen from the perspective of the MOA.

The purpose of this BSCP is to ensure that meter operations work of the MOA is carried out in an orderly and timely manner.

In this BSCP, any reference to "Meter Technical Details" means all the relevant information about Metering Equipment required by the appropriate Data Collector, Supplier or Licensed Distribution System Operator (LDSO) (or where appropriate, the Meter Operator Agent) to carry out his duties. For the avoidance of doubt this includes, but is not limited to the following items listed in Data Interface flows:

For Half Hourly trading (HHDC-serviced Metering Systems):

- D0268: Half Hourly Meter Technical Details
- For Half Hourly trading (Supplier-serviced Metering Systems):D0150: Non Half-hourly Meter Technical Details;
- D0149: Notification of Mapping Details;
- D0367: Smart Meter Configuration Details (where appropriate).

For Non Half Hourly trading:

- D0150: Non Half-hourly Meter Technical Details;
- D0149: Notification of Mapping Details;
- D0313: Auxiliary Meter Technical Details (where appropriate); and
- D0367: Smart Meter Configuration Details (where appropriate).

For NHH advanced Meters, this also includes all appropriate information required by the NHHDC to retrieve data from the Metering System remotely (and, where appropriate, required by the Meter Operator Agent to configure the Metering System remotely). This may include, but is not limited to, the communications and security details of the Metering System and the Code of Practice of the Metering System installed. For any D0313 sent from one Meter Operator Agent to another Meter Operator Agent this must include, but is not limited to, all communications, security and password details required to fully access all remote functions of the Metering System.

Where Meter Technical Details include the population of data items 'J0454 – CT Ratio' and/or 'J0455 - VT Ratio' then the populated value must conform to the valid set held on the Elexon Portal (https://www.elexonportal.co.uk).

Where a Meter Operator receives a value that is invalid (missing from the valid set) it should set the value to 'unknown' and contact the LDSO and Elexon for resolution.

This BSCP contains guidance on the completion of a 'Complex Site Supplementary Information Form' for the D0268 'Half Hourly Meter Technical Details' data flow where the HH MS is deemed to be at a Complex Site.

1.2 Main Users of Procedure and their Responsibilities

This BSCP should be used by Suppliers and their Agent(s) (including MOAs) and Data Collectors (DCs), the SVA Agent(SVAA), by each LDSO and the BSCCo Transfer Coordinator where MS are being transferred from Central Meter Registration Service (CMRS) to SMRS and vice versa.

All Supplier Agents using this BSCP shall be appropriately Qualified (in SVA and if operating in Central Volume Allocation (CVA), additionally CVA Qualified).

The MOA shall perform the responsibilities and obligations set out in this BSCP for a MS for all Settlement Days for which the MOA is appointed by the Supplier in SMRS.

Where the same Metering Equipment (ME) in SVA is being utilised for the measurement of the Import and/or Export Energy for more than one MSID at a site, the Supplier(s) shall ensure that the same MOA is appointed for all the MSIDs involved to comply with the requirements of the BSC. Where there is an Import Supplier and an Export Supplier the obligation rests with the Export Supplier to appoint the same MOA as the Import Supplier. Otherwise, these obligations shall be fulfilled by mutual agreement between the Suppliers involved.

Where the same ME is being utilised for the measurement of Import by SMRS and Export by CMRS, the same MOA shall be appointed to all the Import and Export Meters. The Party which is the Registrant of the CVA MS shall secure that the same person is appointed as MOA in relation to the CVA MS as is appointed in relation to the SVA MS. This MOA shall be Qualified for both SVA and CVA operations.

For NHH MS, any Meter reading(s) required for processes described in this BSCP may be obtained remotely where communication equipment is installed for the SVA MS in question. When retrieving any reading(s) from a Meter of type SMETS 2 Version 3.1 or above (or for other Meter Types where there is known to be a difference between the number of digits held

³ J0454 - CT ratio should be populated as 'unknwn'

in the internal register and those displayed on the Meter), the reading(s) should be consistent with the number of register digits displayed on the display of the Metering System. In the event where an internal reading is retrieved (e.g. via a handheld device), the leading digits from the reading should be truncated such that the number of digits are consistent with the display of the Metering System.

In the case where the MOA cannot complete the required processes in this BSCP, this shall be reported to the Supplier and the Supplier shall resolve as appropriate.

The SVAA will be managing the Market Domain Data in addition to performing the Supplier Volume Allocation role, and therefore SVAA is the Market Domain Data Manager (MDDM).

1.3 Use of the Procedure

The remaining sections in this document are:

Section 2 – Meter Operator Agent Obligations.

This section defines the obligations on Meter Operator Agents

Section 3 – This section in no longer in use.

Section 4 – This section is no longer in use.

Section 5 – Interface and Timetable Information – Half Hourly

This section defines in detail the requirements of each business process.

Section 6 – Interface and Timetable Information – Non-Half Hourly

This section defines in detail the requirements of each business process.

Section 7 – Interface and Timetable Information – Change of Measurement Class

This section defines in detail the requirements of each business process.

Section 8 – Appendices – Half Hourly

This section contains supporting HH information.

Section 9 – Appendices – Non-Half Hourly

This section contains supporting NHH information.

Section 10 – Explanatory Notes

This section contains further explanation to procedures contained within the BSCP.

Note that all Meter register readings shall have date and time in Co-ordinated Universal Time (UTC).

Where Data Transfer Catalogue (DTC) flows are referenced, these shall normally be sent over the Data Transfer Network (DTN). Where another method of transfer is agreed between the relevant parties, the information transferred shall have the same content and format as it would if being transferred using the DTN.

1.4 Balancing and Settlement Code Provision

This BSCP has been produced in accordance with the provisions of the Balancing and Settlement Code (BSC).

Summary of the main obligations to be discharged by BSC Parties on to MOAs⁴ under the BSC:

A MOA is required to:

- be subject to the Qualification Requirements of Section J applicable to a MOA or to the functions of a MOA (Section J 2.1.2(a));
- install, commission, test, maintain, rectify faults and provide a sealing service in respect of Metering Equipment (including if applicable associated Communications Equipment), in accordance with Party Service Line 100 and BSCP514 (in the case of SVA Metering Systems) and any relevant BSC Procedures and Codes of Practice (Section L 1.2.3); and
- (in respect of Half Hourly Metering Systems and Non Half Hourly Metering Systems that have not been installed in compliance with the Smart Metering Equipment Technical Specifications) maintain Meter Technical Details and to provide such Details, in accordance with Section L, to the relevant Half Hourly Data Collector or Non Half Hourly Data Collector (as the case may be) to enable such Data Collector to read and process data in accordance with the Supplier Volume Allocation Rules, in accordance with Party Service Line 100 and BSCP514 for Meter Operation and BSCP502 (in respect of Half Hourly Metering Systems) and BSCP504 (in respect of Non Half Hourly Metering Systems) (Section S2.2.1(b)); and
- (in respect of Metering Systems that have been installed in compliance with the Smart Metering Equipment Technical Specifications) to maintain such Meter Technical Details as are required in accordance with this BSCP and to provide such Details, in accordance with Section L, to the relevant Supplier (Section S2.2.1(c)).

In the event of an inconsistency between the provisions of this BSCP and the BSC, the provisions of the BSC shall prevail.

-

⁴ A BSC Party may perform the functions of any Party Agent including those of a Meter Operator Agent. As such the BSC Party is required to fulfil the obligations discharged to a MOA in accordance with Section J 1.2.4 of the BSC.

1.5 Associated BSC Procedures

| BSCP01 | Overview of Trading Arrangements |
|---------|---|
| BSCP32 | Metering Dispensations |
| BSCP68 | Transfer of Registration of Metering Systems between CMRS and SMRS |
| BSCP501 | Supplier Meter Registration Service |
| BSCP502 | Half Hourly Data Collection for SVA Metering Systems Registered in SMRS |
| BSCP504 | Non Half Hourly Data Collection for SVA Metering Systems Registered in SMRS |
| BSCP507 | SVA Standing Data Changes |
| BSCP508 | Supplier Volume Allocation Agent |
| BSCP509 | Changes to Market Domain Data |
| BSCP513 | Bulk Change of NHH Supplier Agent |
| BSCP515 | Licensed Distribution |
| BSCP520 | Unmetered Supplies Registered in SMRS |
| BSCP537 | Qualification Process for SVA Parties, SVA Party Agents and CVA MOAs. |
| BSCP550 | Shared SVA Metering Arrangement of Half Hourly Import and Export Active Energy |

1.6 Acronyms and Definitions

1.6.1 Acronyms

The terms used in this BSCP are defined as follows.

| Dag | |
|-------------|--|
| BSC | Balancing and Settlement Code |
| BSCP | BSC Procedure |
| CMRS | Central Meter Registration Service |
| CoMC | Change of Measurement Class |
| СоР | Code of Practice |
| CoS | Change of Supplier |
| СТ | Current Transformer |
| CVA | Central Volume Allocation |
| DC | Data Collector |
| DCC | Data Communications Company |
| DTC | Data Transfer Catalogue |
| DTN | Data Transfer Network |
| ECOES | Electricity Central Online Enquiry Service |
| EFSD {REGI} | Effective From Settlement Date {Registration} |
| ETSD {MOA} | Effective to Settlement Day {Meter Operator Agent} |
| НН | Half Hourly |
| HHDA | Half Hourly Data Aggregator |
| HHDC ' | Half Hourly Data Collector |
| ННМОА | Half Hourly Meter Operator Agent |
| HHU | Hand Held Unit |
| Id | Identifier |
| kV | Kilo Volt |
| kWh | Kilowatt hour |
| LDSO | Licensed Distribution System Operator |
| LLF | Line Loss Factor |
| MAP | Meter Asset Provider |
| MAR | Meter Advance Reconciliation |
| MDD | Market Domain Data |
| MDDM | Market Domain Data Manager |
| ME | Metering Equipment |
| MOA | Meter Operator Agent |

| MOP | Meter Operator Agent (in MRASCo documentation) |
|--------|--|
| MPAS | Metering Point Administration Service (the equivalent term for SMRS in MRASCo documentation) |
| MS | Metering System |
| MSID | Metering System Identifier |
| MTD | Meter Technical Details |
| NHH | Non Half Hourly |
| NHHDC | Non Half Hourly Data Collector |
| NHHMOA | Non Half Hourly Meter Operator Agent |
| PSL | Party Service Line |
| Ref | Reference |
| SFIC | Systems Fault Information Centre |
| SMETS | Smart Metering Equipment Technical Specifications |
| SMRS | Supplier Meter Registration System |
| SSD | Supply Start Date |
| SVA | Supplier Volume Allocation |
| SVAA | Supplier Volume Allocation Agent |
| UMetS | Urgent Metering Service |
| UTC | Co-ordinated Universal Time |
| VT | Voltage Transformer |
| WD | Working Day |

1.6.2 Definitions

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

- 'Complex Site' is defined under Appendix 8.4 'Guide to Complex Sites'.
- 'Electricity Central Online Enquiry Service' is defined in the Master Registration Agreement (MRA).
- 'HHDC-serviced Metering System' is a Metering System where the HHDC is responsible for collecting data directly from the Metering System.
- 'Manually intervened (with regard to proving tests)' is defined under Appendix 8.3 'Proving of Half Hourly Metering Systems'.
- 'Supplier-serviced Metering System' is a Metering System where the Supplier obtains data from a SMETS compliant Meter, either directly or using a service provider.

2 Meter Operator Agent Obligations

2.1 General Obligations

2.1.1 Systems and Processes

- a) The MOA shall use systems and processes so approved in accordance with BSCP537 in the operation of SVA Metering Equipment. These systems and processes must also comply with all other applicable requirements set out in the BSC, Party Service Line (PSL100) 'Generic Non Functional Requirements for Licensed Distribution System Operators and Party Agents' and the BSC Procedures.
- b) Controls to ensure that input, processing and output are valid may include the use of software validation checks and exception reporting to identify problems.

2.1.2 Recording Devices

a) The MOA shall ensure that the import or export of electrical energy by every SVA Metering System for which it is responsible is accurately recorded by metering, time control and load switching devices calibrated, installed and maintained in compliance with the relevant Code of Practice.

2.1.3 Notification Requirements to Meter Asset Providers

- a) The MOA shall provide information to the MAP in the circumstances set out in paragraphs (b) to (d) below.
- b) Upon any Metering Equipment removal or installation, the MOA shall ensure that relevant details are sent to the associated MAP(s) as appropriate.
- c) Upon appointment as MOA, whether as a result of Change of Supplier, Change of Agent or Change of Measurement Class, the MOA shall notify the MAP of the MOA's appointment together with the associated Supplier's details.
- d) Upon de-appointment as MOA, the MOA shall notify the MAP of the MOA's de-appointment.
- e) The information in paragraphs (b) to (d) shall be provided via the D0303, except where:
 - the MAP for Metering Equipment is the same as the MOA appointed to the Metering Point at which the Meter is installed or from which it has just been removed, and if agreed between the MAP and MOA roles of the relevant participant;

In this circumstance the D0303 is not mandatory, however the MOA must be able to demonstrate that the information in (b) to (d) has been passed to the MAP.

• the MAP ID is 'CUST'; or

there is a change of MAP.

In these circumstances the D0303 or the information set out in (b) to (d) does not need to be sent by the MOA.

2.1.4 Notification Requirements to the Supplier Meter Registration Services (SMRS)

2.1.4.1 Meter Information

- a) The MOA shall notify the Supplier Meter Registration Services (SMRS) of the following items (upon installation or following any subsequent changes to the items):
 - Metering System ID;
 - Meter Serial Number;
 - Meter Type;
 - Date of Meter Installation;
 - Date of Meter Removal;
 - Meter Asset Provider ID.

This will be done by sending a D0312 'Notification of Meter information to MPAS' flow, unless the Meter Asset Provider is the only change, in which case a 'Notification of Meter Asset Provider' (D0304) flow should be sent instead (see Section 2.1.4.2 below).

- b) The SMRS shall validate D0312 flows received and shall send a response D0312 with the 'MOP Flow Response Code' data item populated to the issuing MOA and the Supplier,
- c) Upon receipt of a response D0312 from the SMRS including a 'MOP Flow Response Code' data item populated with anything other than 'Accepted', the MOA shall revise and reissue the D0312.
- d) Where the SMRS has rejected a D0312 and the MOA does not have the required information, the MOA shall consult with other industry parties to obtain the required information.
- e) Each SMRS shall send a full refresh of Meter Information for each MSID whose details have changed during a day to the Electricity Central Online Enquiry Service (ECOES) for publication.

2.1.4.2 Meter Asset Provider data

a) For a change of Meter Asset Provider where there is no change to the Meter Technical Details (see paragraph a) above), the MOA shall notify the SMRS by sending a 'Notification of Meter Asset Provider' (D0304) flow.

- b) The SMRS shall validate D0304 flows received and shall send a response D0304 with the 'MPAS D0304 Response Code' data item populated to the issuing MOA.
- c) Upon receipt of a response D0304 from the SMRS including a 'MPAS D0304 Response Code' data item populated with anything other than 'Accepted', the MOA shall revise and reissue the D0304.
- d) Where the SMRS has rejected a D0304 and the MOA does not have the required information, the MOA shall consult with other industry parties to obtain the required information.
- e) Each SMRS shall send a full refresh of Meter Asset Provider data for each MSID whose details have changed during a day to ECOES for publication.

2.2 Registration Obligations

2.2.1 Recording of Details

- a) The MOA shall record sufficient details, received from its Associated Supplier, of its appointment in respect of a SVA Metering System to enable the MOA to perform its functions as MOA. These details shall include the relevant SVA Metering System Number and the Identifiers for the Associated Half Hourly Data Collector or, as the case may be, Associated Non Half Hourly Data Collector, the Associated Supplier's metering requirements and the associated Licensed Distribution System Operator (LDSO).
- b) On appointment to a SVA Metering System and irrespective of whether the preceding registration was in CMRS or SMRS, and where the same Meter is to be used, the incoming MOA shall request the transfer of data and other information, in accordance with Section 2.2.2 c), from the outgoing MOA to enable such incoming MOA to assume responsibility for the SVA Metering System.

2.2.2 Termination of Appointment of Meter Operator Agent

- a) The MOA shall prepare and maintain plans that will enable its Associated Supplier's obligations under the BSC to continue to be met notwithstanding the expiry or termination of the MOA's appointment as the MOA. The plans, which the MOA undertakes to implement on any such expiry or termination, will include the immediate transfer of data and other information to an incoming MOA appointed by the Associated Supplier or to the Panel.
- b) In the event of a Change of MOA in respect of an SVA Metering System, or where the SVA Metering System is being transferred from SMRS to CMRS, and where the same Meter is to be used, the outgoing MOA shall transfer the data and other information, as specified in Section 2.2.2c), in accordance with the timescales and processes specified in the relevant BSC Procedures, to the incoming MOA. This shall be done when requested by the incoming MOA and is not dependent on receipt of notification of de-appointment. The outgoing MOA shall cooperate with the incoming MOA, and any subsequent incoming MOA, to correct any errors relating to data associated with the outgoing

MOA's period of appointment. In all cases the incoming MOA will retain an auditable record of any changes to the data.

Where information has not been provided to the outgoing MOA then the incoming and outgoing MOA(s), along with the Supplier, shall work together to resolve the issue.

- c) Data and other information to be transferred shall include Meter Technical Details including that relating to the associated Communications Equipment as appropriate, commissioning data, mapping data and certification and/or calibration details.
- d) On expiry or termination of the MOA's appointment in respect of a SVA Metering System, or where the Metering System is being transferred from SMRS to CMRS, and where the same Meter is to be used, the outgoing MOA's obligations under Section 10.2 and 10.3 of PSL100 shall survive.

2.2.3 Bulk Non Half Hourly Change of Agent

- a) Where the associated Supplier chooses to initiate a bulk Non Half Hourly change of agent application for consideration by the Panel (which may or may not directly involve the MOA), the MOA shall proceed in accordance with BSCP513.
- b) Once the bulk change of agent application has been approved by the Panel and where the MOA is directly involved, the MOA shall proceed in accordance with BSCP504 and BSCP514.

2.3 Metering Obligations

2.3.1 Energisation of Meters

- a) The MOA shall only energise a SVA Metering System if requested to do so by its Associated Supplier.
- b) The MOA shall as soon as reasonably practicable inform its Associated Supplier, the Associated Data Collector and the LDSO of any change in the energisation status of any SVA Metering System to which it has been appointed.
- c) A remotely disabled smart Meter or advanced Meter should be treated as energised for the purposes of Settlement.

2.3.2 Installation, Removal and Re-programming of Meters

a) The MOA shall maintain records and comply with systems and processes so approved in accordance with BSCP537 to commission, recommission, remove, replace or reprogram Meters and shall inform its Associated Supplier, its Associated Data Collector and the LDSO of the nature and date of any related work carried out within such time as shall allow its Associated Data Collector to carry out its obligations to ensure that correct data is taken into Initial Volume Allocation Runs.

- b) Other than Metering Systems assigned to Measurement Class F, or where Half Hourly data is sourced by the Supplier from a Meter compliant with the Smart Metering Equipment Technical Specifications (SMETS), the MOA shall carry out a proving test / re-test for each Half Hourly SVA Metering System, that it is responsible for, in accordance with and in the circumstances described in Section 8.3.
- Where required by its Associated Supplier, the MOA shall set Non Half Hourly c) SVA Metering Systems which incorporate a clock or teleswitch with a timing mechanism to switch at a time consistent with a valid combination of Standard Settlement Configuration and Time Pattern Regime derived from Market Domain Data with an Average Fraction of Yearly Consumption valid for the GSP Group to which the SVA Metering System belongs.
- d) Where multi-register Non Half Hourly Meters are installed and where required by its Associated Supplier, the MOA shall programme those for which it is responsible so that the physical registers may be mapped using the Meter Technical Details supplied to its Associated Data Collector onto logical registers forming a valid Standard Settlement Configuration.
- When installing a NHH multi-register Meter, or when attending the site to carry e) out significant⁵ work on such a Meter that would require re-registration of the Metering System, the MOA shall ensure that the registers of the metering asset are clearly identified⁶ and that the Meter Register IDs (J0010) to be used in all relevant data flows clearly identify the registers on the metering asset to be read. (e.g. "L", "N", "R1", "R2", etc.). For smart Meters, the Supplier is responsible for ensuring that the Meter Register Ids and/or Meter Register Descriptions in the D0367 'Smart Meter Configuration Details'; and the MOA is responsible for ensuring that the Meter Technical Details, are reflective of the display on the Meter.
- f) When installing or reconfiguring Half Hourly Metering Equipment that is operated by measurement transformers, the MOA shall configure the Metering Equipment to record Half Hourly demand values for both Reactive Import and Reactive Export (except where the Metering Equipment does not have this capability, and is not required to do so by the relevant Code of Practice). Reactive Import and Reactive Export measurements shall be configured in accordance with the applicable Code of Practice.
- The MOA shall seal and reseal Metering Equipment in accordance with g) Section 8.1 or 9.1.
- h) The MOA shall request Site Technical Details from the Licensed Distribution System Operator in accordance with this BSCP.

⁵ Significant work – means any work carried out on the Metering System by a competent person, that would require re-registration of the Metering System

⁶ Where the identifier cannot be uniquely identified by a 2-character Meter Register ID (e.g. "CUM 3"), a label shall be applied to, or immediately adjacent to, the Meter that shows the display sequence with the equivalent Meter Register ID for each register (e.g. "CUM 2 – Reg ID = 02" etc.). For two-rate Key Meters only, the only permitted Meter Register IDs are "1", "1", "01" or "R1" and "2", "2", "02" Reg ID = 02" etc.). For two-rate Key Meters only, the only permitted Meter Register IDs are "1", "1", "01" or "R1" and or "R2". (When installing or attending the site to carry out significant work requiring re-registration).

2.4 Interface to Other Party Agents and Suppliers

2.4.1 Information to Data Collectors and Suppliers

- a) Upon any change of Meter Technical Details or any change of Associated Data Collector or upon the MOA's appointment in respect of a SVA Metering System, the MOA shall give Meter Technical Details and access details of the SVA Metering System and its energisation status at feeder level to its Associated Data Collector. This requirement does not apply in the case of Supplier-serviced Metering Systems.
- b) For NHH Metering Systems and HHDC-serviced Metering Systems, the MOA shall inform its Associated Data Collector of the installation, repair, removal, reprogramming, energisation or de-energisation of any Meter for which the Associated Data Collector is responsible. The MOA shall use all reasonable endeavours to assist its Associated Data Collector in recovering data required for Settlement from any Meter that is about to be removed or de-energised.
- c) For Supplier-serviced Metering Systems, the MOA shall inform its Associated Supplier of the installation, repair, removal, energisation or de-energisation of any Meter for which the Associated Supplier is responsible. The MOA shall use all reasonable endeavours to assist its Associated Supplier in recovering data required for Settlement from any Meter that is about to be removed or deenergised.
- d) Except in an emergency, the MOA shall give its Associated Half Hourly Data Collector sufficient notice of the installation, repair, removal, reprogramming, energisation or de-energisation of any Meter associated with an HHDC-serviced Metering System for which the Associated Half Hourly Data Collector is responsible to enable the Associated Half Hourly Data Collector to recover the data required for Settlement using its normal method of data collection. In the case of Supplier-serviced Metering System, the MOA shall give such notice to its Associated Supplier.
- e) The MOA shall provide initial / final Meter readings to its Associated Data Collector following installation, removal, reprogramming, energisation, deenergisation or replacement of a Meter by the MOA, as appropriate and in accordance with this BSCP.
- f) In the case where the outgoing Non Half Hourly Data Collector returns Meter readings to the MOA, as the Non Half Hourly Data Collector has been deappointed for the Non Half Hourly SVA Metering System and the Meter reading history has already been transferred to the incoming Non Half Hourly Data Collector, the MOA shall pass these Meter readings to the incoming Non Half Hourly Data Collector.
- g) Where the MOA has collected data from a SVA Metering System, other than for the circumstances described in Section 2.4.1 e) the Metered Data shall be provided to the Associated Half Hourly Data Collector via the Associated Supplier.

2.4.2 Meter Fault Reporting

- a) Upon the MOA being notified by any person or discovering that any Meter for which the MOA is responsible is potentially recording incorrect data, the MOA shall investigate and rectify the problem and notify its Associated Supplier and its Associated Data Collector of the nature of the fault and the date and time at which it was rectified.
- b) The MOA shall report Meter faults to its Associated Supplier and its Associated Data Collector and advise the Associated Data Collector as to the period covered by the fault and, for Half Hourly Meters, as to how to estimate Half Hourly consumption correctly.
- c) The MOA shall separately identify Meter faults affecting data quality and those not affecting data quality and shall record the date on which each fault was reported and the date on which each fault was cleared. For this purpose a fault affecting data quality shall be treated as cleared when the relevant SVA Metering System once again records in compliance with the relevant Code of Practice.

2.5 Service Levels

The MOA shall perform the services to be performed by it as MOA pursuant to this BSCP to standards which shall be at least as good as those specified in Appendix 10.

3 Interface and Timetable Information

3.1 Submission of Current Transformer (CT) and/or Voltage Transformer (VT) ratios for inclusion (or removal) in the BSCCo valid set⁷

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-------|------------------------|---|-------|-------|----------------------|--------------------|
| 3.1.1 | As required | Submit CT or VT ratio | MOA | BSCCo | CT and/or VT ratios | Email ⁸ |
| 3.1.2 | Within 2 WDs of 3.1.1 | Confirm receipt of submitted ratios | BSCCo | MOA | | Email |
| 3.1.3 | Within 5 WDs of 3.11.1 | Review ratios and approve or reject submission. | BSCCo | 00, | | Internal Process |
| 3.1.4 | Within 2 WDs of 3.1.3 | Notify MOA whether the CT or VT data has been approved | BSCCo | MOA | | Email |
| 3.1.5 | Within 2 WDs of 3.11.4 | Send global notification that a new CT or VT ratio has been approved for addition/removal from the valid set. | BSCCo | | | Circular |

⁷ This valid set refers to DTC data item(s) J0454 (CT Ratio) and J0455 (VT Ratio) however the valid set will be managed by BSCCo. Changes made to the valid set become live as soon as they are published by BSCCo, and the values can be used for retrospective dates.

⁸ MOAs should email metering@elexon.co.uk with the measurement transformer ratios with which they wish Elexon to update the valid set with.

| 3.1.6 | 10 WDs following | Update and publish valid set | BSCCo | CT and/or VT ratios | Internal Process ⁹ |
|-------|------------------|------------------------------|-------|---------------------|-------------------------------|
| | 3.1.3 | | | | |

4 Not Used



⁹ The valid set will be published on the BSCCo website (www.elexonportal.co.uk).

Interface and Timetable Information - Half Hourly 5

5.1 **Market Data Activities**

5.1.1 Market Domain Data¹⁰

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|---|-------|-------|---|--|
| 5.1.1.1 | If required | Request MDD. | ННМОА | MDDM | HHMOA Id. | Electronic or other method, as agreed. |
| 5.1.1.2 | When published by SVAA or within 1 WD of request from HHMOA | Send MDD. | SVAA | ННМОА | D0269 Market Domain Data Complete set. D0270 Market Domain Data Incremental Set. | Electronic or other method, as agreed. |
| 5.1.1.3 | If file incomplete or unreadable | Send notification and await MDD. | ННМОА | MDDM | P0035 Invalid Data. | Electronic or other method, as agreed. |
| 5.1.1.4 | After receiving notification | Send corrected MDD. | SVAA | ННМОА | D0269 Market Domain Data Complete Set. D0270 Market Domain Data Incremental Set. | Electronic or other method, as agreed. |
| 5.1.1.5 | If file readable and complete and within 4 working hours of receipt of MDD | Send acknowledgement ¹¹ of receipt of MDD. | ННМОА | MDDM | P0024 Acknowledgement. | Electronic or other method, as agreed. |

¹⁰ The MOA shall provide the identity of Equipment Owners to Suppliers and Licensed Distribution System Operators, allowing data to be entered into Market Domain Data on their behalf.

¹¹ The acknowledgement may be made by the automatic acknowledgement generated by the gateway of the MOA in respect of Market Domain Data transferred over the Managed Data Network.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|---|-------|----|----------------------|-------------------|
| 5.1.1.6 | As and when needed | Record and use MDD as is considered appropriate by the Panel (having regard to the MOA's functions) and, in particular, use only MDD for those items in relation to which there is a MDD entry. | ННМОА | | | Internal Process |
| 5.1.1.7 | As soon as possible after data in correct format | Update records. | ННМОА | | | Internal Process. |
| 5.1.1.8 | On receipt of new MDD | On receipt of any new MDD, ensure that all MDD affecting the accuracy of Settlement which is manually entered is validated against the source data supplied by the SVAA by means of double entry keying before the data is recorded and used. | ННМОА | | | Internal Process |
| 5.1.1.9 | In the event of a dispute | In the event of any dispute as to whether an item of MDD is appropriate or, as the case may be, affects the accuracy of Settlement, the decision of the Panel shall be conclusive. | | | | |

5.2 **Registration Activities**

5.2.1 **Change of HHMOA (No Change of Metering System or Change of Supplier)**

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|---|---------------|----------------------------|--|--|
| 5.2.1.1 | As required. | Send appointment. | Supplier | New HHMOA ¹² | D0155 Notification of Meter Operator or Data Collector Appointment and Terms ¹³ . | Electronic or other method, as agreed. |
| 5.2.1.2 | If appointment rejected and within 5 WD of 5.2.1.1 (or within 10 WD for Supplier-serviced Metering Systems). | Send notification of rejection of appointment including the reason why the request has been rejected. | New HHMOA | Supplier | D0261 Rejection of Agent Appointment. (Go to 5.2.1.1 if required) | Electronic or other method, as agreed. |
| 5.2.1.3 | If appointment accepted and within 5 WD of 5.2.1.1 (or within 10 WD for Supplier-serviced Metering Systems). | Send notification of acceptance of appointment. | New HHMOA | Supplier | D0011 Agreement of Contractual Terms. | Electronic or other method, as agreed. |
| 5.2.1.4 | Within 5 WD of 5.2.1.3 | Send de-appointment. | Supplier | Current HHMOA | D0151 Termination of Appointment or Contract by Supplier. | Electronic or other method, as agreed. |
| 5.2.1.5 | If de-appointment rejected and within 5 WD of 5.2.1.4 | Send notification of rejection of deappointment. | Current HHMOA | Supplier | Note that rejection of deappointment shall only occur if the current HHMOA has a contract with the customer. | Electronic or other method, as agreed. |

 $^{^{12}}$ For Supplier-serviced Metering Systems, the Supplier will appoint an NHHMOA. 13 A Retrieval Method of 'S' in the D0155 data flow indicates that the Supplier will retrieve the HH Metered Data.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|---|---|--------------------------------|----------------------------|---|--|
| 5.2.1.6 | On appointment of new HHMOA and | Send notification of HHMOA appointment / de-appointment. | Supplier | New HHMOA / HHDC | D0148 Notification of Change to Other Parties. | Electronic or other method, as |
| | between 5 WD ¹⁴ and 10 WD of 5.2.1.4 | The D0302 to the HHDC is optional for Supplier-serviced Metering Systems. | | | D0302 Notification of Customer Details. | agreed. |
| 5.2.1.7 | Within 2 WD of 5.2.1.6 | Instruct current HHMOA to send MTD to new HHMOA. | Supplier | Current HHMOA | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |
| For HHDC | C-serviced Metering Syste | ems | | | | |
| 5.2.1.8 | Within 5 WD of 5.2.1.7 | Send MTD. | Current HHMOA ¹⁵ | New HHMOA ¹⁶ | D0268 Half Hourly Meter Technical Details ¹⁷ | Electronic or other method, as |
| | | | Doc | | If site is Complex, send Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites. | agreed. |
| 5.2.1.9 | Following 5.2.1.8 | Send Commissioning information. | Current HHMOA | New HHMOA | D0383 Notification of Commissioning information D0384 Notification of Commissioning status ¹⁸ | Electronic or other method, as agreed. |

¹⁴ This step could be completed in less than 5 WD if the Supplier knows a de-appointment is not going to be rejected.

¹⁵ Where the current MOA has been instructed to send MTD to a new MOA, and there is a change to MTD, the current MOA should send the revised MTD to the new MOA until such a time as the current MOA is no longer responsible for the MTD.

¹⁶ If required, and at any time after the effective date of the MOA's appointment (and only for MSIDs first registered after 6 November 2008), the MOA may request Site Technical Details by sending a D0170 'Request for Metering System Related Details' to the LDSO. The LDSO shall respond within 5 WD of such requests by sending a D0215 'Provision of Site Technical Details' or D0382 'Rejection Response for Request to LDSO for Site Technical Details' either by electronic means or by another method, as agreed with the MOA. The MOA shall determine any appropriate course of action within 2 WD of receiving this information.

¹⁷ The MTD, in the form of the D0268 flow, is to be sent under all circumstances, even if no MS is present on site, unless the MOA does not have sufficient information to fully populate group 01A of the flow, in which case D0268 will not be sent. Additionally, the D0268 flow would not be sent in the context of CoS/CoA scenarios on 'New Connections' (if no D0215 'Provision of Site Technical Details' flows had been received by MOAs from LDSOs) or 'Change of Measurement Class from NHH to HH' scenarios (if there was insufficient information available to fully populate group 01A due to site changes).

¹⁸ D0384 Notification of Commissioning status is to be sent when a defect or omission exists that has prevented completion of Commissioning prior to the change of HHMOA. The New HHMOA must resolve the defect or omission as soon as possible following receipt of D0384.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|------------|---|--|--------------------------------|---------------------------|--|--|
| 5.2.1.10 | Within 5 WD of 5.2.1.8 | Send MTD. | New HHMOA | Supplier / HHDC / LDSO | D0268 Half Hourly Meter Technical Details. If site is Complex, send Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites. | Electronic or other method, as agreed. |
| 5.2.1.11 | Following 5.2.10 | Send Commissioning information. | New HHMOA | Supplier | D0384 Notification of Commissioning status | Electronic or other method, as agreed. |
| 5.2.1.12 | In accordance with timescales in Appendix 8.3.5 | If MTD manually intervened or there has been a key field change, prove MS. | New HHMOA | HHDC | Refer to Appendix 8.3.5. | Electronic or other method, as agreed. |
| For Suppli | er-serviced Metering Sys | stems | | | | |
| 5.2.1.13 | Within 5 WD of 5.2.1.7. | Send MTD. | Current MOA ^{37,} 19. | New MOA ¹⁶ . | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. | Electronic or other method, as agreed. |
| 5.2.1.14 | Within 5 WD of 5.2.1.13. | Send MTD. | New MOA. | Supplier / LDSO. | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. | Electronic or other method, as agreed. |

¹⁹ The abbreviation MOA is used for Supplier-serviced Metering Systems, where the NHHMOA is fulfilling its functions in respect of a HH Metering System. The abbreviation HHMOA is used for those activities that apply to both HHDC-Serviced and Supplier-serviced Metering Systems.

New Connection - Installation 20

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|---|----------|---------------------|---|--|
| 5.2.2.1 | As required | Send appointment. | Supplier | HHMOA ¹² | D0155 Notification of Meter Operator or Data Collector Appointment and Terms. 13 | Electronic or other method, as agreed. |
| 5.2.2.2 | If appointment rejected and within 5 WD of 5.2.2.1 | Send notification of rejection of appointment including the reason why the request has been rejected. | ННМОА | Supplier | D0261 Rejection of Agent Appointment. (Go to 5.2.2.1 if required) | Electronic or other method, as agreed. |
| 5.2.2.3 | If appointment accepted and within 5 WD of 5.2.2.1 | Send notification of acceptance of appointment. | ННМОА | Supplier | D0011 Agreement of Contractual Terms. | Electronic or other method, as agreed. |
| 5.2.2.4 | On appointment of HHMOA and within 5 WD of 5.2.2.3 | Send notification of HHDC. The D0302 to the HHDC is optional for Supplier-serviced Metering Systems. | Supplier | HHMOA / HHDC | D0148 Notification of Change to Other Parties. D0302 Notification of Customer Details. | Electronic or other method, as agreed. |
| 5.2.2.5 | Following 5.2.2.3 and at least 10 WD before 5.2.2.9 ²¹ | Request installation, Commissioning and energisation of MS. | Supplier | HHMOA ²² | D0142 Request for Installation or Changes to a Metering System Functionality or the Removal of all Meters. | Electronic or other method, as agreed. |
| 5.2.2.6 | Within 2 WD of 5.2.2.5 | Request Site Technical Details. Optional for Supplier-serviced Metering Systems. | ННМОА | LDSO | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |
| 5.2.2.7 | If request for Site Technical Details rejected and within 5 WD of 5.2.2.6 | Send Rejection response for request for Site Technical Details including the reasons why the request has been rejected. | LDSO | ННМОА | D0382 Rejection response for Request to LDSO for Site Technical Details. | Electronic or other method, as agreed. |

 ²⁰ If the new connection is a Transfer of Registration from CMRS, proceed in accordance with section 5.2.5.
 21 This step could be completed in shorter timescales where the Supplier and MOA have reached mutual agreement.

²² Where it is necessary to involve the LDSO, the HHMOA shall arrange this, proceed in accordance with section 5.3.1.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|--|---|--------------------|----------|--|--|
| 5.2.2.8 | Within 5 WD of 5.2.2.6 | Send Site Technical Details. | LDSO ²³ | ННМОА | D0215 Provision of Site Technical Details. | Electronic or other method, as agreed. |
| 5.2.2.9 | On the date requested or agreed in 5.2.2.5 ²⁴ | Install HH MS in accordance with appropriate Codes of Practice. If requested energise MS and note initial Meter register reading. | ННМОА | | | Internal Process. |
| 5.2.2.10 | Following 5.2.2.9 | For HHMS that include Measurement Transformers, Commission in accordance with appropriate Codes of Practice and section 5.2.2.A. For HHMS that do not include Measurement Transformers, Commission in accordance with appropriate Codes of Practice. | ННМОА | | | Internal Process. Internal Process. |
| 5.2.2.11 | If MS cannot be installed or energised, as soon as possible and within 5 WD of 5.2.2.9 | Inform Supplier. | ннмоа | Supplier | D0221 Notification of Failure to Install or Energise Metering System. (Go to 5.2.2.5 if required) | Electronic or other method, as agreed. |

_

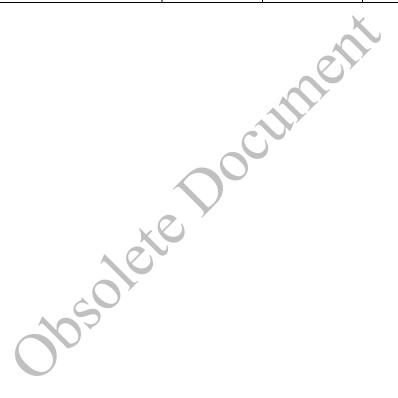
²³ In the event of any subsequent changes to Site Technical Details, the LDSO shall send an updated D0215 'Provision of Site Technical Details' to the MOA within 1WD of updating their systems. The MOA shall determine any appropriate course of action within 2 WD of receiving this information.

²⁴ If MS is to be installed but not energised at this time, the energisation of the MS shall be carried out at an appropriate time in accordance with process 5.3.1

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|---|---|-------|---------------------------|---|--|
| For HHD0 | C-serviced Metering System | ems | | | | |
| 5.2.2.12 | Within 5 WD of 5.2.2.9 | Send energisation status, MTD and initial Meter register reading. | ННМОА | Supplier / HHDC / LDSO | D0268 Half Hourly Meter Technical Details. If site is Complex, send Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites. D0010 Meter readings. | Electronic or other method, as agreed. |
| 5.2.2.13 | Within 5 WD of 5.2.2.9 | Send the relevant Meter information. | ННМОА | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method as agreed. |
| 5.2.2.14 | Immediately following 5.2.1.13 or 5.2.2.16 | Perform validation checks and send response D0312. | SMRS | HHMOA Supplier | D0312 Notification of Meter Information to MPAS with 'MOP Flow Response Code' populated | Electronic or other method, as agreed. |
| 5.2.2.15 | | If response is "Accepted", proceed to 5.2.2.17, otherwise proceed to 5.2.2.16. | | | | |
| 5.2.2.16 | Within 5 WDs of 5.2.2.14 | Where the rejection is of a type the HHMOA can resolve without involving other industry parties, send a corrected D0312. If the HHMOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. Proceed to 5.2.2.14. | ННМОА | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed. |
| 5.2.2.17 | In accordance with timescales in Appendix 8.3.5 | Prove MS. | ННМОА | HHDC | Refer to Appendix 8.3.5. | Electronic or other method, as agreed. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-----------|---|---|-----------|---------------------|--|--|
| For Suppl | ier-serviced Metering Sys | stems | | | | |
| 5.2.2.18 | In time to allow the MOA to distribute MTD within 10 WD of 5.2.2.9. | Send Smart Meter Configuration Details The Supplier will ensure that only the latest version of the configuration for the day is sent to the NHHMOA. If the Supplier is unable to configure the Meter (for example, due to a communications failure), the SSC and TPR will be defaulted to a single-rate default. The TPR should be mapped to the total import register. | Supplier. | MOA. | D0367 Smart Meter Configuration Details. (or alternative method, as agreed bilaterally between the Supplier and NHHMOA). | Electronic or other method, as agreed. |
| 5.2.2.19 | Within 10 WD of 5.2.2.9. | Send MTD. | MOA. | Supplier / LDSO. | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. | Electronic or other method, as agreed. |
| 5.2.2.20 | Within 10 WD of 5.2.2.9. | Send the relevant Meter information. | MOA. | SMRS. | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed. |
| 5.2.2.21 | Immediately following 5.2.2.21 or 5.2.2.23 | Perform validation checks and send response D0312. | SMRS | MOA Supplier | D0312 Notification of Meter Information to MPAS with 'MOP Flow Response Code' populated | Electronic or other method, as agreed. |
| 5.2.2.22 | | If response is "Accepted", end process, otherwise proceed to 5.2.2.23. | | | | |
| 5.2.2.23 | Within 5 WDs of 5.2.2.20 | Where the rejection is of a type the MOA can resolve without involving other industry parties, send a corrected D0312. | MOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-----|------|---|------|----|----------------------|--------|
| | | If the MOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. | | | | |
| | | Proceed to 5.2.2.21. | | | | |



5.2.2.A New Connection – Commissioning of Meter Systems that include Measurement Transformers that are owned by the LDSO

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-----------|---|--|----------|------------|---|--|
| 5.2.2.A.1 | At the earliest opportunity but no later than 16 WD after energisation | If LDSO owns the Measurement Transformers then Commission Measurement Transformers in accordance with Code of Practice 4. | LDSO | X | If LDSO does not own Measurement Transformers, go to 5.2.2.B. | Internal Process. |
| 5.2.2.A.2 | At the earliest opportunity but no later than 5 WD of 5.2.2.A.1 | Send Commissioning information for the Measurement Transformers to the HHMOA. | LDSO | ННМОА | D0383 Notification of Commissioning information. | Electronic or other method, as agreed. |
| 5.2.2.A.3 | On the date requested or agreed in 5.2.2.5 but no later than 32 WD after Energisation | Commission HH MS in accordance with appropriate Codes of Practice for the Metering Equipment and Code of Practice 4. | ННМОА | | | Internal Process. |
| 5.2.2.A.4 | Following 5.2.2.A.3 | If there has been a defect/omission that has prevented Commissioning ²⁵ . If Commissioning has been completed. | ННМОА | | Go to 5.2.2.A.5. Go to 5.2.2.A.8 | Internal Process. |
| 5.2.2.A.5 | At the earliest opportunity but no later than 5 WD of 5.2.2.A.3 | Inform the Supplier where there is a defect/omission that has prevented Commissioning. | ННМОА | Supplier | D0384 Notification of Commissioning status | Electronic or other method, as agreed. |
| 5.2.2.A.6 | At the earliest opportunity but no later than 65 WD after Energisation | Resolve the defect/omission that has prevented Commissioning. ²⁶ | Supplier | LDSO/HHMOA | D0384 Notification of Commissioning status | Electronic or other method, as agreed. |
| 5.2.2.A.7 | When defect/omission has been resolved, but no later than 80 WD after Energisation | Commission HH MS in accordance with appropriate Codes of Practice for the Metering Equipment and Code of Practice 4. | ННМОА | | | Internal Process. |

__

Balancing and Settlement Code

²⁵ A defect or omission in the completion of the processes is set out in CoP4 and will also include that the D0383 Notification of Commissioning information flow has not been received from the LDSO.

²⁶ It shall be the responsibility of the Registrant to ensure that all Metering Equipment is appropriately Commissioned. If the Registrant believes that there is a risk to Settlement it shall, in accordance with Section L3.6 of the BSC, consult with the relevant network operator and agree the appropriate steps to be taken to minimise the risks to Settlement. Such agreements shall also be recorded and made available on request to the BSC Panel. The Supplier may also use D0384 'Notification of Commissioning status' to communicate with the HHMOA or LDSO as required.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-----------|--|--|-------|----------|---|--|
| 5.2.2.A.8 | Within 5 WD of complete Commissioning. | Inform the Supplier that Commissioning has been completed. | ННМОА | Supplier | D0384 Notification of Commissioning status. ²⁷ | Electronic or other method, as agreed. |
| 5.2.2.A.9 | Following 5.2.2.A.8 | Create internal record of MOA Commissioning ²⁸ | ННМОА | ¥ | D0383 Notification of Commissioning information | Internal Process |

²⁷ Notification of complete Commissioning shall not be done if complete information-D0383 flow has not been received from the LDSO.

²⁸ This will be used for the Change of Agent process and the passing of complete Commissioning information.

5.2.2.B New Connection – Commissioning of Meter Systems that include Measurement Transformers that are not owned by a LDSO

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-----------|---|---|----------|----------|---|--|
| 5.2.2.B.1 | On the date requested or agreed in 5.2.2.5 but no later than 32 WD after energisation | Commission HH MS in accordance with appropriate Codes of Practice for the Metering Equipment and Code of Practice 4. | ННМОА | × | | Internal Process. |
| 5.2.2.B.2 | Following 5.2.2.B.1 | If there has been a defect/omission that has prevented Commissioning. ²⁹ If Commissioning has been completed | ННМОА | Silv | Go to 5.2.2.B.3. Go to 5.2.2.B.6 | Internal Process. |
| 5.2.2.B.3 | At the earliest opportunity but no later than 5 WD of 5.2.2.B.1 | Inform the Supplier where there is a defect/omission that has prevented Commissioning. | ннмоа | Supplier | D0384 Notification of Commissioning status | Electronic or other method, as agreed. |
| 5.2.2.B.4 | At the earliest opportunity but no later than 65 WD after energisation | Resolve the defect/omission that has prevented Commissioning. ³⁰ | Supplier | ННМОА | D0384 Notification of Commissioning status | Electronic or other method, as agreed. |
| 5.2.2.B.5 | When defect/omission has been resolved, but no later than 80 WD after energisation | Commission HH MS in accordance with appropriate Codes of Practice for the Metering Equipment and Code of Practice 4. | ННМОА | | | Internal Process. |
| 5.2.2.B.6 | Within 5 WD of 5.2.2.B.5 | Inform the Supplier that Commissioning has been completed. | ННМОА | Supplier | D0384 Notification of Commissioning status | Electronic or other method, as agreed. |
| 5.2.2.B.7 | Following 5.2.2.B.6 | Create internal record of Commissioning information | ННМОА | | D0383 Notification of Commissioning information ³¹ | Internal Process. |

²⁹ A defect or omission in the completion of the processes is set out in CoP4.

³⁰ It shall be the responsibility of the Registrant to ensure that all Metering Equipment is appropriately Commissioned. If the Registrant believes that there is a risk to Settlement it shall, in accordance with Section L3.6 of the BSC, where appropriate, consult with the relevant network operator and agree the appropriate steps to be taken to minimise the risks to Settlement. If the measurement transformers are not owned by a BSC Party then the Registrant or MOA may be required to consult the relevant equipment owner. Such agreements shall also be recorded and made available on request to the BSC Panel. The Supplier may also use D0384 'Notification of Commissioning' status to Communicate with the HHMOA.

³¹ D0383 Notification of Commissioning information contains BSCCo maintained valid sets for measurement transform ratios. For updating these valid sets with additional ratios, go to section BSCP515 3.15

5.2.3 Change of HHDC for an existing Metering System³²

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|--|----------|----------|--|--|
| 5.2.3.1 | As required and for HHDC-serviced Metering Systems only. | Send notification of new HHDC. | Supplier | ННМОА | D0148 Notification of Change to Other Parties. | Electronic or other method, as agreed. |
| 5.2.3.2 | Within 5 WD of 5.2.3.1 | Send MTD and details of any current faults. | ННМОА | New HHDC | D0002 Fault Resolution Report or Request for Decision on Further Action. D0268 Half Hourly Meter Technical Details. 17 If site is Complex, send Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites. | Electronic or other method, as agreed. |
| 5.2.3.3 | In accordance with timescales in Appendix 8.3.5 | If MTD manually intervened or there has been a key field change, prove MS. | ННМОА | New HHDC | Refer to Appendix 8.3.5. | Electronic or other method, as agreed. |

³² This process shall also apply to a concurrent Change of Supplier and Change of HHDC. In this circumstance, the Supplier referred to above is the new Supplier.

5.2.4 Concurrent Change of Supplier and HHMOA (No change to Metering System)

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|---|---------------------|----------------------------|--|---|
| 5.2.4.1 | As required | Send appointment. | New Supplier | New HHMOA ¹² | D0155 Notification of Meter Operator or Data Collector Appointment and Terms. | Electronic or other method, as agreed. |
| 5.2.4.2 | If appointment rejected and within 5 WD of 5.2.4.1 | Send notification of rejection of appointment including the reason why the request has been rejected. | New HHMOA | New Supplier | D0261 Rejection of Agent Appointment. (Go to 5.2.4.1 if required) | Electronic or other method, as agreed. |
| 5.2.4.3 | If appointment accepted and within 5 WD of 5.2.4.1 | Send notification of acceptance of appointment. | New HHMOA | New Supplier | D0011 Agreement of Contractual Terms. | Electronic or other method, as agreed. |
| 5.2.4.4 | Within 5 WD of notification from SMRS or by last date of Supplier Appointment | Send notification of termination of appointment. | Current Supplier | Current HHMOA | D0151 Termination of Appointment or Contract by Supplier. | Electronic or other method, as agreed. |
| 5.2.4.5 | If de-appointment rejected and within 5 WD of 5.2.4.4 | Send notification of rejection of de-appointment. | Current HHMOA | Current Supplier | Note that rejection of deappointment shall only occur if the current HHMOA has a contract with the customer. | Electronic or other method, as agreed. |
| 5.2.4.6 | Within 5 WD of 5.2.4.3 ³³ | Send notification of HHDC and current HHMOA. The D0302 to the HHDC is optional for Supplier-serviced Metering Systems. | New Supplier | New HHMOA / HHDC | D0148 Notification of Change to Other Parties. D0302 Notification of Customer Details. | Electronic or other method, as agreed |
| 5.2.4.7 | Within 2 WD of 5.2.4.6 | Request MTD. | New HHMOA | Current HHMOA | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |

³³ Note that if there is also a concurrent Change of HHDC, the New Supplier shall send the D0148 once the D0011 from both the MOA and the HHDC has been received and within 5WD of the receipt of the latter D0011.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD | | | | |
|----------|---|--|------------------------|----------------------------------|--|--|--|--|--|--|
| For HHD | For HHDC-serviced Metering Systems | | | | | | | | | |
| 5.2.4.8 | Within 5 WD of 5.2.4.7 | Send MTD. | Current HHMOA 15 | New HHMOA ¹⁶ | D0268 Half Hourly Meter Technical Details. 17 If site is Complex, send Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites. | Electronic or other method, as agreed. | | | | |
| 5.2.4.9 | Following 5.2.4.8 | Send Commissioning information. | Current HHMOA | New HHMOA | D0383 Notification of Commissioning information D0384 Notification of Commissioning status ³⁴ | Electronic or other method, as agreed. | | | | |
| 5.2.4.10 | Within 5 WD of 5.2.4.8 | Send MTD. | New HHMOA | New Supplier / HHDC / LDSO | D0268 Half Hourly Meter Technical Details. ¹⁷ If site is Complex, send Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites. | Electronic or other method, as agreed. | | | | |
| 5.2.4.11 | Following 5.2.4.10 | Send Commissioning information. | New HHMOA | Supplier | D0384 Notification of Commissioning status | Electronic or other method, as agreed. | | | | |
| 5.2.4.12 | In accordance with timescales in Appendix 8.3.5 | If MTD manually intervened or there has been a key field change, prove MS. | New HHMOA | HHDC | Refer to Appendix 8.3.5. | Electronic or other method, as agreed. | | | | |

³⁴ D0384 Notification of Commissioning status is to be sent when a defect or omission exists that has prevented completion of Commissioning prior to the change of HHMOA. The New HHMOA must resolve the defect or omission as soon as possible following receipt of D0384.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD | | | | |
|----------|--|---|------------------------------|------------------------|--|--|--|--|--|--|
| For Supp | For Supplier-serviced Metering Systems | | | | | | | | | |
| 5.2.4.13 | Within 1 WD of configuration or within 1 WD of SSD as applicable | Send Smart Meter Configuration Details. If unable to re-configure the Time of Use registers, or no re-configuration required, the Supplier will notify the existing configuration details, where known. If the Time of Use registers are not configured to a valid Standard Settlement Configuration (as defined in MDD), or the Supplier is unable to determine the current configuration, the Supplier will notify a single rate SSC. | New Supplier | New MOA | D0367 Smart Meter Configuration Details (or alternative method, as agreed bilaterally between the Supplier and MOA). | Electronic or other method, as agreed. | | | | |
| 5.2.4.14 | Within 5 WD of 5.2.4.7. | Send MTD. | Current MOA ³⁷ | New MOA ¹⁶ | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. | Electronic or other method, as agreed. | | | | |
| 5.2.4.15 | Within 5 WD of 5.2.4.14. | Send MTD. | New MOA | New Supplier / LDSO | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. | Electronic or other method, as agreed. | | | | |

5.2.5 Registration Transfers from CMRS to SMRS

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|--|--------------------------------------|-------------------------|--|--|
| 5.2.5.1 | At least 26 WD before the proposed EFSD {REGI} | Liaise and agree that the HHMOA to be appointed. ³⁵ | Supplier | SVA HHMOA | | Electronic or other method, as agreed. |
| 5.2.5.2 | At least 21 WD before proposed EFSD {REGI} | Send notification if the transfer is rejected. | BSCCo (Transfer Co- ordinator) | SVA HHMOA / Supplier | Form BSCP68/4.2 Registration Transfer form CMRS to SMRS and reasons for rejection. | Electronic or other method, as agreed. |
| 5.2.5.3 | At least 21 WD before proposed EFSD {REGI} | Send notification that the transfer has been approved. | BSCCo (Transfer Co- ordinator) | SVA HHMOA / Supplier | Form BSCP68/4.2 Registration Transfer form CMRS to SMRS. | Electronic or other method, as agreed. |
| 5.2.5.4 | At least 5 WD before confirmed EFSD {REGI} | Send appointment. | Supplier | SVA HHMOA | D0155 Notification of Meter Operator or Data Collector Appointment and Terms. | Electronic or other method, as agreed. |
| 5.2.5.5 | As soon as possible after 5.2.5.4 | Send notification of acceptance of appointment. | SVA HHMOA | Supplier | D0011 Agreement of Contractual Terms. | Electronic or other method, as agreed. |
| 5.2.5.6 | As soon as possible after 5.2.5.5 | Send notification of HHDC appointment. Send details of the CVA MOA and the CDCA. The D0302 to the HHDC is optional for Supplier-serviced Metering Systems. | Supplier | SVA HHMOA / HHDC | D0148 Notification of Change to Other Parties. D0302 Notification of Customer Details | Electronic or other method, as agreed. |
| 5.2.5.7 | By the confirmed EFSD {REGI} | Request MTD. | SVA HHMOA | CVA MOA | D0170 Request for Metering System Related Details. ³⁶ | Electronic or other method, as agreed. |

³⁵ The HHMOA for the MS must be Qualified in both CVA and SVA. In this case, the appointment shall be rejected at this time if the HHMOA is not Qualified in both SVA and CVA and the Supplier must appoint an appropriately Qualified HHMOA.

³⁶ The HHMOA shall request MTD using the SVA MSID. The CVA MOA should match this with the CVA MSID using the details submitted on form BSCP68/4.2.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|--|--|-----------------------|----------------------------|---|--|
| 5.2.5.8 | By the confirmed EFSD {REGI} | Send MTD. | CVA MOA ³⁷ | SVA HHMOA ¹⁶ | D0268 Half Hourly Meter Technical Details. ¹⁷ If site is Complex, send Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites. | Electronic or other method, as agreed. |
| 5.2.5.9 | Within 5 WD of 5.2.5.8 | Send MTD. | SVA HHMOA | Supplier / HHDC / LDSO | D0268 Half Hourly Meter Technical Details. ¹⁷ If site is Complex, send Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites. | Electronic or other method, as agreed. |
| 5.2.5.10 | Within 10 WD of 5.2.5.8 | Send the relevant Meter information changes. | SVA HHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method as agreed. |
| 5.2.5.11 | Immediately following 5.2.5.10 or 5.2.5.13 | Perform validation checks and send response D0312. | SMRS | SVA HHMOA Supplier | D0312 Notification of Meter Information to MPAS with 'MOP Flow Response Code' populated | Electronic or other method, as agreed. |
| 5.2.5.12 | | If response is "Accepted", proceed to 5.2.5.14, otherwise proceed to 5.2.5.13. | | | | |
| 5.2.5.13 | Within 5 WDs of 5.2.5.11 | Where the rejection is of a type the SVA HHMOA can resolve without involving other industry parties, send a corrected D0312. | SVA HHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed. |

³⁷ Where the current MOA is required to send MTD to a new MOA, the current MOA should send the revised MTD to the new MOA until such a time as the current MOA is no longer responsible for the MTD.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|--|---|------------|---------------------------|---|--|
| | | If the SVA HHMOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. Proceed to 5.2.5.11. | | × | | |
| 5.2.5.14 | Within 5 WD of the confirmed EFSD {REGI} | Take an initial Meter register reading. | SVA HHMOA | | | Internal Process. |
| 5.2.5.15 | Within 5 WD of the confirmed EFSD {REGI} | Send initial Meter register reading. | SVA HHMOA | Supplier / HHDC / LDSO | D0010 Meter Readings. | Electronic or other method, as agreed. |
| 5.2.5.16 | In accordance with timescales in Appendix 8.3.5. | Prove MS. | SVA HHMOA. | HHDC | Refer to Appendix 8.3.5. | Electronic or other method, as agreed. |
| 5.2.5.17 | If required and within 5 WD of confirmed EFSD {REGI} | Request initial Meter register reading. 38 | CDCA | SVA HHMOA | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |
| 5.2.5.18 | Within 5 WD of confirmed EFSD {REGI} | Send initial Meter register reading. | SVA HHMOA | CDCA | D0010 Meter readings. | Electronic or other method, as agreed. |

³⁸ This is the initial Meter register reading in SMRS and is equal to the final Meter register reading in CMRS. The CDCA may request the initial Meter register reading in SMRS to use or compare with as the final Meter register reading in CMRS.

5.2.6 Registration Transfers from SMRS to CMRS

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|--|--------------------------------------|-------------------------|--|--|
| 5.2.6.1 | At least 26 WD before the proposed EFSD {REGI} | Notify of proposed Registration Transfer. | BSCCo (Transfer Co- ordinator) | SVA HHMOA | | Electronic or other method, as agreed. |
| 5.2.6.2 | At least 26 WD before the proposed EFSD {REGI} | Request MTD. | CVA MOA | SVA HHMOA | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |
| 5.2.6.3 | At least 23 WD before the proposed EFSD {REGI} | Send MTD. | SVA HHMOA ³⁷ | CVA MOA ¹⁶ | D0268 Half Hourly Meter Technical Details. 17 | Electronic or other method, as agreed. |
| 5.2.6.4 | At least 21 WD before proposed EFSD {REGI} | Send notification if the transfer is rejected. | BSCCo (Transfer Co- ordinator) | SVA HHMOA / Supplier | Form BSCP68/4.2 Registration Transfer form CMRS to SMRS and reasons for rejection. | Electronic or other method, as agreed. |
| 5.2.6.5 | At least 21 WD before proposed EFSD {REGI} | Send notification that the transfer has been approved. | BSCCo (Transfer Co- ordinator) | SVA HHMOA / Supplier | Form BSCP68/4.2 Registration Transfer form CMRS to SMRS. | Electronic or other method, as agreed. |
| 5.2.6.6 | At least 5 WD before confirmed EFSD {REGI} | Send de-appointment. | Supplier | SVA HHMOA | D0151 Termination of Appointment or Contract by Supplier. | Electronic or other method, as agreed. |
| 5.2.6.7 | If de-appointment rejected | Send notification of rejection of deappointment. | Current SVA HHMOA | Supplier | Note that rejection of deappointment shall only occur if the current HHMOA has a contract with the customer. | Electronic or other method, as agreed. |

5.2.7 Change of Supplier for an Existing Metering System (No Change of Agent)

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|---|---|---------------------|-------------------------------|---|--|
| 5.2.7.1 | As required | Send appointment. | New Supplier | HHMOA ¹² | D0155 Notification of Meter Operator or Data Collector Appointment and Terms. | Electronic or other method, as agreed. |
| 5.2.7.2 | If appointment rejected and within 5 WD of 5.2.7.1 | Send notification of rejection of appointment including the reason why the request has been rejected. | ННМОА | New Supplier | D0261 Rejection of Agent Appointment. (Go to 5.2.1 if required.) | Electronic or other method, as agreed. |
| 5.2.7.3 | If appointment accepted and within 5 WD of 5.2.7.1 | Send notification of acceptance of appointment. | ННМОА | New Supplier | D0011 Agreement of Contractual Terms | Electronic or other method, as agreed. |
| 5.2.7.4 | Within 5 WD of notification from SMRS or by last date of Supplier Appointment | Send notification of termination of appointment. | Current Supplier | ННМОА | D0151 Termination of Appointment or Contract by Supplier | Electronic or other method, as agreed. |
| 5.2.7.5 | Between 5 WD and 10 WD of 5.2.7.3. | Send notification of HHDC and HHMOA. The D0302 to the HHDC is optional for Supplier-serviced Metering Systems. | New Supplier | HHDC/ HHMOA/ LDSO | D0148 Notification of Change to Other Parties D0302 Notification of Customer Details | Electronic or other method, as agreed. |
| For HHDO | C-serviced Metering Systems | 6 | | | | |
| 5.2.7.6 | Within 1 WD of 5.2.7.5 | Request MTD. | New Supplier | ННМОА | D0170 Request for Metering System Related Details | Electronic or other method, as agreed. |
| 5.2.7.7 | Within 5 WD of 5.2.7.6 | Send MTD. | ННМОА | New Supplier / HHDC / LDSO | D0268 Half Hourly Meter Technical Details. 17 | Electronic or other method, as agreed. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|--|---|-----------|------------------|--|--|
| For Supp | lier-serviced Metering Systems | | | | | |
| 5.2.7.8 | Within 1 WD of configuration or within 1 WD of SSD as applicable | Send Smart Meter Configuration Details. If unable to re-configure the Time of Use registers, or no re-configuration required, the Supplier will notify the existing configuration details, where known. If the Time of Use registers are not configured to a valid Standard Settlement Configuration (as defined in MDD), or the Supplier is unable to determine the current configuration, the Supplier will notify a single rate SSC. | Supplier. | MOA. | D0367 Smart Meter Configuration Details (or alternative method, as agreed bilaterally between the Supplier and MOA). | Electronic or other method, as agreed. |
| 5.2.7.9 | Within 5 WD of 5.2.7.8. | Send MTD. | MOA. | Supplier / LDSO. | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. | Electronic or other method, as agreed. |

5.2.8 Change of Meter Asset Provider (No change to Metering System)

| REF. | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|---|------|-------|---|--|
| 5.2.8.1 | On receipt of a D0304 from a Meter Asset Provider. | Notify the relevant SMRS. | MOA | SMRS. | D0304 Notification of Meter Asset Provider | Electronic or other method, as agreed. |
| | As soon as possible and in any event within 5 WD of the effective date of the change | | | | ent | |
| 5.2.8.2 | On receipt of data. | Perform validation checks. If valid, proceed to 5.2.8.5 | SMRS | | "MPAS D0304 Response Code" Valid Set | Internal Process. |
| 5.2.8.3 | Upon unsuccessful validation. | Notify MOA of rejection of invalid Meter Asset Provider data. | SMRS | MOA | D0304 Notification of Meter Asset Provider populated with "MPAS D0304 Response Code" other than "Accepted". | Electronic or other method, as agreed. |
| 5.2.8.4 | Within 5 WD of 5.2.8.3. | Where the rejection is of a type the MOA can resolve without involving other industry parties, send a corrected D0304. If the MOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. Proceed to 5.2.8.2. | MOA | SMRS | D0304 Notification of Meter Asset Provider | |
| 5.2.8.5 | Upon successful validation | Update database. | SMRS | | | Internal Process. |
| 5.2.8.6 | Immediately following 5.2.8.5 | Notify MOA of acceptance of Meter Asset Provider data. | SMRS | MOA | D0304 Notification of Meter Asset Provider populated with "MPAS D0304 Response Code" "Accepted". | Electronic or other method, as agreed. |

| 5.2.9 Change of Supplier – No Meter REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--|--|---|---------------------|----------------------------|--|---|
| 5.2.9.1 | By New Supplier SSD | Send appointment. | New Supplier | New HHMOA ¹² | D0155 Notification of Meter Operator or Data Collector Appointment and Terms. | Electronic or other method, as agreed. |
| 5.2.9.2 | If appointment rejected and within 5 WD of 5.2.9.1 | Send notification of rejection of appointment including the reason why the request has been rejected. | New HHMOA | New Supplier | D0261 Rejection of Agent Appointment. (Go to 5.2.9.1 if required) | Electronic or other method, as agreed. |
| 5.2.9.3 | If appointment accepted and within 5 WD of 5.2.9.1 | Send notification of acceptance of appointment. | New HHMOA | New Supplier | D0011 Agreement of Contractual Terms. | Electronic or other method, as agreed. |
| 5.2.9.4 | Within 5 WD of notification from SMRS or by last date of Supplier Appointment | Send notification of termination of appointment. | Current Supplier | Current HHMOA | D0151 Termination of Appointment or Contract by Supplier. | Electronic or other method, as agreed. |
| 5.2.9.5 | If de-appointment rejected and within 5 WD of 5.2.9.4 | Send notification of rejection of de-appointment. | Current HHMOA | Current Supplier | Note that rejection of deappointment shall only occur if the current HHMOA has a contract with the customer. | Electronic or other method, as agreed. |
| 5.2.9.6 | Within 5 WD of 5.2.9.3 ³⁹ | Send notification of HHDC and current HHMOA. The D0302 to the HHDC is optional for Supplier-serviced Metering Systems. | New Supplier | New HHMOA / HHDC | D0148 Notification of Change to Other Parties. D0302 Notification of Customer Details. | Electronic or other method, as agreed |
| 5.2.9.7 | Within 2 WD of 5.2.9.6 | Request MTD. | New HHMOA | Current HHMOA | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |

³⁹ Note that if there is also a concurrent Change of HHDC, the New Supplier shall send the D0148 once the D0011 from both the MOA and the HHDC has been received and within 5WD of the receipt of the latter D0011.

| 5.2.9 Change of Supplier – No Meter REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--|-------------------------|-----------|------------------------------|----------------------------------|--|--|
| For HHDC-serviced | Metering Systems | | | | | |
| 5.2.9.8 | Within 5 WD of 5.2.9.7 | Send MTD. | Current HHMOA 15 | New HHMOA ¹⁶ | D0268 Half Hourly Meter Technical Details. ¹⁷ | Electronic or other method, as agreed. |
| 5.2.9.9 | Within 5 WD of 5.2.9.8 | Send MTD. | New HHMOA | New Supplier / HHDC / LDSO | D0268 Half Hourly Meter Technical Details. 17 | Electronic or other method, as agreed. |
| For Supplier-serviced | d Metering Systems | | | | | |
| 5.2.9.10 | Within 5 WD of 5.2.9.7 | Send MTD. | Current MOA ³⁷ | New MOA ¹⁶ | D0150 Non Half-hourly Meter Technical Details. | Electronic or other method, as agreed. |
| 5.2.9.11 | Within 5 WD of 5.2.9.10 | Send MTD. | New MOA | New Supplier / LDSO | D0150 Non Half-hourly Meter Technical Details. | Electronic or other method, as agreed. |

5.3 Metering Activities

5.3.1 Energise a Metering System

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD | | | | |
|---------|--|---|----------|----------------------------|--|--|--|--|--|--|
| If HHMO | If HHMOA Energises | | | | | | | | | |
| 5.3.1.1 | As required | Send request to energise MS. | Supplier | ннмоа | D0134 Request to Change Energisation Status. | Electronic or other method, as agreed. | | | | |
| 5.3.1.2 | If request rejected and within 2 WD of 5.3.1.1 (or 5 WD for Supplier-serviced Metering Systems). | Send notification of rejection including the reason why the request has been rejected. | ннмоа | Supplier | P0211 Site Visit Rejection. (Go to 5.3.1.1 if required) | Electronic or other method, as agreed. | | | | |
| 5.3.1.3 | On the date requested or agreed in 5.3.1.1 | Energise MS and note initial Meter register reading. | ННМОА | | | Internal Process. | | | | |
| 5.3.1.4 | Within 5 WD of attempting to change energisation status (or within 10 WD for Supplier-serviced Metering Systems) or Following the HHMOA becoming | Send change of energisation status and the initial Meter register reading. Send change of energisation status and, if requested, the initial Meter register reading. | ННМОА | Supplier / LDSO HHDC | D0139 Confirmation or Rejection of Energisation Status Change. ⁴⁰ , ⁴¹ | Electronic or other method, as agreed. | | | | |

⁴⁰ If there is a failure to change the energisation status, the D0139 shall be sent only to the Supplier. If energisation status is changed but a Meter register reading cannot be taken, the D0139 shall be sent to all of the above recipients and a D0002 'Fault Resolution Report or Request for Decision on Further Action' shall be sent to the DC.

⁴¹ If the date of the change of energisation status is unknown, a date can be instructed or agreed by the Supplier for inclusion in the D0139 flow. All other fields in this D0139 must be completed as normal. Such a D0139 flow should not be sent unless the date for inclusion has been agreed by the Supplier. For guidance:

[•] The Supplier should consider all available information (e.g. D0235 'Half hourly Aggregation Exception Report' flows, HHDC/HHMOA information) when determining the date that should be recorded for the change in energisation status.

[·] Communication regarding the instruction of a date should be by email or another method, as agreed; an audit trail should be retained.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-----------|--|---|-------|-------------------|--|--|
| | aware of a discrepancy between the energisation status on site and that held by the Supplier/HHDC. | | | | | |
| If LDSO I | Energises | | | ~0 | | |
| 5.3.1.5 | Within 5 WD of energising a Metering System. | Send change of energisation status and the initial Meter register reading. | LDSO | HHMOA Supplier | D0139 Confirmation or Rejection of Energisation Status Change. ⁴⁰ | Electronic or other method, as agreed. |
| 5.3.1.6 | Within 5 WD of 5.3.15 (or 10 WD for Supplier-serviced Metering Systems). | Send change of energisation status and, if requested, the initial Meter register reading. | ННМОА | HHDC | D0139 Confirmation or Rejection of Energisation Status Change. | Electronic or other method, as agreed. |

5.3.2 De-energise a Metering System

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|------------|--|---|----------|----------|--|--|
| If HHMOA I | De-energises | | | • | | |
| 5.3.2.1 | As required and at least 10 WD before 5.3.2.6. ²¹ | Send request to de-energise MS. | Supplier | ННМОА | D0134 Request to Change Energisation Status. | Electronic or other method, as agreed. |
| 5.3.2.2 | If request rejected and within 2 WD of 5.3.2.1 (or 5 WD for Supplier-serviced Metering Systems). | Send notification of rejection including the reason why the request has been rejected. | ННМОА | Supplier | D0139 Confirmation or Rejection of Energisation Status Change. D0221 Notification of Failure to Install or Energise Metering System P0211 Site Visit Rejection. ⁴² (Go to 5.3.2.1 if required) | Electronic or other method, as agreed. |
| 5.3.2.3 | If request accepted and within 3 WD of 5.3.2.1 and before planned date for deenergisation. | Arrange with HHDC to collect final HH Metered Data. For Supplier-serviced Metering Systems, the Supplier, rather than the HHDC, will collect the HH Metered Data. Steps 5.3.2.3 to 5.3.2.6 do not apply. | ННМОА | HHDC | D0005 Instruction on Action. | Electronic or other method, as agreed. |
| 5.3.2.4 | On date and time agreed in 5.3.2.3. | Collect final HH Metered Data. | HHDC | | | Internal Process. |
| 5.3.2.5 | Immediately following 5.3.2.4 | Confirm final HH Metered Data collection. | HHDC | ННМОА | The MOA will telephone the HHDC when it is on site. Following the HHDC collecting the data, the HHDC will provide confirmation to the MOA. | Telephone. |

⁴² The use of this data flow is optional.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--|--|--|----------|-------------------|---|--|
| 5.3.2.6 | Immediately following 5.3.2.5 | Note final Meter register reading, if available. | ННМОА | | | Internal Process. |
| | | If final HH Metered Data was not uploaded by the HHDC, download final HH Metered Data, if available. De-energise MS. | | × | | |
| 5.3.2.7 | Within 5 WD of changing | Send change of energisation status and final Meter register reading, if available. | ННМОА | Supplier/ LDSO | D0139 Confirmation or Rejection of Energisation Status | Electronic or other method, as |
| ((fr M o F H a d ttl s | energisation status (or within 10 WD for Supplier-serviced Metering Systems) | Send change of energisation status and, if requested, final Meter register reading, if available. | ННМОА | HHDC | Change. 40 41 D0010 Meter Readings | agreed. |
| | or Following the HHMOA becoming aware of a discrepancy between the energisation status on site and that held by the Supplier/HHDC. | Sexe | O C | | | |
| If LDSO De-e | energises | 100 | | | | |
| 5.3.2.8 | As required and at least 10 WD before 5.3.2.14 ⁴³ | Send request to de-energise MS. | Supplier | LDSO | D0134 Request to Change Energisation Status. | Electronic or other method, as agreed. |

⁴³ This step could be completed in shorter timescales where the Supplier and MOA/LDSO, as applicable, have reached mutual agreement.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|---|--|-------|--------------------------------------|--|--|
| 5.3.2.9 | If request rejected and within 2 WD of 5.3.2.8. | Send notification of rejection including the reason why the request has been rejected. | LDSO | Supplier / HHMOA | D0139 Confirmation or Rejection of Energisation Status Change. | Electronic or other method, as agreed. |
| | | | | | P0211 Site Visit Rejection. 42 | Manual |
| | | | | | (Go to 5.3.2.8 if required) | |
| 5.3.2.10 | If request accepted and within 2 WD of request to de- energise Metering System. | Agree date and time for de-energisation. | LDSO | ННМОА | De-energisation details. | Telephone or other method, as agreed. |
| 5.3.2.11 | Within 2 WD of 5.3.2.10 and before planned date for deenergisation | Arrange with HHDC to collect final HH Metered Data. | ННМОА | HHDC | D0005 Instruction on Action. | Electronic or other method, as agreed. |
| 5.3.2.12 | On date and time agreed in 5.3.2.10 | Collect final HH Metered Data. | HHDC | | | Internal Process. |
| 5.3.2.13 | Immediately following 5.3.2.12 | Confirm final HH Metered Data collection. | HHDC | LDSO (or HHMOA if appropriate) | The LDSO or MOA will telephone the HHDC when it is on site. Following the HHDC collecting the data, the HHDC will provide confirmation to the MOA or LDSO, as appropriate. | Telephone or other method, as agreed. |
| 5.3.2.14 | On the date requested or agreed in 5.3.2.8; or as required (for example, as a result of an emergency). | Note final Meter register reading, if available. De-energise MS. | LDSO | | | Internal Process. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|---|---|--------------------|---------------------|---|--|
| 5.3.2.15 | Within 5 WD of 5.3.2.14 | Send change of energisation status and final Meter register reading, if available. | LDSO | Supplier / HHMOA | D0139 Confirmation or Rejection of Energisation Status Change. ⁴⁰ | Electronic or other method, as agreed. |
| 5.3.2.16 | Within 5 WD of 5.3.2.15 | Send change of energisation status and, if requested, final Meter register reading, if available. | ННМОА | HHDC | D0139 Confirmation or Rejection of Energisation Status Change. D0010 Meter Readings. | Electronic or other method, as agreed. |
| 5.3.2.17 | If required and no valid Meter register reading received within 10 WD of notification of change to energisation status. | Request final Meter register reading | ННОС | HHMOA, Supplier | D0010 Meter Readings | Electronic or other method, as agreed |
| 5.3.2.18 | Within 10 WD of 6.3.2.17 | Send final Meter register reading | HHMOA, Supplier | HHDC | | Electronic or other method, as agreed |

5.3.3 Removal of a Metering System^{44 45 46}

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|--|----------------------------|--|--|--|
| 5.3.3.1 | As required | Send request to remove MS. | Supplier or Supplier | HHMOA or LDSO. | D0142 Request for Installation or Change to a Metering System Functionality or the Removal of All Meters. | Electronic or other method, as agreed. |
| | | | | | Request removal of assets, including all Meters. | |
| 5.3.3.2 | If request rejected | j – j | HHMOA/LDSO | Supplier | P0211 Site Visit Rejection. | Electronic or |
| | and within 2 WD of 5.3.3.1 | the reason why the request has been rejected. | | | (Go to 5.3.3.1 if required) | other method, as agreed. |
| 5.3.3.3 | On the date requested or agreed in 5.3.3.1 or as the HHMOA/LDSO sees necessary | Note final Meter register reading, if available and remove MS. ⁴⁷ | HHMOA/LDSO | , , , , , , , , , , , , , , , , , , , | | Internal process. |
| 5.3.3.4 | Within 5 WD of removing MS or of | S or of necessary. | ННМОА | LDSO | D0268 Half Hourly Meter Technical Details. ¹⁷ | Electronic or other method, as |
| | receiving notification from the LDSO that an MS | | | | Or for Supplier-serviced Metering Systems: | agreed. |
| | was disconnected. | | | | D0150 Non Half-hourly Meter Technical Details. | |
| | | 90, | | | Location of assets and arrangements for delivery / collection. | |

⁴⁴ The Removal of a MS includes the removal of all Meters assigned to that MS. Where only some of the Meters are to be removed, a reconfiguration process shall be followed in accordance with section 5.3.4.

⁴⁵ Note that prior to the removal of the MS a de-energisation shall be carried out in accordance with section 5.3.2. If de-energisation is carried out at the same time as the removal of the MS, the following steps of section 5.3.2 must also be carried out (Collection of HH Data by the HHDC): where HHMOA de-energises, steps 5.3.2.3 to 5.3.2.5; and where the LDSO de-energises (for example, as a result of an emergency), steps 5.3.2.11 to 5.3.2.13.

⁴⁶ Note that the removal of a MS requires the removal of all of the Meters associated with that MS. Where only some of the Meters are to be removed, proceed in accordance with section 5.3.4 Reconfigure or Replace Metering System (No Change of Measurement Class).

⁴⁷ If the MS cannot be removed at the appointed time, the MOA/LDSO shall liaise with the Supplier to agree the way forward.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|---|---|----------------------|------------------------------|---|--|
| 5.3.3.5 | At the same time as 5.3.3.4. | Send MTD and notification that the MS has been removed. | ННМОА | Supplier / HHDC / LDSO | D0268 Half Hourly Meter Technical Details. ¹⁷ | Electronic or other method, as |
| | | | | LDSO | Or for Supplier-serviced Metering Systems and to Supplier/LDSO only: | agreed. |
| | | | | X | D0150 Non Half-hourly Meter Technical Details. | |
| | | | | Mel | If site is Complex, send Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites. | |
| 5.3.3.6 | At the same time as 5.3.3.4. | Send final Meter register reading or notification that Meter register reading not obtainable. | LDSO (if applicable) | ННМОА | D0139 Confirmation or Rejection of Energisation Status Change. | Electronic or other method, as agreed. |
| | | | ННМОА | HHDC | For HHDC-serviced Metering Systems only: | |
| | | | | | D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action. | |
| 5.3.3.7 | At the same time as 5.3.3.4. | Send the relevant Meter information changes. | ННМОА | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method as agreed. |
| 5.3.3.8 | Immediately following 5.3.3.7 or 5.3.3.10 | Perform validation checks and send response D0312. | SMRS | HHMOA Supplier | D0312 Notification of Meter Information to MPAS with 'MOP Flow Response Code' populated | Electronic or other method, as agreed. |
| 5.3.3.9 | | If response is "Accepted", end process, otherwise proceed to 5.3.5.10. | | | | |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|-------------------------|---|-------|------|--|--|
| 5.3.3.10 | Within 5 WDs of 5.3.3.8 | Where the rejection is of a type the HHMOA can resolve without involving other industry parties, send a corrected D0312. If the HHMOA needs to involve other | ННМОА | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed. |
| | | industry parties to resolve the issue, then reasonable endeavours should apply. Proceed to 5.3.3.8. | | X | | |

Reconfigure or Replace Metering System (No Change of Measurement Class)⁴⁸ 5.3.4

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD | | | | |
|-----------|---|--|----------|----------|--|--|--|--|--|--|
| For HHDC- | For HHDC-serviced Metering Systems | | | | | | | | | |
| 5.3.4.1 | As required | Send request to reconfigure or replace MS. | Supplier | ННМОА | D0142 Request for Installation or Change to a Metering System Functionality or the Removal of All Meters. | Electronic or other method, as agreed. | | | | |
| 5.3.4.2 | If request rejected and within 2 WD of 5.3.4.1 | Send notification of rejection including the reason why the request has been rejected. | ННМОА | Supplier | P0211 Site Visit Rejection. (Go to 5.3.4.1 if required) | Electronic or other method, as agreed. | | | | |
| 5.3.4.3 | If request accepted and within 3 WD of request and before data collection date or as the HHMOA sees necessary. ⁴⁹ | Arrange with HHDC to collect final HH Metered Data. | ННМОА | ННОС | D0005 Instruction on Action. | Electronic or other method, as agreed. | | | | |
| 5.3.4.4 | On date and time agreed in 5.3.4.3 | Collect final HH Metered Data. | HHDC | | | Internal Process. | | | | |
| 5.3.4.5 | Immediately following 5.3.4.4 | Confirm final HH Metered Data collection. | HHDC | ННМОА | The MOA will telephone the HHDC when the MOA is on site. Following the HHDC collecting the data, the HHDC will provide confirmation to the MOA | Telephone. | | | | |

 $^{^{48}}$ Note that prior to the replacement of the MS, a de-energisation shall be carried out in accordance with section 5.3.2. 49 The need to replace or reconfigure the MS could also be from CoP4 requirements, Ofgem or Customer driven.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|---|--|-------|---------------------------|---|--|
| 5.3.4.6 | Immediately following 5.3.4.5 | Note final Meter register reading, if available. | ННМОА | | | Internal Process. |
| | | If final HH Metered Data was not uploaded by the HHDC, download final HH Metered Data, if available. | | | | |
| | | Reconfigure MS or replace and energise MS. 50, 51 | | X | | |
| | | Note initial Meter register reading. | | | | |
| 5.3.4.7 | Within 5 WD of the replacement / reconfiguration of the | Send final Meter register reading for replaced / reconfigured MS or notification that Meter register reading | ННМОА | Supplier / HHDC / LDSO | D0010 Meter Readings, or | Electronic or other method, as agreed. |
| | MS | not obtainable. | 000 | | D0002 Fault Resolution Report or Request for Decision on Further Action. | |
| | | Send initial Meter register reading for replacement MS / new configuration. | | ННОС | D0010 Meter Readings. | |
| | | Send MTD for replacement MS / new configuration. | | Supplier / HHDC / LDSO | D0268 Half Hourly Meter Technical Details. | |
| | | (10 ⁵ 0) | | | If site is Complex, send Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites. | |
| 5.3.4.8 | At the same time as 5.3.4.7. | Send the relevant Meter information changes. | ННМОА | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method as agreed. |

⁵⁰ If the MS cannot be reconfigured or replaced at the appointed time, the MOA shall liaise with the Supplier to agree the way forward.
⁵¹ If replacement includes Measurement Transformers, commission in accordance with Code of Practice 4 and proceed as per section 5.2.2.A.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-------------|--|--|-----------|---------------------|---|--|
| 5.3.4.9 | Immediately following 5.3.4.8 or 5.3.4.10 | Perform validation checks and send response D0312 | SMRS | HHMOA Supplier | D0312 Notification of Meter Information to MPAS with 'MOP Flow Response Code' populated. | Electronic or other method, as agreed. |
| 5.3.4.10 | | If D0312 response is "Accepted", proceed to 5.3.4.12, otherwise proceed to 5.3.4.11. | | X | | |
| 5.3.4.11 | Within 5 WDs of 5.3.4.9 | Where the rejection is of a type the HHMOA can resolve without involving other industry parties, send a corrected D0312. | ННМОА | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed. |
| | | If the HHMOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. Proceed to 5.3.4.9. | 70°C | 0 | | |
| 5.3.4.12 | In accordance with timescales in Appendix 8.3.5 | Prove MS. | ННМОА | HHDC | Refer to Appendix 8.3.5. | Electronic or other method, as agreed. |
| For Supplie | er-serviced Metering Syst | ems (when the MOA replaces the Meter) | | | | |
| 5.3.4.13 | As required. | Send request to replace Meter. | Supplier. | MOA ¹² . | D0142 Request for Installation or Change to a Metering System Functionality or the Removal of All Meters. | Electronic or other method, as agreed. |
| 5.3.4.14 | If request rejected and within 5 WD of 5.3.4.13. | Send notification of rejection including the reason why the request has been rejected. | MOA. | Supplier. | P0211 Site Visit Rejection. (Go to 5.3.4.10 if required). | Electronic or other method, as agreed. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|---|---|-----------|-----------------|---|--|
| 5.3.4.15 | On replacement. | Contact Supplier to retrieve final HH and cumulative readings remotely. | MOA. | | | Internal process. |
| | | Replace Meter. | | | | |
| | | Contact Supplier to retrieve initial cumulative reading remotely. | | | | |
| 5.3.4.16 | On replacement. | Take final readings from Meter, configure replacement Meter (as required) and take initial readings. | Supplier. | 60 | 2 | Internal process. |
| 5.3.4.17 | If Time of Use registers configured remotely and in time to allow the HHMOA to distribute MTD within 10 WD of 5.3.4.15. | Send Meter Configuration Details. The Supplier will ensure that only the latest version of the configuration for the day is sent to the NHHMOA. If the Supplier is unable to configure the Meter (for example, due to a communications failure), the SSC and TPR will be defaulted to a single-rate | Supplier. | MOA. | D0367 Smart Meter Configuration Details (or alternative method, as agreed bilaterally between the Supplier and NHHMOA). | Electronic or other method, as agreed. |
| 5.3.4.18 | Within 10 WD of | default. The TPR should be mapped to the total import register. Send MTD for new Meter and | MOA. | Supplier / | D0150 Non Half-hourly Meter | Electronic or |
| 3.3.4.10 | 5.3.4.15. | notification of removal of old Meter. | WOA. | LDSO. | Technical Details. | other method, as |
| | | 300 | | | D0149 Notification of Mapping Details. | agreed. |
| 5.3.4.19 | At the same time as 5.3.4.18 | Send the relevant Meter information changes. | MOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method as agreed. |
| 5.3.4.20 | Immediately following 5.3.4.18 or 5.3.4.20 | Perform validation checks and send response D0312. | SMRS | MOA Supplier | D0312 Notification of Meter Information MPAS with 'MOP Flow Response Code' populated | Electronic or other method, as agreed. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--------------|---|---|-----------|--------------------------|---|--|
| 5.3.4.21 | | If D0312 response is "Accepted", proceed to 5.3.4.23, otherwise proceed to 5.3.4.22. | | | | |
| 5.3.4.22 | Within 5 WDs of 5.3.4.20 | Where the rejection is of a type the MOA can resolve without involving other industry parties, send a corrected D0312. If the MOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. Proceed to 5.3.4.20. | MOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed. |
| 5.3.4.23 | Within 10 WD of 5.3.4.15. | Send notification of removal of old Meter. | MOA. | MAP of removed Meter. | D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | Electronic or other method, as agreed. |
| For Supplier | -serviced Metering Syste | ems (when the Supplier reconfigures the Me | ter) | | | |
| 5.3.4.24 | If Time of Use registers configured remotely. | Send Meter Configuration Details. The Supplier will ensure that only the latest version of the configuration for the day is sent to the NHHMOA. If the Time of Use registers are not configured to a valid Standard Settlement Configuration (as defined in MDD), the Supplier will notify a single rate SSC. | Supplier. | MOA. | D0367 Smart Meter Configuration Details (or alternative method, as agreed bilaterally between the Supplier and NHHMOA). | Electronic or other method, as agreed. |
| 5.3.4.25 | Within 10 WD of 5.3.4.24. | Send MTD. | MOA. | Supplier / LDSO. | D0150 Non Half-hourly Meter Technical Details. D0149 Notification of Mapping Details. | |

LDSO Replaces MS (For Safety Reasons / Urgent Metering Services) 5.3.5

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|---|--|--------------------|----------|--|--|
| 5.3.5.1 | As required | Send request to replace MS. | Supplier | LDSO | Request site visit. | Electronic or other method, as agreed. |
| 5.3.5.2 | If request rejected, as soon as possible after 5.3.5.1 | Send notification of rejection including the reason why the request has been rejected. | LDSO | Supplier | P0211 Site Visit Rejection. (Go to 5.3.5.1 if required) | Electronic or other method, as agreed. |
| 5.3.5.3 | On the date requested or agreed in 5.3.5.1 or as the LDSO sees necessary | Note final Meter register reading, if available. Replace and energise MS. ⁵² , ⁵³ Note initial Meter register reading. | LDSO | | | Internal Process. |
| 5.3.5.4 | Within 5 WD of 5.3.5.3 | Send final Meter register reading or notification that Meter register reading not obtainable. Send initial Meter register reading and MTD for replacement MS. | LDSO ⁵⁴ | ННМОА | D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action. D0268 Half Hourly Meter Technical Details. If site is Complex, send Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites. D0010 Meter Readings. | Electronic or other method, as agreed. |

⁵² If the MS cannot be reconfigured or replaced at the appointed time, the LDSO shall liaise with the Supplier to agree the way forward.

⁵³ If replacement includes Measurement Transformers, commission in accordance with Code of Practice 4 and proceed as per section 5.2.2.

⁵⁴ Since the LDSO is operating as part of an Urgent Metering Service (UMetS), he shall interface with the HHMOA who shall be responsible for notifying the Supplier and the HHDC of the action taken.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|---|--|-------|-------------------|--|--|
| 5.3.5.5 | Within 5 WD of 5.3.5.4 | Send final Meter register reading or notification that Meter register reading not obtainable | ННМОА | HHDC | D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action. | Electronic or other method, as agreed. |
| 5.3.5.6 | At the same time as 5.3.5.5 | Send initial Meter register reading for replacement MS. Send MTD for replacement MS. | ННМОА | Supplier / HHDC | D0268 Half Hourly Meter Technical Details. If site is Complex, send Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites. | Electronic or other method, as agreed. |
| 5.3.5.7 | At the same time as 5.3.5.5 | Send the relevant Meter information changes. | ННМОА | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method as agreed. |
| 5.3.5.8 | Immediately following 5.3.5.7 or 5.3.5.10 | Perform validation checks and send response D0312. | SMRS | HHMOA Supplier | D0312 Notification of Meter Information to MPAS with 'MOP Flow Response Code' populated | Electronic or other method, as agreed. |
| 5.3.5.9 | | If response is "Accepted" proceed to 5.3.5.11, otherwise proceed to 5.3.5.10. | | | | |
| 5.3.5.10 | Within 5 WDs of 5.3.5.8 | Where the rejection is of a type the HHMOA can resolve without involving other industry parties, send a corrected D0312. | ННМОА | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed. |
| | | If the HHMOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. Proceed to 5.3.5.8. | | | | |
| | | 110000 10 3.3.3.6. | | | | |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|---|-----------|-------|------|--------------------------|--|
| 5.3.5.11 | In accordance with timescales in Appendix 8.3.5 | Prove MS. | ННМОА | HHDC | Refer to Appendix 8.3.5. | Electronic or other method, as agreed. |



5.3.6 Change of Feeder Status – Energise Feeder⁵⁵

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|--|----------|-----------------------------------|--|--|
| 5.3.6.1 | As required | Send request to change feeder status. | Supplier | HHMOA ⁵⁶ | D0142 Request for Installation or Change to a Metering System Functionality or the Removal of All Meters. | Electronic or other method, as agreed. |
| 5.3.6.2 | If request rejected and within 2 WD of 5.3.6.1 | Send notification of rejection including the reason why the request has been rejected. | ННМОА | Supplier | P0211 Site Visit Rejection. (Go to 5.3.6.1 if required) | Electronic or other method, as agreed. |
| 5.3.6.3 | On the date requested or agreed in 5.3.6.1 or as the HHMOA sees necessary | Change feeder status. Note Meter register reading. | ННМОА | JIG | | Internal Process. |
| 5.3.6.4 | Within 5 WD of changing feeder status | If requested, send Meter register reading. Send MTD. | ннмоа. | HHDC Supplier / HHDC / LDSO | D0010 Meter Readings. D0268 Half Hourly Meter Technical Details. If site is Complex, send Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites. | Electronic or other method, as agreed. |
| 5.3.6.5 | In accordance with timescales in Appendix 8.3.5 | Prove MS if feeder has been energised for the first time. | ННМОА | HHDC | Refer to Appendix 8.3.5. | Electronic or other method, as agreed. |

⁵⁵ This process shall only be used for multi-feeder sites. Where a single feeder site is to be energised or de-energised, processes 5.3.1 or 5.3.2 shall be used as appropriate. ⁵⁶ The LDSO may perform this role.

5.3.7 Change of Feeder Status – De-energise Feeder⁵⁵

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|---|-----------|----------------------|---|--|
| 5.3.7.1 | As required. | Send request to change feeder status. | Supplier. | HHMOA. ⁵⁶ | D0142 Request for Installation or Change to a Metering System Functionality or the Removal of All Meters. | Electronic or other method, as agreed. |
| 5.3.7.2 | If request rejected and within 2 WD of 5.3.7.1 | Send notification of rejection including the reason why the request has been rejected. | ННМОА. | Supplier. | P0211 Site Visit Rejection. (Go to 5.3.7.1 if required) | Electronic or other method, as agreed. |
| 5.3.7.3 | If request accepted and within 3 WD of request and before data collection date or as the HHMOA sees necessary | Arrange with HHDC to collect HH Metered Data. | ннмоа. | ннос. | D0005 Instruction on Action. | Electronic or other method, as agreed. |
| 5.3.7.4 | On date and time agreed in 5.3.7.3 | Collect HH Metered Data. | HHDC. | | | Internal Process |
| 5.3.7.5 | Immediately following 5.3.7.4 | Confirm HH Metered Data collection. | HHDC. | ННМОА. | The MOA will telephone the HHDC when the MOA is on site. Following the HHDC collecting the data, the HHDC will provide confirmation to the MOA. | Telephone |
| 5.3.7.6 | Immediately following 5.3.7.5 | Note Meter register reading, if available. If HH Metered Data was not uploaded by the HHDC, download HH Metered Data, if available. Change feeder status. | ННМОА. | | | Internal Process |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|---------------------------------------|---|----------------------|---------------------------|---|--|
| 5.3.7.7 | Within 5 WD of changing feeder status | If requested, send Meter register reading or notification that Meter register reading not obtainable. | HHMOA. ³⁷ | HHDC | D0010 Meter Readings. | Electronic or other method, as agreed. |
| | | Send MTD. | | Supplier / HHDC / LDSO | D0268 Half Hourly Meter Technical Details. ¹⁷ | |
| | | | | | If site is Complex, send Complex Site Supplementary Information Form. | |
| | | | | | Refer to Appendix 8.4 Guide to Complex Sites. | |

5.4 Meter Operation Activities

5.4.1 Half Hourly Metering System Investigation Process

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|---|--|----------------------------------|---|---|--|
| 5.4.1.1 | As appropriate | Send request to investigate MS. | Any Participant ⁵⁷ | Supplier | Details of fault. | Electronic or other method, as agreed. |
| 5.4.1.2 | Within 2 WD of 5.4.1.1 (if applicable) or as required | Send request to investigate MS. | Supplier / HHDC | ННМОА | D0001 Request Metering System Investigation. | Electronic or other method, as agreed. |
| 5.4.1.3 | Within 5 WD of receipt of D0001 | Investigate MS. Attempt to resolve fault. If the resolution involves a site visit take a Meter register reading. following resolution of the fault. | ННМОА | O* | | Internal process. |
| 5.4.1.4 | If fault resolved within 5 WD of receipt of D0001 | Go to 5.4.1.12. | ННМОА | | | |
| 5.4.1.5 | If fault remains unresolved 5 WD after receipt of D0001 | Send notification that the fault cannot be resolved within 5WD, and send a corresponding fault resolution plan (if required) detailing the actions that need to be taken to resolve the fault and the proposed timescales or update on proposed next steps. Request decision on further action if appropriate. | HHMOA ⁵⁸ | HHDC or Supplier, as appropriate. | D0005 Instruction on Action. ⁵⁹ Or equivalent communication, by other means, with the Supplier. Fault resolution plan (if required). | Electronic or other method, as agreed. Fax, Email or other method, as agreed. |

⁵⁷ Any Participant other than the HHDC wishing to request that the HHMOA carries out a MS investigation shall do so via the Supplier. The D0001 'Request Metering System Investigation' can be used to notify the Supplier of the fault if appropriate.

⁵⁸ The HHMOA should contact and liaise with the Supplier if appropriate

⁵⁹ The D0005 'Instruction on Action' should always be sent containing the high level points so that an audit trail can be maintained. For complex cases where the D0005 is not sufficient, or where requested by the HHDC, further details can be given in the fault resolution plan. In these instances the sending of the fault resolution plan should be referred to in the D0005. Any other correspondence between the Supplier, HHMOA and HHDC which is required to resolve the fault should be sent in a format and by a method agreed by those Participants involved.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|--|---|--|--|---|--|
| 5.4.1.6 | As soon as possible after 5.4.1.5, if appropriate | Send decision on further action. | HHDC or Supplier as appropriate. | ННМОА | D0005 Instruction on Action. Or equivalent communication, by other means, with the Supplier. | Electronic or other method as agreed. |
| 5.4.1.7 | Following 5.4.1.5 or 5.4.1.6 (as appropriate) | Attempt to resolve fault. | ННМОА | | | Internal Process. |
| 5.4.1.8 | If fault resolved within 15 WD of receipt of D0001 | Go to 5.4.1.12. | ННМОА | 00, | | |
| 5.4.1.9 | If fault remains unresolved 15 WD after receipt of D0001 | Notify that the fault remains unresolved. | ННМОА | HHDC or Supplier as appropriate. | D0005 Instruction on Action. Or equivalent communication, by other means, with the Supplier. | Electronic or other method, as agreed. |
| 5.4.1.10 | As soon as possible following 5.4.1.9 | Progress resolution of outstanding fault. | ннмоа | | As appropriate: D0005 Instruction on Action. Fault resolution plan. | Internal Process. |
| 5.4.1.11 | If and when appropriate following 5.4.1.10 | Consult and / or update HHDC, or Supplier as appropriate, regarding investigation on regular basis (as agreed) until fault resolved. | HHMOA ⁵⁸ | HHDC or Supplier as appropriate. | D0005 Instruction on Action. Or equivalent communication, by other means, with the Supplier. | Electronic or other method, as agreed. |
| 5.4.1.12 | Within 5 WD of resolving fault | Send fault resolution report and undertake any steps in process 5.3.4 which may be appropriate. | ННМОА | HHDC and/or Supplier as appropriate. | D0002 Fault Resolution Report or Request for Decision on Further Action. | Electronic or other method, as agreed. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|--|---|------------------------|---------------------------|---|--|
| 5.4.1.13 | If appropriate, within 5 WD of 5.4.1.12 | Report resolution of fault. | Supplier ⁶⁰ | Relevant Participant | As appropriate: D0002 Fault Resolution Report or Request for Decision on Further Action. Details of resolution. | Electronic or other method, as agreed. |
| For HHDC | C-serviced Metering Systems | | | | | |
| 5.4.1.14 | If appropriate, at the same time as 5.4.1.12 | Send MTD, if changed or corrected. | ннмоа | Supplier / HHDC / LDSO | D0268 Half Hourly Meter Technical Details. If site is Complex refer to Appendix 8.4. | Electronic or other method, as agreed. |
| 5.4.1.15 | If appropriate, within 10 WD of resolving fault. | Send the relevant Meter information changes. | ННМОА | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method as agreed. |
| 5.4.1.16 | Immediately following 5.4.1.15 or 5.4.1.18 | Perform validation checks and send response D0312. | SMRS | HHMOA Supplier | D0312 Notification of Meter Information to MPAS with 'MOP Flow Response Code' populated. | Electronic or other method, as agreed. |
| 5.4.1.17 | | If response is "Accepted", proceed to 5.4.1.19, otherwise proceed to 5.4.1.18. | | | | |
| 5.4.1.18 | Within 5 WDs of 5.4.1.16 | Where the rejection is of a type the HHMOA can resolve, send a corrected D0312. | ННМОА | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed. |

⁻⁶¹

⁶⁰ Where the MS investigation was requested by a Participant other than the HHDC, the Supplier shall send the relevant Participant the fault resolution report within 5 WD of receiving the D0002 'Fault Resolution Report or Request for Decision on Further Action'. The Supplier shall use the D0002 for this notification where the Participant initially notified the Supplier of the inconsistency via the D0001 'Request Metering System Investigation'.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|------------|---|--|-----------|------------------|--|--|
| | | If the HHMOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. | | | | |
| | | Proceed to 5.4.1.16. | | × | | |
| 5.4.1.19 | In accordance with timescales in Appendix 8.3.5 | If MTD manually intervened or there has been a key field change, prove MS. | ННМОА | HHDC | Refer to Appendix 8.3.5 and process 5.5. | Electronic or other method, as agreed. |
| For Suppli | er-serviced Metering Systems | | _ | | | |
| 5.4.1.20 | If Supplier reconfigures the Time of Use registers following a fault. | Send Smart Meter Configuration Details. If the Time of Use registers are not configured to a valid Standard Settlement Configuration (as defined in MDD), the Supplier will notify a single rate SSC. | Supplier. | MOA. | D0367 Smart Meter Configuration Details (or alternative method, as agreed bilaterally between the Supplier and MOA). | Electronic or other method, as agreed. |
| 5.4.1.21 | Within 10 WD of 7.5.1. | Send MTD. | MOA. | Supplier / LDSO. | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. | Electronic or other method, as agreed. |
| 5.4.1.22 | If appropriate, within 10 WD of resolving fault. | Send the relevant Meter information changes. | MOA. | SMRS. | D0312 Notification of Meter Information to MPAS. | Electronic or other method as agreed. |
| 5.4.1.23 | Immediately following 5.4.1.22 or 5.4.1.25 | Perform validation checks and send response D0312. | SMRS | MOA Supplier | D0312 Notification of Meter Information to MPAS with 'MOP Flow Response Code' populated | Electronic or other method, as agreed. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|--------------------------|---|------|------|--|--|
| 5.4.1.24 | | If response is "Accepted", end process, otherwise proceed to 5.4.1.25. | | | | |
| 5.4.1.25 | Within 5 WDs of 5.4.1.23 | Where the rejection is of a type the MOA can resolve without involving other industry parties, send a corrected D0312. If the MOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. Proceed to 5.4.1.23. | MOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed. |

5.5 Proving a Metering System⁶¹, ⁶²

5.5.1 Proving of a Metering System by Method 1⁶³,⁶²

Complex Sites are subject to Complex Site Validation Test as set out in 5.5.6 and as referenced in Appendix 8.4 Guide to Complex Sites.

For Outstations with integral Meters which can only have a pulse multiplier of 1 as identified on the ELEXON website (compliance and protocol approval list), a proving test is not required. All other Metering Systems, other than those registered in Measurement Class F, are subject to a proving test.

| REF | WHEN | ACTION | FROM | ТО | INFORMATION REQUIRED | METHOD |
|---------|---|---|-------|------|---|--|
| 5.5.1.1 | When instructed by Supplier | Install or reconfigure commission to CoP4, record MTD and note HH Metered Data to cover a specific Settlement Period while on site. | ННМОА | | See 5.2.2 or 5.3.4 as required. | Internal Process. |
| 5.5.1.2 | Following installation / reconfiguration, commissioning and once HH Metered Data retrieved or if previous proving test attempt failed | If appropriate send request for proving test (indicating which Settlement Periods to be collected) or alternatively request re-test following failure of immediately preceding proving test and provide MTD. | ННМОА | HHDC | D0005 Instruction on Action. D0268 Half Hourly Meter Technical Details. | Electronic or other method, as agreed. |
| 5.5.1.3 | Following 5.5.1.2 | Read Meter for the same HH Settlement Period as requested by the HHMOA using either a Hand Held Unit or via remote interrogation as appropriate (ensuring that data collected for the Settlement Period does not contain a zero value). | HHDC | | As a minimum the HHDC shall collect the data required by the HHMOA, but may also collect and send more data than requested. | Internal Process. |

_

⁶¹ The HHMOA shall decide what proving method is appropriate in conjunction with the HHDC. Refer to appendix 8.3.2 'Methods of Proving' for descriptions of the method of proving.

⁶² MS assigned to Measurement Class F, or where Half Hourly data is sourced by the Supplier from a Meter compliant with the SMETS, are exempt from proving tests, except for Complex Sites which are subject to the Complex Site Validation Test.

⁶³ Note that if the Proving Test fails the MOA and HHDC may have to reconsider whether the Site should be considered as a Complex Site.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|-------------------|---|-------|-------|--|--|
| 5.5.1.4 | Following 5.5.1.3 | Send raw HH Metered Data or notification that Metered Data cannot be collected for the Settlement Periods requested. ⁶⁴ | HHDC | ННМОА | D0001 Request Metering System Investigation. D0003 Half Hourly Advances. | Electronic or other method, as agreed. |
| | | If unable to collect metering data for Settlement Period requested, send alternative Settlement Period HH Metered Data. | | en' | ∂ | |
| 5.5.1.5 | Following 5.5.1.4 | If data received from HHDC, proceed to process 5.5.5 to undertake a comparison and issue the results. | ННМОА | | | Internal Process. |
| | | If data not received from HHDC, proceed to 5.5.1.2 to undertake a re-test or use an alternative method to prove MS. | 0000 | | | |

⁶⁴ The HHDC shall use all reasonable endeavours to collect the data for the Settlement Period requested.

5.5.2 Proving of a Metering System by Method 2⁶², ⁶³

| REF | WHEN ⁶⁵ | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|---|--|-------|-------|---|--|
| 5.5.2.1 | When instructed by Supplier | Install or reconfigure commission to CoP4 and record MTD while on site. | ННМОА | | See 5.2.2 or 5.3.4 as required. | Internal Process. |
| 5.5.2.2 | Following installation / reconfiguration, commissioning and once HH Metered Data retrieved or if previous proving test attempt failed | Agree date and time for proving test with HHDC or alternatively request re-test following failure of immediately preceding proving test and provide MTD. | ННМОА | HHDC | D0005 Instruction on Action. D0268 Half Hourly Meter Technical Details. | Electronic or other method, as agreed. |
| 5.5.2.3 | Following 5.5.2.2 | Visit site a second time and note HH Metered Data to cover a specific Settlement Period. | ННМОА | | | Internal Process. |
| 5.5.2.4 | Following 5.5.2.3 | Read Meter for the same HH Settlement Period as agreed with the HHMOA using either a Hand Held Unit or via remote interrogation as appropriate (ensuring that data for the Settlement Period collected does not contain a zero value). | HHDC | | As a minimum the HHDC shall collect the data required by the HHMOA, but may also collect and send more data than requested. | Internal Process. |
| 5.5.2.5 | Following 5.5.2.4 | Send raw HH Metered Data or notification that Metered Data cannot be collected ⁶⁴ . If unable to collect HH Metered Data for agreed Settlement Period, send alternative Settlement Period HH Metered Data. | HHDC | ННМОА | D0001 Request Metering System Investigation. D0003 Half Hourly Advances. | Electronic or other method, as agreed. |

_

⁶⁵ In the case of a Registration Transfer from CMRS to SMRS, the proving test shall be performed in accordance with the timescale described in BSCP68

| REF | WHEN ⁶⁵ | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--------------------|---|-------|----|-------------------------|-------------------|
| 5.5.2.6 | Following 5.5.2.5 | If data received from HHDC, proceed to process 5.5.5 to undertake a comparison and issue the results. If data not received from HHDC, proceed to 5.5.2. to undertake a re-test or use an alternative method to prove MS. | ННМОА | | | Internal Process. |

Proving of a Metering System by Method 3⁶², ⁶³ 5.5.3

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|---|---|-------|------|--|--|
| 5.5.3.1 | When instructed by Supplier | Install or reconfigure, commission to CoP4,66 retrieve HH Metered Data for a specific HH Settlement Period and note MTD while on site. | ННМОА | | See 5.2.2 or 5.3.4 as required. | Internal Process. |
| | | From the office, use own data retrieval system to read remotely for the same HH Settlement Period as collected during site visit. | | ne f | | |
| | | Compare HHMOA HH Metered Data from data retrieval system against that collected during site visit. ⁶⁷ | ć | | | |
| | | If problem with readings taken from data retrieval system, investigate and rectify the problem then re-do the steps above. | 00, | | | |
| 5.5.3.2 | Following installation, commissioning and once HH Metered Data retrieved. | Send request for proving test or alternatively request a re-test following failure of immediately preceding proving test and provide MTD. ⁶⁸ | ННМОА | HHDC | D0005 Instruction on Action. D0268 Half Hourly Meter Technical Details. | Electronic or other method, as agreed. |
| 5.5.3.3 | Following 5.5.3.2 | Read Meter for Settlement Period of own choosing using either a Hand Held Unit or via remote interrogation as appropriate (ensuring that data for the Settlement Period collected does not contain a zero value). | HHDC | | | Internal Process. |

 ⁶⁶ The commissioning may be carried out when the HH MS is installed but may be deferred if load is not available at that time.
 ⁶⁷ If this data is correct then the MOAs data retrieval system has been successfully proved.
 ⁶⁸ The MOA does not specify the Settlement Periods to be collected by the HHDC.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|-------------------|--|-------|-------|--|--|
| 5.5.3.4 | Following 5.5.3.3 | Send raw HH Metered Data or notification that Metered Data cannot be collected. | HHDC | ННМОА | D0001 Request Metering System Investigation. D0003 Half Hourly Advances. | Electronic or other method, as agreed. |
| 5.5.3.5 | Following 5.5.3.4 | Use own data retrieval system to collect HH Metered Data for the same HH Settlement Period as provided by the HHDC. If unable to collect data from data retrieval system, resolve problem then complete proving test. If data received from HHDC, proceed to process 5.5.5 to undertake a comparison and issue the results. If data not received from HHDC, proceed to 5.5.3.2 to undertake a re-test or use an alternative method to prove MS. | ННМОА | Jimen | | Internal Process. |

5.5.4 Proving of a Metering System by Method 4⁶², ⁶³

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|--|-------|-------|--|--|
| 5.5.4.1 | When instructed by Supplier | Install or reconfigure, commission to CoP4, retrieve HH Metered Data for a specific HH Settlement Period and note MTD while on site. | ННМОА | X | See 5.2.2 or 5.3.4 as required. | Internal Process. |
| 5.5.4.2 | Following installation / reconfiguration, commissioning and once HH Metered Data retrieved | Send request for proving test or alternatively request a re-test following failure of immediately preceding proving test and provide MTD. | ННМОА | HHDC | D0005 Instruction on Action. D0268 Half Hourly Meter Technical Details. | Electronic or other method, as agreed. |
| 5.5.4.3 | Following 5.5.4.2 | Read Meter for Settlement Period of own choosing using either a Hand Held Unit or via remote interrogation as appropriate (ensuring that data for the Settlement Period collected does not contain a zero value). | HHDC | | | Internal Process. |
| 5.5.4.4 | Following 5.5.4.3 | Send raw HH Metered Data or notification that Metered Data cannot be collected. | ннос | ННМОА | D0001 Request Metering System Investigation. D0003 Half Hourly Advances. | Electronic or other method, as agreed. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|-------------------|--|-------|-----|-------------------------|-------------------|
| 5.5.4.5 | Following 5.5.4.4 | Uses either the manufacturer's software or software which has a relevant protocol approval in accordance with BSCP601 to read Meter constants, pulse multiplier, serial no etc, then read Meter pulses or engineering data for same HH period as provided by HHDC to calculate HH reading. | ННМОА | eni | | Internal Process. |
| | | If data received from HHDC, proceed to process 5.5.5 to undertake a comparison and issue the results. | | | | |
| | | If data not received from HHDC, proceed to 5.5.4.2 to undertake a retest. | 700 | | | |

5.5.5 Issuing Results of Proving Test (All Methods of Proving)

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|---|--|-------|--|--|--|
| 5.5.5.1 | Following receipt of data from the HHDC | Compare HHMOA HH Metered Data with HHDC HH Metered Data for the same Settlement Period. | ННМОА | | | Internal Process. |
| 5.5.5.2 | In accordance with timescales in Appendix 8.3.5 | Send notification of successful proving test / re-test. | ННМОА | HHDC / Supplier / LDSO / BSCCo (Transfer Co- ordinator) if Registration Transfer | D0214 Confirmation of Proving Tests. | Electronic or other method, as agreed. |
| 5.5.5.3 | In accordance with timescales in Appendix 8.3.5 | Send notification that proving test / re-test failed. | ННМОА | HHDC | D0002 Fault Resolution Report or Request for Decision on Further Action. | Electronic or other method, as agreed. |
| 5.5.5.4 | In accordance with timescales in Appendix 8.3.5 | Investigate problem and take corrective action. Proceed to the appropriate method to redo the proving test. | ННМОА | | | Internal Process. |

5.5.6 Complex Site Validation Test

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|--|-------|-------------------|--|--|
| 5.5.6.1 | Following installation / reconfiguration, commissioning and where previous Complex Site Validation Test failed | Collect HH Meter Readings ⁶⁹ and aggregate in accordance with Complex Site rules and record values. | ННМОА | | | Internal Process |
| 5.5.6.2 | Following 5.5.6.1 | Send request for proving test or alternatively request a re-test following failure of immediately preceding proving test and provide MTD. | ннмоа | HHDC | D0005 Instruction on Action. D0268 Half Hourly Meter Technical Details. Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites. | Electronic or other method, as agreed. |
| 5.5.6.3 | Within 5 WD of 5.5.6.2 | Collect Metered Data and aggregate in accordance with the Complex Site rules and send to HHMOA | ннос | ННМОА | D0003 Half Hourly Advances. Email with aggregated consumption data for the day requested in 5.5.6.2. | Electronic or other method, as agreed. |
| 5.5.6.4 | Within 2 WD of 5.5.6.3 | Validate Metered volumes | ННМОА | | | Internal Process |
| 5.5.6.5 | Within 2WD of 5.5.6.3 If validation test passes, | Send notification | ННМОА | HHDC, Supplier | D0214 Conformation of Proving Tests. | Electronic or other method, as agreed |
| 5.5.6.6 | Within 2WD of 5.5.6.3 If validation test fails | Send notification | ННМОА | HHDC, Supplier | D0002 Fault Resolution Report or Request for Decision on Further Action. | Electronic or other method, as agreed |

⁶⁹ Data collection methods as defined in Section 5.5.1 to 5.5.4

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|-----------------------|--|-------|----|-------------------------|------------------|
| 5.5.6.7 | Within 5WD of 5.5.6.6 | Investigate discrepancy with HHDC and resolve. Proceed to 5.5.6.1 | ННМОА | | | Internal Process |
| | | Note: If unresolved after 5WD the HHDC is required to raise a D0001 'Request Metering System Investigation' via BSCP502 3.4.3. | | × | | |

6 Interface and Timetable and Information – Non Half Hourly

6.1 Market Data Activities

6.1.1 Market Domain Data ¹⁰

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|---|---|--------|--------|---|--|
| 6.1.1.1 | If required | Request MDD. | NHHMOA | MDDM | NHHMOA Id. | Electronic or other method, as agreed. |
| 6.1.1.2 | When published by SVAA or within 1 WD of request from NHHMOA | Send MDD. | SVAA | NHHMQA | D0269 Market Domain Data Complete Set. D0270 Market Domain Data Incremental Set. | Electronic or other method, as agreed. |
| 6.1.1.3 | If file incomplete or unreadable | Send notification and await MDD. | NННМОА | MDDM | P0035 Invalid Data. | Electronic or other method, as agreed. |
| 6.1.1.4 | After receiving notification | Send corrected MDD. | SVAA | NHHMOA | D0269 Market Domain Data Complete Set. D0270 Market Domain Data | Electronic or other method, as agreed. |
| | | , O ^y | | | Incremental Set. | |
| 6.1.1.5 | If file readable and complete and within 4 working hours of receipt of MDD | Send acknowledgement7 of receipt of MDD. | NHHMOA | MDDM | P0024 Acknowledgement. | Electronic or other method, as agreed. |
| 6.1.1.6 | As and when needed | Record and use MDD as is considered appropriate by the Panel (having regard to the MOA's functions) and, in particular, use only MDD for those items in relation to which there is a MDD entry. | NHHMOA | | | Internal Process |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|---|--------|------|----------------------|-------------------|
| 6.1.1.7 | As soon as possible after data in correct format | Update records. | NHHMOA | | | Internal Process. |
| 6.1.1.8 | On receipt of new MDD | On receipt of any new MDD, ensure that all MDD affecting the accuracy of Settlement which is manually entered is validated against the source data supplied by the SVAA by means of double entry keying before the data is recorded and used. | NHHMOA | aet) | | Internal Process |
| 6.1.1.9 | In the event of a dispute | In the event of any dispute as to whether an item of MDD is appropriate or, as the case may be, affects the accuracy of Settlement, the decision of the Panel shall be conclusive. | 700 | | | |

6.2 Registration Activities

6.2.1 Change of NHHMOA (No change of Metering System or Change of Supplier)

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|---|---|-------------------|-----------------------|---|--|
| 6.2.1.1 | As required | Send appointment. | Supplier | New NHHMOA | D0155 Notification of Meter Operator or Data Collector Appointment and Terms. | Electronic or other method, as agreed. |
| 6.2.1.2 | If appointment rejected and within 10 WD of 6.2.1.1 | Send notification of rejection of appointment including the reason why the request has been rejected. | New NHHMOA | Supplier | D0261 Rejection of Agent Appointment. (Go to 6.2.1.1 if required) | Electronic or other method, as agreed. |
| 6.2.1.3 | If appointment accepted and within 10 WD of 6.2.1.1 | Send notification of acceptance of appointment. | New NHHMOA | Supplier | D0011 Agreement of Contractual Terms. | Electronic or other method, as agreed. |
| 6.2.1.4 | Within 5 WD of 6.2.1.3 | Send de-appointment. | Supplier | Current NHHMOA | D0151 Termination of Appointment or Contract by Supplier. | Electronic or other method, as agreed. |
| 6.2.1.5 | If de-appointment accepted and within 5 WD of 6.2.1.4 | Send notification of de-appointment. | Current NHHMOA | MAP | D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | Electronic or other method, as agreed. |
| 6.2.1.6 | If de-appointment rejected and within 5 WD of 6.2.1.4 | Send notification of rejection of deappointment. | Current NHHMOA | Supplier | Note that rejection of deappointment shall only occur if the current NHHMOA has a contract with the customer. | Electronic or other method, as agreed. |
| 6.2.1.7 | Between 5 WD ¹⁴ and 10WD of 6.2.1.4 | Send notification of NHHMOA appointment / de-appointment. | Supplier | New NHHMOA / NHHDC | D0148 Notification of Change to Other Parties. | Electronic or other method, as agreed. |
| | | | | | D0302 Notification of Customer Details. | |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|------------------------|--|---------------------------------|------------------------------------|---|--|
| 6.2.1.8 | Within 2 WD of 6.2.1.7 | Instruct current NHHMOA to send MTD to new NHHMOA. | Supplier | Current NHHMOA | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |
| 6.2.1.9 | Within 5 WD of 6.2.1.8 | Send MTD ⁷⁰ , ⁷¹ . | Current NHHMOA ¹⁵ | New NHHMOA ¹⁶ | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. ^{72 73} D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3) | Electronic or other method, as agreed. |
| 6.2.1.10 | Within 5 WD of 6.2.1.9 | Send MTD. | New NHHMOA | Supplier / NHHDC / LDSO Supplier / | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. D0313 Auxiliary Meter | Electronic or other method, as agreed. |
| | | Send notification of appointment. | 2 | NHHDC MAP | Technical Details (in accordance with Appendix 9.3) D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | |

⁷⁰ The current NHHMOA will send the Meter Technical Details on receipt of a D0170 data flow, irrespective of whether a D0151 'Termination of Appointment or Contract by Supplier' data flow has been received from the Supplier. Where no D0151 data flow has been received, the de-appointment date can be derived from the 'Date Action Required By' (J0028) data item on the D0170 data flow.

⁷¹ The outgoing MOA remains responsible for sending revised MTD where they relate to site activity carried out after their de-appointment date.

⁷² If MTD are not received within 12 WD of new NHHMOA appointment, new NHHMOA to request the current NHHMOA to send MTD using the D0170 Request for Metering System Related Details and report this to the Supplier.

⁷³ The NHHMOA will send the D0150 Non Half-hourly Meter Technical Details to the relevant parties in all cases, even when no Meter is present.

6.2.2 New Connection

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|---|--------------------|-------------------|---|--|
| 6.2.2.1 | As required | Send appointment. | Supplier | NHHMOA | D0155 Notification of New NHHMOA or NHHDC Appointment and Terms. | Electronic or other method, as agreed. |
| 6.2.2.2 | If appointment rejected and within 10 WD of 6.2.2.1 | Send notification of rejection of appointment including the reason why the request has been rejected. | NHHMOA | Supplier | D0261 Rejection of Agent Appointment. (Go to 6.2.2.1 if required) | Electronic or other method, as agreed. |
| 6.2.2.3 | If appointment accepted and within 10 WD of 6.2.2.1 | Send notification of acceptance of appointment. | NHHMOA | Supplier | D0011 Agreement of Contractual Terms. | Electronic or other method, as agreed. |
| 6.2.2.4 | Within 5 WD of 6.2.2.3 | Send notification of NHHDC. | Supplier | NHHMOA / NHHDC | D0148 Notification of Change to Other Parties. D0302 Notification of Customer Details. | Electronic or other method, as agreed. |
| 6.2.2.5 | Within 2 WD of 6.2.2.4 | Request Site Technical Details. | NHHMOA | LDSO | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |
| 6.2.2.6 | If request for Site Technical Details rejected and within 5 WD of 6.2.2.5 | Send Rejection response for request for Site Technical Details including the reasons why the request has been rejected. | LDSO | NHHMOA | D0382 Rejection response for Request to LDSO for Site Technical Details. | Electronic or other method, as agreed. |
| 6.2.2.7 | Within 5 WD of 6.2.2.5 | Send Site Technical Details. | LDSO ²³ | NHHMOA | D0215 Provision of Site Technical Details. | Electronic or other method, as agreed. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|--|--|----------|----------|--|---|
| 6.2.2.8 | Following 6.2.2.3 and at least 10 WD ²¹ before 6.2.2.9 | Request installation, commissioning and energisation of MS. ⁷⁴ | Supplier | NHHMOA | D0142 Request for Installation or Changes to a Metering System Functionality or the Removal of all Meters. ⁷⁵ | Electronic or other method, as agreed. |
| | | | | × | For Prepayment Meters see Appendix 9.2 | |
| 6.2.2.9 | On date requested or agreed in 6.2.2.8 | Install and commission MS. If requested energise MS and note initial Meter register reading. | NHHMOA | Cill | | Internal Process. |
| 6.2.2.10 | If MS cannot be installed or energised, as soon as possible and within 5 WD of 6.2.2.9 | Inform Supplier. | NHHMOA | Supplier | D0221 Notification of Failure to Install or Energise Metering System. (Go to 6.2.2.7 if required) | Electronic or other method, as agreed. |
| For smar | t Meters only | | | | | |
| 6.2.2.11 | Optionally, by arrangement with Supplier, and in timescales agreed with Supplier | Send initial Meter register reading(s) (readings will be sent as a contingency against delays in the Supplier obtaining a remote reading and, where the register configuration is unknown, will consist of a reading from the total cumulative register) | NННМОА | Supplier | D0010 Meter Readings | Electronic or other method, as agreed |
| 6.2.2.12 | If configured remotely and in time to allow the NHHMOA to distribute MTD within 10 WD of 6.2.2.9 | Send Smart Meter Configuration Details The Supplier will ensure that only the latest version of the configuration for the day is sent to the NHHMOA | Supplier | NHHMOA | D0367 Smart Meter Configuration Details (or alternative method, as agreed bilaterally between the Supplier and NHHMOA) | Electronic or other method, as agreed |

Note that currently the extent of Commissioning for NHH MS is not defined in CoP4.
 If the MSID is for Export purposes, the 'Additional Information' field should state this, and therefore a physical site visit may not be required.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-----------|--|--|----------|--|---|--|
| 6.2.2.13 | Within 10 WD of 6.2.2.9 | Send initial Meter register reading(s) (as remotely collected by the Supplier unless any readings provided by the NHHMOA are required as a 'backstop') | Supplier | NHHDC | D0010 Meter Readings | Electronic or other method, as agreed |
| For all N | HH Meters | | | | | |
| 6.2.2.14 | Within 10 WD of 6.2.2.9 | Send change of energisation status and MTD. ⁷⁶ | NHHMOA | Supplier / NHHDC / LDSO Supplier / NHHDC | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3) | Electronic or other method, as agreed. |
| | | Send initial Meter register reading (for non-smart Meters only). Send notification of Meter installation, Supplier ID and NHHMOA's appointment. | | NHHDC MAP | D0010 Meter readings. D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | |
| 6.2.2.15 | Within 10 WD of 6.2.2.9 | Send the relevant Meter information. | NHHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method as agreed. |
| 6.2.2.16 | Immediately following 6.2.2.15 or 6.2.2.18 | Perform validation checks and send response D0312. | SMRS | NHHMOA | D0312 Notification of Meter Information to MPAS with 'MOP Flow Response Code' populated | Electronic or other method as agreed. |
| 6.2.2.17 | | If response is "Accepted", proceed to 6.2.2.19, otherwise proceed to 6.2.2.18. | | | | |

⁷⁶

⁷⁶ Whenever installing new, replacement or re-configured meters or carrying out work requiring re-registration of the metering system, the MOA shall ensure that the meter registers are clearly labelled and that the data item J0010 'Meter Register Id' in all relevant DTN data flows (e.g. D0149 & D0150) accurately reflects the identifiers of the meter registers themselves. See Sections 2.3.2 and 2.4.1 for details.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|--|---|---------------------|---------------------|--|---|
| 6.2.2.18 | Within 5 WDs of 6.2.2.16 | Where the rejection is of a type the NHHMOA can resolve without involving other industry parties, send a corrected D0312. | NHHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method as agreed. |
| | | If the NHHMOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. | | × | | |
| | | Proceed to 6.2.2.16. | | | | |
| 6.2.2.19 | If required and no valid Meter register reading received within 10 WD of the installation of the Meter | Request initial Meter register reading | NHHDC | NHHMOA, Supplier | | Post / Fax / Email |
| 6.2.2.20 | Within 10 WD of 6.2.2.18 | Send initial Meter register reading | NHHMOA, Supplier | NHHDC ⁷⁷ | D0010 Meter Readings | Electronic or other method, as agreed |

_

⁷⁷ If more than one Meter register reading is provided, the NHHDC shall process and use the first reading provided.

6.2.3 Change of NHHDC for an existing Metering System⁷⁸

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|---|-----------|-------------------|---|--|
| 6.2.3.1 | As required | Send notification of new NHHDC. | Supplier | NHHMOA / NHHDC | D0148 Notification of Change to Other Parties. | Electronic or other method, as agreed. |
| 6.2.3.2 | Within 5 WD of 6.2.3.1 | Send MTD and details of any current faults. | NHHMOA | New NHHDC | D0002 Fault Resolution Report or Request for Decision on Further Action. D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter | Electronic or other method, as agreed. |
| | | | 10C/ | | Technical Details. ⁷³ D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3) | |
| 6.2.3.3 | Within 1 WD of 6.2.3.2 | If MTD not received as expected, request this data. | New NHHDC | NHHMOA | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |
| 6.2.3.4 | Within 1 WD of 6.2.3.3 request from new NHHDC. | Send current MTD. | MOA | New NHHDC | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3) | Electronic or other method, as agreed. |

⁷⁸ This process shall also apply to a concurrent Change of Supplier and Change of NHHDC. The Supplier referred to above is the new Supplier. In this case, the MTD and details of any current faults shall also be sent to the new Supplier and LDSO.

6.2.4 Concurrent change of Supplier and NHHMOA

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|---|-------------------|--------------------------|---|--|
| 6.2.4.1 | As required | Send appointment. | New Supplier | New | D0155 Notification of New | Electronic or other |
| | | The Supplier will notify the New NHHMOA if the Metering System has a DCC-serviced smart Meter. | | NHHMOA | Meter Operator or Data Collector Appointment and Terms. | method, as agreed. |
| 6.2.4.2 | If appointment rejected and within 2 WD of 6.2.4.1 | Send notification of rejection of appointment including the reason why the request has been rejected. | New NHHMOA | New Supplier | D0261 Rejection of Agent Appointment. | Electronic or other method, as agreed. |
| | | | | | (Go to 6.2.4.1 if required) | |
| 6.2.4.3 | If appointment accepted and within 2 WD of 6.2.4.1 | Send notification of acceptance of appointment. | New NHHMOA | New Supplier | D0011 Agreement of Contractual Terms. | Electronic or other method, as agreed. |
| 6.2.4.4 | Within 5 WD of notification from SMRS or by last date of Supplier Appointment | Send notification of termination of appointment. | Current Supplier | Current NHHMOA | D0151 Termination of Appointment or Contract by Supplier. | Electronic or other method, as agreed. |
| 6.2.4.5 | If de-appointment accepted and within 5 WD of 6.2.4.4 | Send notification of de-appointment. | Current NHHMOA | MAP | D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | Electronic or other method, as agreed. |
| 6.2.4.6 | If de-appointment rejected and within 5 WD of 6.2.4.4 | Send notification of rejection of deappointment. | Current NHHMOA | Current Supplier | Note that rejection of deappointment shall only occur if the current NHHMOA has a contract with the customer. | Electronic or other method, as agreed. |
| 6.2.4.7 | On appointment of NHHMOA and within 1 | | New Supplier | New NHHMOA / NHHDC | D0148 Notification of Change to Other Parties. | Electronic or other method, as agreed. |
| | WD of 6.2.4.3 ⁷⁹ | | | | D0302 Notification of Customer Details. | |

⁷⁹ Note that if there is also a concurrent Change of NHHDC and/or NHHDA, and the Supplier waits for all D0011 flows before sending a D0148, the New Supplier shall send the D0148 within 1 WD of the receipt of all applicable D0011 flows.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-----------|--|--|---------------------------------|--|--|--|
| 6.2.4.8 | Within 1 WD of 6.2.4.7 | Request MTD. | New NHHMOA | Current NHHMOA | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |
| 6.2.4.9 | Within 2 WD of 6.2.4.8 For those Meters defined in Appendix 9.3, the D0149, D0150 and D0313 may be sent as late as SSD – 1 WD to maintain security. | Send MTD ⁷⁰ , ⁷¹ . | Current NHHMOA ¹⁵ | New NHHMOA ¹⁶ | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. ⁷³ D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3) | Electronic or other method, as agreed. |
| For Meter | ing Systems which are not serv | viced by the DCC | | | | |
| 6.2.4.10 | Within 1 WD of 6.2.4.9 | Send MTD. | New NHHMOA | New Supplier / NHHDC / LDSO New Supplier / NHHDC | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. ⁷³ D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3) | Electronic or other method, as agreed. |
| For Meter | ing Systems which are serviced | d by the DCC | | • | | |
| 6.2.4.11 | As soon as possible after midnight UTC on the SSD | Configure Meter ⁸⁰ | New Supplier | | | |

_

⁸⁰ If the new Supplier is unable to configure the Meter until after the SSD, but is able to do so by SSD+5WD, for example due to a communications failure, the new Supplier will re-date any SSC change (and associated) readings to the SSD. If the new Supplier is unable to configure the Meter until after SSD+5WD, the new Supplier will use the change of SSC process in BSCP504 section 3.3.6 and will adopt the old Supplier's SSC for the intervening period.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|---|---|--------------|-----------------------------------|--|---------------------------------------|
| 6.2.4.12 | Within 1 WD of 6.2.4.11 | Send Smart Meter Configuration Details | New Supplier | New NHHMOA | D0367 Smart Meter Configuration Details | Electronic or other method, as agreed |
| | | | | V | (or alternative method, as agreed bilaterally between the Supplier and NHHMOA) | |
| 6.2.4.13 | If the new Supplier has been unable to communicate with the smart Meter by SSD+5WD | Notify the new NHHMOA that the process for non DCC-serviced NHH Metering Systems should be followed | New Supplier | New NHHMOA | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed |
| 6.2.4.14 | Where 6.2.4.13 does not apply, within 1 WD of the later of 6.2.4.9 and 6.2.4.12 | Send MTD | New NHHMOA | New Supplier / NHHDC / LDSO | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. ⁵⁰ | Electronic or other method, as agreed |

6.2.5 Change of Supplier (No Change to Metering System or Change of NHHMOA)

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|---|---|------------------|---------------------|--|--|
| 6.2.5.1 | As required | Send appointment. | New Supplier | NHHMOA | D0155 Notification of New Meter Operator or Data Collector Appointment and Terms. | Electronic or other method, as agreed. |
| 6.2.5.2 | If appointment rejected and within 2 WD of 6.2.5.1 | Send notification of rejection of appointment including the reason why the request has been rejected. | NHHMOA | New Supplier | D0261 Rejection of Agent Appointment. (Go to 6.2.5.1 if required) | Electronic or other method, as agreed. |
| 6.2.5.3 | If appointment accepted and within 2 WD of 6.2.5.1 | Send notification of acceptance of appointment. | NHHMOA | New Supplier | D0011 Agreement of Contractual Terms. | Electronic or other method, as agreed. |
| 6.2.5.4 | Within 5 WD of notification from SMRS or by last date of Supplier Appointment | Send notification of termination of appointment. | Current Supplier | NHHMOA | D0151 Termination of Appointment or Contract by Supplier. | Electronic or other method, as agreed. |
| 6.2.5.5 | If de-appointment accepted and within 5 WD of 6.2.5.4 | Send notification of de-appointment. | NННМОА | MAP | D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | Electronic or other method, as agreed. |
| 6.2.5.6 | If de-appointment rejected and within 5 WD of 6.2.5.4 | Send notification of rejection of deappointment. | NHHMOA | Current Supplier | Note that rejection of deappointment shall only occur if the current NHHMOA has a contract with the customer. | Electronic or other method, as agreed. |
| 6.2.5.7 | On appointment of NHHMOA and within 1 WD of 6.2.5.3 ⁷⁹ | Send notification of NHHDC and current NHHMOA. | New Supplier | NHHMOA / NHHDC | D0148 Notification of Change to Other Parties. D0302 Notification of Customer Details. | Electronic or other method, as agreed. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|------------------------|---|------|-----------------------------------|---|--|
| 6.2.5.8 | Within 1 WD of 6.2.5.7 | Send MTD (where the New Supplier reconfigures a smart Meter on change of Supplier, refer to 6.3.4). | | New Supplier / NHHDC / LDSO | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. 73 | Electronic or other method, as agreed. |
| | | Send notification of Supplier and NHHMOA's appointment. | | New Supplier / NHHDC | D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3) D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | |

6.2.6 Change of Supplier – No Meter

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|---|---------------------------------|-----------------------------|---|--|
| 6.2.6.1 | By New Supplier SSD | Send appointment. | New Supplier | New NHHMOA | D0155 Notification of New Meter Operator or Data Collector Appointment and Terms. | Electronic or other method, as agreed. |
| 6.2.6.2 | If appointment rejected and within 2 WD of 6.2.6.1 | Send notification of rejection of appointment including the reason why the request has been rejected. | New NHHMOA | New Supplier | D0261 Rejection of Agent Appointment. (Go to 6.2.6.1 if required) | Electronic or other method, as agreed. |
| 6.2.6.3 | If appointment accepted and within 2 WD of 6.2.6.1 | Send notification of acceptance of appointment. | New NHHMOA | New Supplier | D0011 Agreement of Contractual Terms. | Electronic or other method, as agreed. |
| 6.2.6.4 | Within 5 WD of notification from SMRS or by last date of Supplier Appointment | Send notification of termination of appointment. | Current Supplier | Current NHHMOA | D0151 Termination of Appointment or Contract by Supplier. | Electronic or other method, as agreed. |
| 6.2.6.5 | If de-appointment rejected and within 5 WD of 6.2.6.4 | Send notification of rejection of deappointment. | Current NHHMOA | Current Supplier | Note that rejection of deappointment shall only occur if the current NHHMOA has a contract with the customer. | Electronic or other method, as agreed. |
| 6.2.6.6 | On appointment of NHHMOA and within 1 WD of 6.2.6.381 | Send notification of NHHDC and current NHHMOA. | New Supplier | New NHHMOA / NHHDC | D0148 Notification of Change to Other Parties. | Electronic or other method, as agreed. |
| | | | | | D0302 Notification of Customer Details. | |
| 6.2.6.7 | Within 1 WD of 6.2.6.6 | Request MTD. | New NHHMOA | Current NHHMOA | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |
| 6.2.6.8 | Within 2 WD of 6.2.6.7 | Send MTD ⁷⁰ , ⁷¹ . | Current NHHMOA ¹⁵ | New NHHMOA ¹⁶ | D0150 Non Half-hourly Meter Technical Details. ⁷³ | Electronic or other method, as agreed. |

⁸¹ Note that if there is also a concurrent Change of NHHDC and/or NHHDA, and the Supplier waits for all D0011 flows before sending a D0148, the New Supplier shall send the D0148 within 1 WD of the receipt of all applicable D0011 flows.

| REF | WHEN | ACTION | FROM | _ | INFORMATION REQUIRED | METHOD |
|---------|------------------------|-----------|------------|-----|---|--|
| 6.2.6.9 | Within 1 WD of 6.2.6.8 | Send MTD. | New NHHMOA | 1.1 | D0150 Non Half-hourly Meter Technical Details. ⁷³ | Electronic or other method, as agreed. |

6.3 Metering Activities

6.3.1 Energise a Metering System

Please note that a remotely disabled smart or advanced Meter should be treated as energised for the purposes of this section.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|--|----------|-------------------------------|---|--|
| 6.3.1.1 | As required and at least 10 WD ²¹ before 6.3.1.3 | Send request to energise MS. | Supplier | NHHMOA | D0134 Request to Change Energisation Status For Prepayment Meters see Appendix 9.2 | Electronic or other method, as agreed. |
| 6.3.1.2 | If request rejected and within 5 WD of 6.3.1.1 | Send notification of rejection including the reason why the request has been rejected. | NHHMOA | Supplier | P0211 Site Visit Rejection. (Go to 6.3.1.1 if required) | Electronic or other method, as agreed. |
| 6.3.1.3 | On the date requested or agreed in 6.3.1.1 | Energise MS and note initial Meter register reading. | NННМОА | | | Internal Process. |
| 6.3.1.4 | Within 10 WD of attempting to change energisation status | Send change of energisation status and the initial Meter register reading. | NHHMOA | NHHDC / Supplier / LDSO | D0139 Confirmation or Rejection of Energisation Status Change. ⁴⁰ For Prepayment Meters see Appendix 9.2 | Electronic or other method, as agreed. |
| | | | NHHMOA | NHHDC | D0010 Meter Readings. | |
| 6.3.1.5 | If required and no valid Meter register reading received within 10 WD of notification of change to energisation status | Request initial Meter register reading | NHHDC | NHHMOA, Supplier | | Post / Fax / Email |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD | | | |
|-----------------|--|--|----------------------|----------------------|---|--|--|--|--|
| 6.3.1.6 | Within 10 WD of 6.3.1.5 | Send initial Meter register reading | NHHMOA / Supplier | NHHDC ¹⁰⁶ | D0010 Meter Readings | Electronic or other method, as agreed | | | |
| If LDSO energis | If LDSO energises | | | | | | | | |
| 6.3.1.7 | Within 10WD of receiving change of energisation status and Meter register reading, if available from LDSO. | Send change of energisation status and the initial Meter register reading, if available. | NHHMOA | NHHDC / Supplier | D0139 Confirmation or Rejection of Energisation Status Change. For Prepayment Meters see Appendix 9.2 | Electronic or other method, as agreed. | | | |
| | | | NHHMOA | NHHDC | D0010 Meter Readings | | | | |

6.3.2 De-energise a Metering System

Please note that a remotely disabled smart or advanced Meter should be treated as energised for the purposes of this section.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD | | | | |
|-------------|---|--|----------|-------------------------------|---|--|--|--|--|--|
| If NHHMOA d | If NHHMOA de-energises | | | | | | | | | |
| 6.3.2.1 | As required and at least 10 WD ²¹ before 6.3.2.3 | Send request to de-energise MS. | Supplier | NHHMOA | D0134 Request to Change Energisation Status. For Prepayment Meters see Appendix 9.2 | Electronic or other method, as agreed. | | | | |
| 6.3.2.2 | If request rejected and within 5 WD of 6.3.2.1 | Send notification of rejection including the reason why the request has been rejected. | NHHMOA | Supplier | D0139 Confirmation or Rejection of Energisation Status Change; D0221 Notification of Failure to Install or Energise Metering System; and | Electronic or other method, as agreed. | | | | |
| | | colete | | | P0211 Site Visit Rejection. 42 For Prepayment Meters see Appendix 9.2. (Go to 6.3.2.1 if required) | | | | | |
| 6.3.2.3 | On the date requested or agreed in 6.3.2.1 | Note final Meter register reading, if available; and de-energise MS. | NHHMOA | | | Internal Process. | | | | |
| 6.3.2.4 | Within 10 WD of attempting to change energisation status | Send change of energisation status and the final Meter register reading, if available. | NHHMOA | NHHDC / Supplier / LDSO | D0139 Confirmation or Rejection of Energisation Status Change. ⁴⁰ | Electronic or other method, as agreed. | | | | |
| | | | | | For Prepayment Meters see Appendix 9.2 | | | | | |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-------------|--|--|----------------------|---------------------|--|--|
| | | | NHHMOA | NHHDC | D0010 Meter Readings. | |
| 6.3.2.5 | If required and no valid Meter register reading received within 10 WD of notification of change to energisation status | Request final Meter register reading | NHHDC | NHHMOA, Supplier | | Electronic or other method as agreed. |
| 6.3.2.6 | Within 10 WD of 6.3.2.5 | Send final Meter register reading | NHHMOA / Supplier | NHHDC | D0010 Meter Readings | Electronic or other method, as agreed |
| If LDSO De- | -energises | | | | | |
| 6.3.2.7 | As required and at least 10 WD ⁴⁴ before 6.3.2.9. | Send request to de-energise MS. | Supplier | LDSO | D0134 Request to Change Energisation Status. For Prepayment Meters see Appendix 9.2 | Electronic or other method, as agreed. |
| 6.3.2.8 | If request rejected and within 5 WD of 6.3.2.7. | Send notification of rejection, including reasons why the request has been rejected. | LDSO | Supplier, NHHMOA | D0139 Confirmation or Rejection of Energisation Status Change; and P0211 Site Visit Rejection. ⁴² For Prepayment Meters see Appendix 9.2. (Go to 6.3.2.7 if required) | Electronic or other method, as agreed. Manual |
| 6.3.2.9 | On the date requested or agreed in 6.3.2.7; or as required (for example, as a result of an emergency). | Note final Meter register reading, if available. De-energise the MS. | LDSO | | | Internal Process. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|---|--|----------------------|---------------------|--|---|
| 6.3.2.10 | Within 5 WD of 6.3.2.9. | Send change of energisation status and final Meter register reading, if available. | LDSO | NHHMOA | D0139 Confirmation of Rejection of Energisation Status Change. ⁴⁰ | Electronic of other method, as agreed. |
| | | | | X | For Prepayment Meters see Appendix 9.2 | |
| 6.3.2.11 | Within 10 WD of 6.3.2.10. | Send change of energisation status | NHHMOA | NHHDC, Supplier | D0139 Confirmation of Rejection of Energisation Status Change. | Electronic of other method, as agreed. |
| | | | | | For Prepayment Meters see Appendix 9.2 | |
| | | Send final Meter register reading, if available. ⁸² | NHHMOA | NHHDC | D0010 Meter Readings. | |
| 6.3.2.12 | If required and no valid Meter register reading received within 10 WD of notification of change to energisation status. | Request final Meter register reading | NHHDC | NHHMOA, Supplier | | Post / Fax / Email |
| 6.3.2.13 | Within 10 WD of 6.3.2.12 | Send final Meter register reading | NHHMOA / Supplier | NHHDC | D0010 Meter Readings | Electronic or other method, as agreed |

⁸² If LDSO has not provided the final Meter register reading, the NHHMOA can retrieve this from the Meter when it retrieves the Meter. If the LDSO removed the Meter, the NHHMOA must ensure that it has the final Meter register reading and provided this to the NHHDC before disposing of or re-using the Meter. See 6.3.3.4 to 6.3.3.7 for steps where the LDSO removes the Metering System.

6.3.3 Removal of a Metering System 83 84 85

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|--|----------------------------|---|--|--|
| 6.3.3.1 | As required and at least 10 WD before 6.3.3.3 | Send request to remove MS. | Supplier or Supplier | NHHMOA LDSO | D0142 Request for Installation or change to a Metering System Functionality or the Removal of all Meters. The Request removal of assets, including all Meters. | Electronic or other method, as agreed. |
| 6.3.3.2 | If request rejected and within 5 WD of 6.3.3.1 | Send notification of rejection including the reason why the request has been rejected. | NHHMOA / LDSO | Supplier | P0211 Site Visit Rejection. (Go to 6.3.3.1 if required) | Electronic or other method, as agreed. |
| 6.3.3.3 | On the date requested or agreed in 6.3.3.1 or as the NHHMOA sees necessary. | Note final Meter register reading, if available and remove MS. 47 | NHHMOA / LDSO | N | | Internal Process. |
| 6.3.3.4 | Within 10 WD of removing MS or of receiving notification from the LDSO that an MS was disconnected. | Liaise with LDSO to recover Meter if necessary. | NHHMOA | LDSO | Location of assets and arrangements for delivery / collection. | Email or other method as agreed |
| 6.3.3.5 | At the same time as 6.3.3.4. | Send MTD and notification that the MS has been removed. ⁸⁶ | NHHMOA | Supplier, NHHDC, LDSO (if applicable). | D0150 Non Half-hourly Meter Technical Details. | Electronic or other method, as agreed. |

_

⁸³ Note that prior to the removal of the MS, a de-energisation shall be carried out in accordance with section 6.3.2. If de-energisation is carried out at the same time as the removal of the MS, only the flows referenced in section 6.3.3 need be sent.

⁸⁴ The Removal of a MS includes the removal of all Meters assigned to that MS. Where only some of the Meters are to be removed, a reconfiguration process shall be followed in accordance with section 6.3.4.

⁸⁵ Note that the removal of a MS requires the removal of all of the Meters associated with that MS. Where only some of the Meters are to be removed, proceed in accordance with section 6.3.4 Reconfigure or Replace Metering System (No Change of Measurement Class).

⁸⁶ Where the MS has been removed by the LDSO, the LDSO shall provide the notification and final Meter register reading to the NHHMOA, and the NHHMOA shall provide this information to the Supplier and the NHHDC.

| notification t obtainable. 86 me as Send notifica | eter register reading or hat Meter register reading not tion of Meter removal. | LDSO (if applicable) NHHMOA | NHHMOA NHHDC, Supplier MAP | D0139 Confirmation or Rejection of Energisation Status Change. D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action | Electronic or other method, as agreed. |
|--|---|--|---|--|--|
| | tion of Meter removal. | | Supplier | Fault Resolution Report or Request for Decision on Further Action | |
| | tion of Meter removal. | NHHMOA | MAP | V | |
| of Sand the rela | | | | D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | Electronic or other method, as agreed. |
| or of changes. ication that | vant Meter information | NHHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method as agreed. |
| \mathcal{L} | | SMRS | NHHMOA / Supplier | D0312 Notification of Meter Information to MPAS with 'MOP Flow Response Code' populated | Electronic or other method, as agreed |
| | | | | | |
| NHHMOA cother industry D0312. If the NHHM industry part reasonable en | an resolve without involving y parties, send a corrected IOA needs to involve other tes to resolve the issue, then indeavours should apply. | NHHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed |
| | changes. changes. changes. changes. changes. changes. changes. changes. changes. fresponse valid response D03 If response is 6.3.3.12, other of Where the response response of the | changes. Changes. Changes. Changes. Changes. Changes. Changes. Changes. Changes. Perform validation checks and send response D0312. If response is "Accepted", proceed to 6.3.3.12, otherwise proceed to 6.3.3.11. Cof Where the rejection is of a type the NHHMOA can resolve without involving other industry parties, send a corrected | changes. SMRS SMRS If response D0312. If response is "Accepted", proceed to 6.3.3.11. Of Where the rejection is of a type the NHHMOA can resolve without involving other industry parties, send a corrected D0312. If the NHHMOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. | changes. SMRS NHHMOA / Supplier If response is "Accepted", proceed to 6.3.3.12, otherwise proceed to 6.3.3.11. Of Where the rejection is of a type the NHHMOA can resolve without involving other industry parties, send a corrected D0312. If the NHHMOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. | Send the relevant Meter information changes. NHHMOA SMRS D0312 Notification of Meter Information to MPAS. NHHMOA SMRS D0312 Notification of Meter Information to MPAS. NHHMOA SMRS NHHMOA D0312 Notification of Meter Information to MPAS with 'MOP Flow Response D0312. If response is "Accepted", proceed to 6.3.3.11. Of Where the rejection is of a type the NHHMOA can resolve without involving other industry parties, send a corrected D0312. If the NHHMOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|---|--------------------------------------|----------------------|--------------------|----------------------|---------------------------------------|
| 6.3.3.12 | If required and no valid Meter register reading received within 10 WD of the removal. | Request final Meter register reading | NHHDC | NHHMOA Supplier | | Electronic or other method as agreed. |
| 6.3.3.13 | Within 10 WD of 6.3.3.12 | Send final Meter register reading | NHHMOA / Supplier | NHHDC | D0010 Meter Readings | Electronic or other method, as agreed |

6.3.4 Reconfigure or Replace Metering System (No Change of Measurement Class)⁸⁷

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|------------|---|---|----------------------|-------------------------------|---|--|
| For all NI | HH Meters other than sma | rt Meters (and for smart Meters locally confi | gured by the NHHN | IOA, other than a | s part of a Meter replacement) | |
| 6.3.4.1 | As required and at least 10 WD ²¹ before 6.3.4.3 | Send request to reconfigure or replace MS. | Supplier | NHHMOA | D0142 Request for Installation or Change to a Metering System Functionality or the Removal of All Meters. | Electronic or other method, as agreed. |
| 6.3.4.2 | If request rejected and within 5 WD of 6.3.4.1 | Send notification of rejection including the reason why the request has been rejected. | NHHMOA | Supplier | P0211 Site Visit Rejection. (Go to 6.3.4.1 if required) | Electronic or other method, as agreed. |
| 6.3.4.3 | On the date requested or agreed in 6.3.4.1 or as the NHHMOA sees necessary ⁴⁹ | Note final Meter register reading, if available. Reconfigure MS or replace and energise MS. 50 Note initial Meter register reading. | NHHMOA | | | Internal Process. |
| 6.3.4.4 | Within 10 WD of the replacement / reconfiguration of the MS | Send final Meter register reading for replaced / reconfigured MS or notification that Meter register reading not obtainable. Send initial Meter register reading for replacement MS / new configuration. Send MTD for replacement MS / new configuration. | NHHMOA ⁴⁷ | NHHDC / Supplier / LDSO | D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action. D0010 Meter Readings. D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. | Electronic or other method, as agreed. |

⁸⁷ Note that prior to the reconfiguration or replacement of the MS, a de-energisation shall be carried out in accordance with section 6.3.2.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|---|---|--------|---------------------------|--|---|
| | | | | NHHDC / Supplier / | D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3) | |
| 6.3.4.5 | Within 10 WD of the replacement of the MS | Send notification of removal of old Meter. | | MAP of removed Meter | D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | |
| | | Send notification of installation of new Meter. | | MAP of installed Meter | D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | |
| 6.3.4.6 | Within 10 WD of the replacement of the MS | Send the relevant Meter information changes. | NHHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method as agreed. |
| 6.3.4.7 | Immediately following 6.3.4.6 or 6.3.4.9 | Perform validation checks and send response D0312. | SMRS | NHHMOA / Supplier | D0312 Notification of Meter Information to MPAS with 'MOP Flow Response Code' populated | Electronic or other method, as agreed |
| 6.3.4.8 | | If response is "Accepted", proceed to 6.3.4.10, otherwise proceed to 6.3.4.9. | | | | |
| 6.3.4.9 | Within 5 WDs of 6.3.4.7 | Where the rejection is of a type the NHHMOA can resolve without involving other industry parties, send a corrected D0312. If the NHHMOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. | NHHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed |
| | | Proceed to 6.3.4.7. | | | | |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|---|--|----------------------|-------------------------------|--|---|
| 6.3.4.10 | If no valid Meter register reading(s) received 10 WD of the replacement / reconfiguration and initial and / or final reading required | Request initial and / or final Meter register reading | NHHDC | NHHMOA Supplier | | Post / Fax / Email |
| 6.3.4.11 | Within 10 WD of 6.3.4.6 | Send initial and / or final Meter register reading | NHHMOA / Supplier | NHHDC | D0010 Meter Readings | Electronic or other method, as agreed |
| When Sup | plier configures a smart N | Meter (other than as part of a Meter installation | on or Meter replacer | nent) | | |
| 6.3.4.12 | As required | Take final readings for the old configuration. Reconfigure the smart Meter. Take initial readings for the new configuration. | Supplier | | | Internal process |
| 6.3.4.13 | In time to allow the NHHMOA to distribute MTD within 10 WD of 6.3.4.12 | Send Smart Meter Configuration Details The Supplier will ensure that only the latest version of the configuration for the day is sent to the NHHMOA | Supplier | NHHMOA | D0367 Smart Meter Configuration Details (or alternative method, as agreed bilaterally between the Supplier and NHHMOA) | Electronic or other method, as agreed |
| 6.3.4.14 | Within 10WD of reconfiguration | Send final reading(s) for old configuration and initial reading(s) for new configuration | Supplier | NHHDC | D0010 Meter Readings | Electronic or other method, as agreed |
| 6.3.4.15 | Within 10WD of reconfiguration | Send MTD for new configuration | NHHMOA | NHHDC / Supplier / LDSO | D0150 Non Half-hourly Meter Technical Details. D0149 Notification of Mapping Details. | |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|--|--|---------------------|----------|--|---|
| When Me | eter Operator installs a sma | art Meter as a replacement for either a non-si | mart or smart Meter | | | |
| 6.3.4.16 | As required and at least 10 WD before 6.3.4.18 | Send request to replace Metering System | Supplier | NHHMOA | D0142 Request for Installation or Change to a Metering System Functionality or the Removal of All Meters. | Electronic or other method, as agreed. |
| 6.3.4.17 | If request rejected and within 5 WD of 6.3.4.16 | Send notification of rejection including the reason why the request has been rejected. | NHHMOA | Supplier | P0211 Site Visit Rejection. (Go to 6.3.4.16 if required) | Electronic or other method, as agreed. |
| 6.3.4.18 | As requested in 6.3.4.19 | Take final reading(s) if replaced Meter is not smart. If replaced Meter is smart, take final reading(s) as agreed with Supplier or contact Supplier to retrieve reading(s) remotely. Replace Meter. Take initial reading(s) as agreed with Supplier or contact Supplier to retrieve reading(s) remotely. | NHHMOA | | | Internal process |
| 6.3.4.19 | Optionally, by arrangement with Supplier, and in timescales agreed with Supplier | Send final/initial Meter register reading(s) (readings will be sent as a contingency against delays in the Supplier obtaining a remote reading and, where the register configuration for the new Meter is unknown, will consist of a reading from the total cumulative register) | NHHMOA | Supplier | D0010 Meter Readings | Electronic or other method, as agreed |
| 6.3.4.20 | As required | Take final reading(s) from replaced smart Meter, configure replacement Meter and take initial readings | Supplier | | | Internal process |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|--|--|----------|-------------------------------|--|---|
| 6.3.4.21 | If replacement Meter configured remotely and in time to allow the NHHMOA to distribute MTD within 10 WD of 6.3.4.18 | Send Smart Meter Configuration Details The Supplier will ensure that only the latest version of the configuration for the day is sent to the NHHMOA | Supplier | NHHMOA | D0367 Smart Meter Configuration Details (or alternative method, as agreed bilaterally between the Supplier and NHHMOA) | Electronic or other method, as agreed |
| 6.3.4.22 | Within 10 WD of 6.3.4.20 | Send final and initial Meter register reading(s) (as remotely collected by the Supplier unless any readings provided by the NHHMOA are required as a 'backstop') | Supplier | NHHDC | D0010 Meter Readings | Electronic or other method, as agreed |
| 6.3.4.23 | Within 10 WD of 6.3.4.18 | Send MTD for new Meter and notification of removal of old Meter | NHHMOA | NHHDC / Supplier / LDSO | D0150 Non Half-hourly Meter Technical Details. D0149 Notification of Mapping Details. | Electronic or other method, as agreed |
| 6.3.4.24 | Within 10 WD of 6.3.4.18 | Send notification of removal of old Meter. | NННМОА | MAP of removed Meter | D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | Electronic or other method, as agreed |
| | | Send notification of installation of new Meter | NHHMOA | MAP of installed Meter | D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | Electronic or other method, as agreed |
| | | Send the relevant Meter information changes. | NHHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed |
| 6.3.4.25 | Immediately following 6.3.4.24 or 6.3.4.27 | Perform validation checks and send response D0312. | SMRS | NHHMOA Supplier | D0312 Notification of Meter Information to MPAS with 'MOP Flow Response Code' populated | Electronic or other method, as agreed |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-----------|---|--|----------|----------------------|--|---|
| 6.3.4.26 | | If D0312 response is "Accepted", proceed to 6.3.4.28, otherwise proceed to 6.3.4.27. | | | | |
| 6.3.4.27 | Within 5 WDs of 6.3.4.24 | Where the rejection is of a type the NHHMOA can resolve without involving other industry parties, send a corrected D0312. | NHHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed |
| | | If the NHHMOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. Proceed to 6.3.4.25. | | men | | |
| Following | reconfiguration or replac | ement of a smart Meter | | | | |
| 6.3.4.28 | If no valid Meter register reading(s) received 10 WD of the replacement / reconfiguration and initial and / or final reading required | Request initial and / or final Meter register reading | NHHDC | Supplier | | Post / Fax / Email |
| 6.3.4.29 | Within 10 WD of 6.3.4.28 | Send initial and / or final Meter register reading | Supplier | NHHDC | D0010 Meter Readings | Electronic or other method, as agreed |
| | | Send the relevant Meter information changes. | NHHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed |
| 6.3.4.30 | Immediately following 6.3.4.29 or 6.3.4.32 | Perform validation checks and send response D0312. | SMRS | NHHMOA / Supplier | D0312 Notification of Meter Information to MPAS with 'MOP Flow Response Code' populated | Electronic or other method, as agreed |
| 6.3.4.31 | | If D0312 response is "Accepted", end process, otherwise proceed to 6.3.4.32. | | | | |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|--------------------------|---|--------|------|--|---|
| 6.3.4.32 | Within 5 WDs of 6.3.4.31 | Where the rejection is of a type the NHHMOA can resolve without involving other industry parties, send a corrected D0312. If the NHHMOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. | NHHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed |
| | | Proceed to 6.3.4.30. | | | Y | |

6.3.5 LDSO Replaces MS (For Safety Reasons / Urgent Metering Services)

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|--|--------------------|----------|---|---|
| 6.3.5.1 | As required ⁸⁸ | Send request to reconfigure or replace MS. | Supplier | LDSO | Request site visit. | Phone / Fax or other method, as agreed. |
| 6.3.5.2 | If request rejected and as soon as possible after 6.3.5.1 | Send notification of rejection including the reason why the request has been rejected. | LDSO | Supplier | (Go to 6.3.4.1 if required) | Electronic or other method, as agreed. |
| 6.3.5.3 | On the date requested or agreed in 6.3.5.1 or as the LDSO sees necessary | Note final Meter register reading, if available. Replace and energise MS ⁵² Note initial Meter register reading | LDSO | | | Internal Process. |
| 6.3.5.4 | Within 10 WD of 6.3.5.3 | Send final Meter register reading for replaced MS or notify that Meter register reading not obtainable. Send initial Meter register reading and MTD for replacement MS. | LDSO ⁸⁹ | NHHMOA | D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action. D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. D0010 Meter Readings. | Electronic or other method, as agreed. |

⁸⁸ This may be a standing arrangement between the Supplier and LDSO and in practise, steps 6.3.5.1 and 6.3.5.2 may not occur.

⁸⁹ Since the LDSO is operating as part of an Urgent Metering Services (UMetS), he shall interface with the NHHMOA who shall be responsible for notifying the Supplier and the NHHDC of the action taken.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|--|----------------------|-------------------------|--|--|
| 6.3.5.5 | Within 10 WD of 6.3.5.4 | Send final Meter register reading for replaced MS or notification that Meter register reading not obtainable. | NHHMOA ⁴⁷ | NHHDC | D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action. | Electronic or other method, as agreed. |
| | | Send initial Meter register reading for replacement MS. Send MTD for replacement MS. | | Supplier / NHHDC | D0010 Meter Readings. D0149 Notification of Mapping Details. | |
| | | | | JIME, | D0150 Non Half-hourly Meter Technical Details. D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3) | |
| | | Send notification of removal of old Meter. | Do | MAP of removed Meter | D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | |
| | | Send notification of installation of new Meter. | 500 | MAP of installed Meter | D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | |
| 6.3.5.6 | Within 10 WD of 6.3.5.4 | Send the relevant Meter information changes. | NHHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method as agreed. |
| 6.3.5.7 | Immediately following 6.3.5.6 or 6.3.5.9 | Perform validation checks and send response D0312. | SMRS | NHHMOA / Supplier | D0312 Notification of Meter Information to MPAS with 'MOP Flow Response Code' populated | Electronic or other method, as agreed |
| 6.3.5.8 | | If D0312 response is "Accepted", end process, otherwise proceed to 6.3.5.9. | | | | |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|-------------------------|--|--------|------|--|---------------------------------------|
| 6.3.5.9 | Within 5 WDs of 6.3.5.7 | Where the rejection is of a type the NHHMOA can resolve without involving other industry parties, send a corrected D0312. If the NHHMOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. Proceed to 6.3.5.7. | NHHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed |

6.4 Meter Operation Activities

6.4.1 Investigate Inconsistencies

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|---|--|------------------------------|----------|--|--|
| 6.4.1.1 | As appropriate | Send request to investigate MS. | Any Participant | Supplier | | Electronic or other method, as agreed. |
| 6.4.1.2 | Within 2 WD of 6.4.1.1 or as the Supplier or NHHDC sees necessary | Receive notification of inconsistencies, invalid data, faulty metering, invalid MTD, or request to investigate suspect metering. Or receive action following decision (From 6.4.1.6). | Supplier / NHHDC Supplier | NHHMOA | D0001 Request Metering System Investigation. D0005 Instruction on Action. | Electronic or other method, as agreed. |
| 6.4.1.3 | Within 5 WD of 6.4.1.2 or as the NHHMOA sees necessary ⁹⁰ | Investigate MS. Resolve problem if possible. If the resolution involves a site visit take a Meter register reading. | NHHMOA | | If the problem resolved go to 6.4.1.7. | Internal process. |
| 6.4.1.4 | If unable to resolve problem within 5 WD of 6.4.1.2 | Send request for decision on further action. | NHHMOA | Supplier | D0002 Fault Resolution Report or Request for Decision on Further Action. | Electronic or other method as agreed. |
| 6.4.1.5 | As soon as possible following 6.4.1.4 | Determine appropriate further action or trigger another relevant process, for example, 6.3.2 Deenergise a Metering System, 6.3.3 Removal of a Metering systems or 6.3.4 Reconfigure or replace Metering System (No Change of Measurement Class). | Supplier | | | Internal process. |

⁹⁰ Where the NHHMOA has a contract with the customer, this must be taken into account when determining whether it is appropriate for the NHHMOA to investigate inconsistencies.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|---------|--|---|----------|--|--|--|
| 6.4.1.6 | Immediately following 6.4.1.5 | Send decision on further action. | Supplier | NHHMOA | D0005 Instruction on Action. Proceed to 6.4.1.1. | Electronic or other method as agreed. |
| 6.4.1.7 | Within 5 WD of resolving problem | Send resolution of problem report. | NHHMOA | NHHDC / Supplier ⁹¹ | D0002 Fault Resolution Report or Request for Decision on Further Action. Meter reading if a site visit made. D0010 Meter Readings (If the resolution of the problem involved a site visit). | Electronic or other method as agreed. |
| 6.4.1.8 | Within 10 WD of resolving problem | Send MTD if appropriate. Notify relevant MAP of corrections as required. | NHHMOA | Supplier / NHHDC / LDSO NHHDC / Supplier / | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3) D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | Electronic or other method, as agreed. |
| 6.4.1.9 | If appropriate and within 10 WD of resolving problem | Send the relevant Meter information changes. | NHHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method as agreed. |

⁹¹ Where the MS investigation was requested by another Participant via the Supplier, the Supplier shall send the relevant Participant the resolution of problem report.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|----------|---|---|-------------------|----------------------|--|---|
| 6.4.1.10 | Immediately following 6.4.1.9 or 6.4.1.12 | Perform validation checks and send response D0312. | SMRS | NHHMOA / Supplier | D0312 Notification of Meter Information to MPAS with 'MOP Flow Response Code' populated | Electronic or other method, as agreed |
| 6.4.1.11 | | If response is "Accepted", proceed to 6.4.1.13, otherwise proceed to 6.4.1.12. | | Č | | |
| 6.4.1.12 | Within 5 WDs of 6.4.1.10 | Where the rejection is of a type the NHHMOA can resolve without involving other industry parties, send a corrected D0312. If the NHHMOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. Proceed to 6.4.1.10. | NHHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed |
| 6.4.1.13 | If required and no valid initial Meter register reading received 5 WD after SVA MS fault rectified | Request initial Meter register reading | NHHDC | NHHMOA, Supplier | | Post / Fax / Email |
| 6.4.1.14 | Within 10 WD of 6.4.1.13 | Send initial Meter register reading | NHHMOA / Supplier | NHHDC | | Electronic or other method, as agreed |

7 Interface and Timetable Information - Change of Measurement Class

7.1 Change of Measurement Class from NHH to HH for HHDC-serviced Metering System⁹² 93.

The Supplier should make all agents aware of the planned Change of Measurement Class (CoMC) in advance of any formal appointment and deappointment processes. This is to ensure that the appointment and de-appointment dates align with the date of the site visit, where such a visit is required.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-------|--|---|----------|----------|---|--|
| 7.1.1 | As required | Send appointment. The Supplier will appoint the HHMOA with effect from the planned date of the CoMC. The Supplier will use a formal appointment flow (D0155) or notify the HHMOA by other means. The Supplier will send a further appointment flow after the CoMC with the actual appointment date, where different or where a formal D0155 was not previously sent. | Supplier | ННМОА | D0155 Notification of New Meter Operator or Data Collector Appointment and Terms. | Electronic or other method, as agreed. |
| 7.1.2 | If appointment rejected and within 5 WD of 7.1.1 | Send notification of rejection of appointment including the reason why the request has been rejected. Where a formal appointment flow (D0155) has not been used in 7.1.1, the HHMOA will notify the Rejection of Agent Appointment by means other than a D0261. | ННМОА | Supplier | D0261 Rejection of Agent Appointment. (Go to 7.1.1 if required) | Electronic or other method, as agreed. |

⁹² Should any participant experience any problems whilst carrying out the CoMC process, these should be reported to the Supplier and the Supplier should resolve as appropriate.

⁹³ Note that the Change of Meter shall not occur until on or after the SSD.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-------|---|---|----------|-----------------|---|--|
| 7.1.3 | If appointment accepted and within 5 WD of 7.1.1 | Send notification of acceptance of appointment. Where a formal appointment flow (D0155) has not been used in 7.1.1, the HHMOA will notify the Agreement of Contractual Terms by means other than a D0011. | ННМОА | Supplier | D0011 Agreement of Contractual Terms. | Electronic or other method, as agreed. |
| 7.1.4 | Within 5 WD of 7.1.3 | Send notification of termination of appointment. To avoid having to send a second notification if the CoMC doesn't take place on the planned date, the Supplier may delay a formal notification until the CoMC date is firm or the CoMC has taken place. | Supplier | NHHMOA | D0151 Termination of Appointment or Contract by Supplier. ⁹⁴ | Electronic or other method, as agreed. |
| 7.1.5 | If de-appointment accepted and within 5 WD of 7.1.4 | Send notification of deappointment. | NHHMOA | MAP | D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | Electronic or other method, as agreed. |
| 7.1.6 | Within 5 WD of 7.1.4 | Send notification of rejection of deappointment. | NHHMOA | Supplier | Note that rejection of deappointment shall only occur if the current NHHMOA has a contract with the customer. | Electronic or other method, as agreed. |
| 7.1.7 | Between 5 WD ¹⁴ and 10 WD of 7.1.4 | Send notification of appointment, de-appointment and associated Agent details. | Supplier | HHDC / HHMOA | D0148 Notification of Change to Other Parties. D0289 Notification of MC/EAC/PC. D0302 Notification of Customer Details. | Electronic or other method, as agreed. |

⁹⁴ The Supplier shall indicate in the D0151 via the 'Termination Reason' field that this is a CoMC.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--------|--|--|----------------------|---------------------|---|--|
| 7.1.8 | Following 7.1.3 and at least 12 WD ²¹ prior to date of CoMC | Request HH MS functionality. ⁹⁵ | Supplier | HHMOA ²² | D0142 Request for Installation or Changes to a Metering System Functionality or the Removal of all Meters. | Electronic or other method, as agreed. |
| 7.1.9 | Within 2 WD of 7.1.8 | Request Site Technical Details. | ННМОА | LDSO | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed |
| 7.1.10 | If request for Site Technical Details rejected and within 5 WD of 7.1.9 | Send Rejection response for request for Site Technical Details including the reasons why the request has been rejected. | LDSO | ННМОА | D0382 Rejection response for Request to LDSO for Site Technical Details. | Electronic or other method, as agreed. |
| 7.1.11 | Within 5 WD of 7.1.9 | Send Site Technical Details. | LDSO ²³ | ННМОА | D0215 Provision of Site Technical Details. | Electronic or other method, as agreed. |
| 7.1.12 | Once the CoMC date is firm | Send notification of termination of appointment (if not formally deappointed in 7.1.4 or date of planned CoMC has changed) | Supplier | NHHMOA | D0151 Termination of Appointment or Contract by Supplier | Electronic or other method, as agreed |
| 7.1.13 | Within 2 WD of 7.1.8 | Instruct NHHMOA to send MTD to HHMOA. | Supplier | NHHMOA | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |
| 7.1.14 | Within 10 WD of 7.1.13 | Send MTD, including the commissioning details. | NHHMOA ¹⁵ | ННМОА | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3) Commissioning details. | Electronic or other method, as agreed. |

⁹⁵ The HHMOA shall decide whether to replace the MS or upgrade the NHH MS to a HH MS (where current MS has both HH and NHH capabilities).

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--------|---|---|-------|---------------------------|--|--|
| 7.1.15 | On the date requested or agreed in 7.1.8, subject to the completion of steps 7.1.9-7.1.14 | Note final NHH Meter register reading, if available from NHH MS. Install HH MS ⁹⁶ or invoke HH capabilities in existing NHH MS (where current MS has both HH and NHH capabilities). Commission and energise HH MS, if not already commissioned and energised. Note initial HH Meter register reading. | ННМОА | | | Internal Process. |
| 7.1.16 | If HH MS cannot be installed or energised, as soon as possible and within 5 WD of 7.1.15 | Inform Supplier. | ННМОА | Supplier | D0221 Notification of Failure to Install or Energise Metering System. | Electronic or other method, as agreed. |
| 7.1.17 | Within 5 WD of 7.1.15 | Send MTD and initial HH Meter register reading. The initial register reading should include the time as well as the date of the reading. This will allow the HHDC to estimate zero for Settlement Periods prior to the meter replacement/reconfiguration. | ННМОА | Supplier / HHDC / LDSO | D0268 Half Hourly Meter Technical Details. If site is Complex, send Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites. D0010 Meter Readings. | Electronic or other method, as agreed. |
| 7.1.18 | In accordance with timescales in Appendix 8.3.5. | Prove MS. | ННМОА | HHDC | Refer to Appendix 8.3.5. | Electronic or other method, as agreed. |

⁹⁶ The Supplier shall provide the HHMOA with the relevant details of the NHH meter where the NHH meter is to be removed by the HHMOA. Where the NHH meter is being removed by the HHMOA, the HHMOA shall agree an appropriate method for the return of the meter with the NHHMOA.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--------|--|--|--------|--|---|--|
| 7.1.19 | Within 5 WD of 7.1.15 | Send final NHH Meter register reading or notification that Meter reading not obtainable and that this is a CoMC. | ННМОА | NHHMOA | D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action. | Electronic or other method, as agreed. |
| 7.1.20 | Within 10 WD of 7.1.19 | Send final NHH Meter register reading 97 or notification that Meter register reading not obtainable and that this is a CoMC. Notification of Meter removal (or that Meter is no longer NHH) Notification of Meter removal (or that Meter is no longer NHH) | NHHMOA | NHHDC Supplier / NHHDC /LDSO MAP of old Meter | D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action. D0150 Non Half-hourly Meter Technical Details. D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | Electronic or other method, as agreed. |
| 7.1.21 | Within 10 WD of 7.1.19 | Send the relevant Meter information changes. | ННМОА | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method as agreed. |
| 7.1.22 | Immediately following 7.1.21 or 7.1.24 | Perform validation checks and send response D0312. | SMRS | HHMOA / Supplier | D0312 Notification of Meter Information to MPAS with 'MOP Flow Response Code' populated | Electronic or other method, as agreed |
| 7.1.23 | | If D0312 response is "Accepted", proceed to 7.1.25, otherwise proceed to 7.1.24. | | | | |
| 7.1.24 | Within 5 WDs of 7.1.22 | Where the rejection is of a type the HHMOA can resolve without involving other industry parties, send a corrected D0312. | ННМОА | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed |

⁹⁷ The outgoing MOA shall be entitled to use customer own reads or readings provided by the outgoing Non Half Hourly Data Collector for the final Meter readings.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--------|--|---|-------------------|---------------------|----------------------|---------------------------------------|
| | | If the HHMOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. Proceed to 7.1.22. | | | | |
| 7.1.25 | If no Meter register reading received by 15 WD after the CoMC and if required. | Request final Meter register reading | Current NHHDC | NHHMOA, Supplier | | Post / Fax / Email |
| 7.1.26 | Within 10 WD of 7.1.25 | Send final Meter register reading | NHHMOA / Supplier | Current NHHDC | D0010 Meter Readings | Electronic or other method, as agreed |

7.2 Coincident Change of Measurement Class from NHH to HH and Change of Supplier for HHDC-serviced Metering Systems⁹³.

The New Supplier should make its prospective HH agents aware of the planned Change of Measurement Class (CoMC) in advance of registering in SMRS and should ensure that the new HH agents will accept the appointment. The New Supplier should also confirm the intended CoMC date with the HHMOA (and customer). A coincident CoMC and Change of Supplier process may be infeasible, unless a HH capable Meter is already installed and a site visit is not required.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-------|--|---|---------------------|--------------|--|--|
| 7.2.1 | As required | Send appointment. | New Supplier | ННМОА | D0155 Notification of New Meter Operator or Data Collector Appointment and Terms. | Electronic or other method, as agreed. |
| 7.2.2 | If appointment rejected and within 5 WD of 7.2.1 | Send notification of rejection of appointment including the reason why the request has been rejected. | ННМОА | New Supplier | D0261 Rejection of Agent Appointment. (Go to 7.2.1 if required) | Electronic or other method, as agreed. |
| 7.2.3 | If appointment accepted and within 5 WD of 7.2.1 | Send notification of acceptance of appointment. | нимоа | New Supplier | D0011 Agreement of Contractual Terms. | Electronic or other method, as agreed. |
| 7.2.4 | Within 5WD of notification from SMRS or by last date of Supplier Appointment | Send notification of termination of appointment. | Current Supplier | NHHMOA | D0151 Termination of Appointment or Contract by Supplier. ⁹⁸ | Electronic or other method, as agreed. |
| 7.2.5 | If de-appointment accepted and within 5 WD of 7.2.4 | Send notification of de-appointment. | NHHMOA | MAP | D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | Electronic or other method, as agreed. |
| 7.2.6 | If de-appointment rejected and within 5 WD of 7.2.4 | Send notification of rejection of deappointment. | NHHMOA | Supplier | Note that rejection of de-appointment shall only occur if the current NHHMOA has a contract with the customer. | Electronic or other method, as agreed. |

⁹⁸ The Supplier shall indicate in the D0151 the reason for termination in the Additional Information field.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--------|--|---|----------------------|---------------------|---|--|
| 7.2.7 | Within 5 WD of 7.2.3 | Send notification of appointment, deappointment and associated Agent details. | New Supplier | HHDC / HHMOA | D0148 Notification of Change to Other Parties. D0289 Notification of MC/EAC/PC. D0302 Notification of Customer Details. | Electronic or other method, as agreed. |
| 7.2.8 | Following 7.2.3 and at least 12 WD prior to date of CoMC | Request HH MS functionality. 95 | New Supplier | HHMOA ²² | D0142 Request for Installation or Changes to a Metering System Functionality or the Removal of all Meters. | Electronic or other method, as agreed. |
| 7.2.9 | Within 2 WD of 7.2.8 | Request Site Technical Details. | ННМОА | LDŞO | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |
| 7.2.10 | If request for Site Technical Details rejected and within 5 WD of 7.2.9 | Send Rejection response for request for Site Technical Details including the reasons why the request has been rejected. | LDSO | ННМОА | D0382 Rejection response for Request to LDSO for Site Technical Details. | Electronic or other method, as agreed. |
| 7.2.11 | Within 5 WD of 7.2.9 | Send Site Technical Details. | LDSO ²³ | ННМОА | D0215 Provision of Site Technical Details. | Electronic or other method, as agreed. |
| 7.2.12 | Within 2 WD of 7.2.7 | Request MTD. | ННМОА | NHHMOA | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |
| 7.2.13 | Within 10 WD of 7.2.12 | Send MTD, including the commissioning details | NHHMOA ¹⁵ | ННМОА | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3) Commissioning details. | Electronic or other method, as agreed. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--------|---|--|--------|----------------------------------|---|--|
| 7.2.14 | On the date requested or agreed in 7.2.8, subject to the completion of steps 7.2.9-7.2.13 | Note final NHH Meter register reading, if available from NHH MS. Install HH MS ⁹⁶ or invoke HH capabilities in existing NHH MS (where current MS has both HH and NHH capabilities). Commission and energise HH MS, if not already commissioned and energised. Note initial HH Meter register reading. | ННМОА | | | Internal Process. |
| 7.2.15 | If HH MS cannot be installed or energised, as soon as possible and within 5 WD of 7.2.14 | Inform Supplier. | ННМОА | New Supplier | D0221 Notification of Failure to Install or Energise Metering System. | Electronic or other method, as agreed. |
| 7.2.16 | Within 5 WD of 7.2.14 | Send MTD and initial HH Meter register reading. The initial register reading should include the time as well as the date of the reading. This will allow the HHDC to estimate zero for Settlement Periods prior to the meter replacement/re-configuration. | ННМОА. | New Supplier / HHDC / LDSO | D0268 Half Hourly Meter Technical Details. If site is Complex, send Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites. D0010 Meter Readings. | Electronic or other method, as agreed. |
| 7.2.17 | In accordance with timescales in Appendix 8.3.5. | Prove MS. | ННМОА. | HHDC | Refer to Appendix 8.3.5. | Electronic or other method, as agreed. |
| 7.2.18 | Within 5 WD of 7.1.14 | Send final NHH Meter register reading or notification that Meter reading not obtainable. | ННМОА | NHHMOA | D0291 Notification of Register Readings on Change of Measurement Class coincident with Change of Supplier or D0002 Fault Resolution Report or Request for Decision on Further Action. | Electronic or other method, as agreed. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--------|------------------------|---|--------|-------------------------------|--|--|
| 7.2.19 | Within 10 WD of 7.2.18 | Send final NHH Meter register reading ⁹⁷ or notification that Meter register reading not obtainable and that this is a CoMC. | NHHMOA | NHHDC | D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action | Electronic or other method, as agreed. |
| | | Notification of Meter removal (or that Meter is no longer NHH) | | Supplier / NHHDC / LDSO | D0150 Non Half-hourly Meter Technical Details | |
| | | Notification of Meter removal (or that Meter is no longer NHH). | | MAP | D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | |

7.3 Change of Measurement Class from HH to NHH for HHDC-serviced Metering Systems 92,93

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-------|---|---|---------------|----------------------|---|--|
| 7.3.1 | As required | Send appointment. | Supplier | NHHMOA | D0155 Notification of New Meter Operator or Data Collector Appointment and Terms. | Electronic or other method, as agreed. |
| 7.3.2 | If appointment rejected and within 10 WD of 7.3.1 | Send notification of rejection of appointment including the reason why the request has been rejected. | NHHMOA | Supplier | D0261 Rejection of Agent Appointment. (Go to 7.3.1 if required) | Electronic or other method, as agreed. |
| 7.3.3 | If appointment accepted and within 10 WD of 7.3.1 | Send notification of acceptance of appointment. | NHHMOA | Supplier | D0011 Agreement of Contractual Terms. | Electronic or other method, as agreed. |
| 7.3.4 | Within 5 WD of 7.3.3 | Send notification of termination of appointment. | Supplier | ННМОА | D0151 Termination of Appointment or Contract by Supplier. ⁹⁴ | Electronic or other method, as agreed. |
| 7.3.5 | Within 5 WD of 7.3.4 | Send notification of rejection of de-appointment. | Current HHMOA | Supplier | Note that rejection of deappointment shall only occur if the current HHMOA has a contract with the customer. | Electronic or other method, as agreed. |
| 7.3.6 | Between 5 WD ¹⁴ and 10WD of 7.3.4 | Send notification of appointment, de-appointment and associated Agent details. | Supplier | NHHMOA / NHHDC | D0148 Notification of Change to Other Parties. D0302 Notification of Customer Details. | Electronic or other method, as agreed. |
| 7.3.7 | Following 7.3.3 and at least 7 WD ²¹ prior to date of CoMC | Request NHH MS functionality. | Supplier | NHHMOA ⁹⁹ | D0142 Request for Installation or Changes to a Metering System Functionality or the Removal of all Meters. | Electronic or other method, as agreed. |

-

⁹⁹ The NHHMOA shall decide whether to replace the MS or to reconfigure the existing MS, as required (where current MS has both HH and NHH capabilities).

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--------|--|---|--------------------|--------|--|--|
| 7.3.8 | Within 2 WD of 7.3.7 | Request Site Technical Details. | NHHMOA | LDSO | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed |
| 7.3.9 | If request for Site Technical Details rejected and within 5 WD of 7.3.8 | Send Rejection response for request for Site Technical Details including the reasons why the request has been rejected. | LDSO | NHHMOA | D0382 Rejection response for Request to LDSO for Site Technical Details. | Electronic or other method, as agreed. |
| 7.3.10 | Within 5 WD of 7.3.8 | Send Site Technical Details. | LDSO ²³ | NHHMOA | D0215 Provision of Site Technical Details. | Electronic or other method, as agreed. |
| 7.3.11 | Within 2 WD of 7.3.7 | Instruct HHMOA to send MTD to NHHMOA | Supplier | ННМОА | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |
| 7.3.12 | Within 5 WD of 7.3.11 | Send MTD. | HHMOA 15 | NHHMOA | D0268 Half Hourly Meter Technical Details. If site is Complex, send Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites. | Electronic or other method, as agreed. |
| 7.3.13 | Within 2 WD of 7.3.7 | Request that final HH Metered Data is collected. | Supplier | HHDC | D0005 Instruction on Action. | Electronic or other method, as agreed. |
| 7.3.14 | Within 3 WD of 7.3.13 and before planned date of CoMC | Arrange date by when final HH Metered Data should be collected. | HHDC | NHHMOA | D0005 Instruction on Action. Note that a date for the CoMC has been requested in step 7.3.7 | Electronic or other method, as agreed. |
| 7.3.15 | On date and time agreed in 7.3.14, subject to the completion of steps 7.3.8 - 7.3.12 | Collect final HH Metered Data. | HHDC | | | Internal Process. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--------|---|--|--------|----------|---|--|
| 7.3.16 | Immediately following 7.3.15 | Confirm final HH Metered Data collection. | HHDC | NHHMOA | The MOA will telephone the HHDC when the MOA is on site (or when the MOA is ready to reconfigure the Meter). Following the HHDC collecting the data, the HHDC will provide confirmation to the MOA. | Telephone. |
| 7.3.17 | Immediately following 7.3.16 | If the HH Meter is being replaced, note final HH Meter register reading, if available from HH MS. Install NHH MS ¹⁰⁰ , commission and energise and note initial | NHHMOA | | | Internal Process. |
| | | Meter register reading. If the HH Meter is not being replaced, retrieve an initial NHH Meter register reading(s), either locally or remotely, having configured any time of use registers as required. The initial NHH Meter register readings should be taken on the date and time agreed with the HHDC in 7.3.13. | | | | |
| 7.3.18 | If NHH MS cannot be installed or energised, as soon as possible and within 5 WD of 7.3.17 | Inform Supplier. | NHHMOA | Supplier | D0221 Notification of Failure to Install or Energise Metering System. | Electronic or other method, as agreed. |

¹⁰⁰ The Supplier shall provide the NHHMOA with the relevant details of the HH meter where the HH meter is to be removed by the NHHMOA. Where the HH meter is being removed by the NHHMOA, the NHHMOA shall agree an appropriate method for the return of the meter with the HHMOA.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--------|--|---|--------|----------------------------|---|--|
| 7.3.19 | Within 10 WD of 7.3.17 | Send MTD. | NHHMOA | Supplier / NHHDC / LDSO | D0150 Non Half-hourly Meter Technical Details. | Electronic or other method, as agreed. |
| | | | | | D0149 Notification of Mapping Details. | |
| | | | | | D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3) | |
| | | Send initial NHH Meter register reading. | | NHHDC | D0010 Meter Readings. | |
| | | Send notification of Meter installation, Supplier and NHHMOA's appointment. | OOC | MAP | D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | |
| 7.3.20 | Within 10 WD of 7.3.17 | Send the relevant Meter information changes. | NHHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method as agreed. |
| 7.3.21 | Immediately following 7.3.20 or 7.3.23 | Perform validation checks and send response D0312. | SMRS | NHHMOA / Supplier | D0312 Notification of Meter Information to MPAS with 'MOP Flow Response Code' populated | Electronic or other method, as agreed |
| 7.3.22 | | If response is "Accepted", proceed to 7.3.24, otherwise proceed to 7.3.23. | | | | |
| 7.3.23 | Within 5 WDs of 7.3.21 | Where the rejection is of a type the NHHMOA can resolve without involving other industry parties, send a corrected D0312. | NHHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--------|--|--|----------------------|---------------------|---|--|
| | | If the NHHMOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. | | | | |
| | | Proceed to 7.3.21. | | × | | |
| 7.3.24 | If no Meter register reading received within 10 WD of CoMC and initial reading required and same Metering Equipment is in use. | Request initial Meter register reading If no request for initial Meter register reading required, proceed to 7.3.24. | NHHDC | NHHMOA, Supplier | | Post / Fax / Email |
| 7.3.25 | Within 10 WD of 7.3.24 | Send initial Meter register reading | NHHMOA / Supplier | NHHDC | D0010 Meter Readings | Electronic or other method, as agreed |
| 7.3.26 | Within 10 WD of 7.3.17 | Send final HH Meter register reading or notification that Meter register reading not obtainable and that this is a CoMC. | NHHMOA | ННМОА | D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action. | Electronic or other method, as agreed. |
| 7.3.27 | Within 5 WD of 7.3.26 | Send final HH Meter register reading or notification that Meter register reading not obtainable and that this is a CoMC. | ннмоа | ННОС | D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action. | Electronic or other method, as agreed. |

¹⁰¹ An initial Meter reading is required for a co-incident CoS and CoMC. It is optional for a CoMC only.

7.4 Coincident Change of Measurement Class from HH to NHH and Change of Supplier for HHDC-serviced Metering Systems.

The New Supplier should make its prospective NHH agents aware of the planned Change of Measurement Class (CoMC) in advance of registering in SMRS and ensure that the new NHH agents will accept the appointment. The New Supplier should also confirm the intended CoMC date with the NHHMOA (and customer).

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-------|---|---|---------------------|----------------------|---|--|
| 7.4.1 | As required | Send appointment. | New Supplier | NHHMOA | D0155 Notification of New Meter Operator or Data Collector Appointment and Terms. | Electronic or other method, as agreed. |
| 7.4.2 | If appointment rejected and within 10 WD of 7.4.1 | Send notification of rejection of appointment including the reason why the request has been rejected. | NHHMOA | New Supplier | D0261 Rejection of Agent Appointment. (Go to 7.4.1 if required) | Electronic or other method, as agreed. |
| 7.4.3 | If appointment accepted and within 10 WD of 7.3.1 | Send notification of acceptance of appointment. | NHHMOA | New Supplier | D0011 Agreement of Contractual Terms. | Electronic or other method, as agreed. |
| 7.4.4 | Within 5 WD of notification from SMRS or by last date of Supplier Appointment | Send notification of termination of appointment. | Current Supplier | ННМОА | D0151 Termination of Appointment or Contract by Supplier. 98 | Electronic or other method, as agreed. |
| 7.4.5 | If de-appointment rejected and within 5 WD of 7.4.4 | Send notification of rejection of deappointment. | Current HHMOA | Supplier | Note that rejection of de-appointment shall only occur if the current HHMOA has a contract with the customer. | Electronic or other method, as agreed. |
| 7.4.6 | Within 5 WD of 7.4.3 | Send notification of appointment, deappointment and associated Agent details. | New Supplier | NHHMOA / NHHDC | D0148 Notification of Change to Other Parties. D0302 Notification of Customer Details. | Electronic or other method, as agreed. |
| 7.4.7 | Following 7.4.3 and at least 7 WD ²¹ prior to date of CoMC | Request NHH MS functionality. | New Supplier | NHHMOA ⁹⁹ | D0142 Request for Installation or Changes to a Metering System Functionality or the Removal of all Meters. | Electronic or other method, as agreed. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--------|--|--|---------------------|--------|---|--|
| 7.4.8 | Within 2 WD of 7.4.7 | Request Site Technical Details. | NHHMOA | LDSO | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |
| 7.4.9 | If request for Site Technical Details rejected and within 5 WD of 7.4.8 | Send Rejection response for request for Site Technical Details including the reasons why the request has been rejected. | LDSO | NHHMOA | D0382 Rejection response for Request to LDSO for Site Technical Details. | Electronic or other method, as agreed. |
| 7.4.10 | Within 5 WD of 7.4.8 | Send Site Technical Details. | LDSO ²³ | NHHMOA | D0215 Provision of Site Technical Details. | Electronic or other method, as agreed. |
| 7.4.11 | Within 2 WD of 7.4.7 | Request MTD. | NHHMOA | ННМОА | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |
| 7.4.12 | Within 5 WD of 7.4.11 | Send MTD. | HHMOA ¹⁵ | NHHMOA | D0268 Half Hourly Meter Technical Details. If site is Complex, send Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites. | Electronic or other method, as agreed. |
| 7.4.13 | Within 2 WD of 7.4.7 | Request that final HH Metered Data is collected. | Current Supplier | HHDC | D0005 Instruction on Action. | Electronic or other method, as agreed. |
| 7.4.14 | Within 3 WD of 7.3.13 and before planned date of CoMC | Arrange date by when final HH Metered Data should be collected. | HHDC | NHHMOA | D0005 Instruction on Action. Note that a date for the CoMC has been requested in step 7.4.7 | Electronic or other method, as agreed. |
| 7.4.15 | On date and time agreed in 7.4.14, subject to the completion of steps 7.4.7 – 7.4.12 | Collect final HH Metered Data. | HHDC | | | Internal Process. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--------|---|--|--------|--|---|--|
| 7.4.16 | Immediately following 7.4.15 | Confirm final HH Metered Data collection. | HHDC | NHHMOA | The MOA will telephone the HHDC when the MOA is on site. Following the HHDC collecting the data, the HHDC will provide confirmation to the MOA. | Telephone. |
| 7.4.17 | Immediately following 7.4.16 | If the HH Meter is being replaced, note final HH Meter register reading, if available from HH MS. Install NHH MS ¹⁰⁰ , commission and energise, and note initial NHH Meter register reading. | NHHMOA | | | Internal Process. |
| | | If the HH Meter is not being replaced, retrieve an initial NHH Meter register reading(s), either locally or remotely, having configured any time of use registers as required. | | | | |
| | If NHH MS cannot be installed or energised, as soon as possible and within 5 WD of 7.4.17 | Inform Supplier. | NHHMOA | New Supplier | D0221 Notification of Failure to Install or Energise Metering System. | Electronic or other method, as agreed. |
| 7.4.19 | Within 10 WD of 7.4.17 | n 10 WD of 7.4.17 Send MTD. | NHHMOA | New Supplier / NHHDC / LDSO New Supplier / NHHDC | D0150 Non Half-hourly Meter Technical Details. D0313 Auxiliary Meter Technical | Electronic or other method, as agreed. |
| | | | | | Details (in accordance with Appendix 9.3) | |
| | | Send initial NHH Meter register reading. | | NHHDC | D0010 Meter Readings. | |
| | | Send notification of Meter installation and Supplier. | | MAP | D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--------|---|--|----------------------|---------------------|--|--|
| | If no Meter register reading received within 10 WD of CoMC and initial reading required and if same Metering Equipment is in use. | Request initial Meter register reading If no request for initial Meter register reading required, proceed to 7.4.21. | NHHDC | NHHMOA, Supplier | | Post / Fax / Email |
| 7.4.21 | Within 10 WD of 7.4.20 | Send initial Meter register reading | NHHMOA / Supplier | NHHDC | D0010 Meter Readings | Electronic or other method, as agreed |
| 7.4.22 | Within 5 WD of 7.4.17 | Send final HH Meter register reading or notification that Meter register reading not obtainable and that this is a CoMC coincident with CoS. | NHHMOA | ННМОА | D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action. | Electronic or other method, as agreed. |
| 7.4.23 | Within 5 WD of 7.4.22 | Send final HH Meter register reading or notification that Meter register reading not obtainable and that this is a CoMC. | ННМОА | HHDC | D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action. | Electronic or other method, as agreed. |

7.5 Change of Measurement Class from NHH to HH for Supplier-serviced Metering Systems (no change of MOA¹⁰²).

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-------|---|--|-----------|------------------|--|--|
| 7.5.1 | If Supplier reconfigures the Time of Use registers. | Send Smart Meter Configuration Details. If the Time of Use registers are not configured to a valid Standard Settlement Configuration (as defined in MDD), the Supplier will notify a single rate SSC. | Supplier. | MOA. | D0367 Smart Meter Configuration Details (or alternative method, as agreed bilaterally between the Supplier and MOA) ¹⁰³ . | Electronic or other method, as agreed. |
| 7.5.2 | Within 10 WD of 7.5.1. | Send MTD. | MOA. | Supplier / LĎSO. | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details 103. | Electronic or other method, as agreed. |

103 Meter Type (J0483) should not be set to 'H' for Half Hourly. This will ensure that the original value, typically the SMETS version or variant, is available if the Metering System is subsequently registered as NHH.

Balancing and Settlement Code

¹⁰² The NHHMOA will retain responsibility for the HH Metering System, so the Supplier does not need to send an appointment flow unless changing the NHHMOA. For a coincident CoMC and change of MOA, this process should be read in conjunction with the MOA steps in the concurrent CoMC and CoS process.

7.6 Coincident Change of Measurement Class from NHH to HH and Change of Supplier for Supplier-serviced Metering Systems.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-------|---|---|-------------------|-------------------------|---|--|
| 7.6.1 | As required. | Send appointment. | New Supplier. | New MOA ¹² . | D0155 Notification of New Meter Operator or Data Collector Appointment and Terms ¹³ . | Electronic or other method, as agreed. |
| 7.6.2 | If appointment rejected and within 5 WD of 7.6.1. | Send notification of rejection of appointment including the reason why the request has been rejected. | New MOA. | New Supplier: | D0261 Rejection of Agent Appointment. (Go to 7.6.1 if required). | Electronic or other method, as agreed. |
| 7.6.3 | If appointment accepted and within 5 WD of 7.6.1. | Send notification of acceptance of appointment. | New MOA. | New Supplier. | D0011 Agreement of Contractual Terms. | Electronic or other method, as agreed. |
| 7.6.4 | Within 5WD of notification from SMRS or by last date of Supplier Appointment. | Send notification of termination of appointment. | Current Supplier. | Old NHHMOA. | D0151 Termination of Appointment or Contract by Supplier ¹⁰⁴ . | Electronic or other method, as agreed. |
| 7.6.5 | If de-appointment rejected and within 5 WD of 7.6.4. | Send notification of rejection of de-appointment. | Old NHHMOA. | Current Supplier | Note that rejection of deappointment shall only occur if the current NHHMOA has a contract with the customer. | Electronic or other method, as agreed. |
| 7.6.6 | Within 5 WD of 7.6.3. | Send notification of appointment, de-appointment and associated Agent details. | New Supplier. | New MOA. | D0148 Notification of Change to Other Parties. D0289 Notification of MC/EAC/PC. D0302 Notification of Customer Details. | Electronic or other method, as agreed. |

 $^{^{104}}$ The Supplier shall indicate in the D0151 the reason for termination in the Additional Information field.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--------|--|--|----------------------------|----------------------|--|--|
| 7.6.7 | Within 2 WD of 7.6.6. | Request MTD. | New MOA. | Old NHHMOA. | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |
| 7.6.8 | Within 10 WD of 7.6.7. | Send MTD, including the commissioning details. | Old NHHMOA ¹⁵ . | New MOA. | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. | Electronic or other method, as agreed. |
| 7.6.9 | If New Supplier reconfigures the Time of Use registers. | Send Smart Meter Configuration Details. If the Time of Use registers are not configured to a valid Standard Settlement Configuration (as defined in MDD), the Supplier will notify a single rate SSC. | New Supplier. | New MOA. | D0367 Smart Meter Configuration Details (or alternative method, as agreed bilaterally between the Supplier and MOA) ¹⁰³ . | Electronic or other method, as agreed. |
| 7.6.10 | Within 5 WD of 7.6.8. | Send MTD. | New MOA. | New Supplier / LDSO. | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details ¹⁰³ . | Electronic or other method, as agreed. |
| 7.6.11 | Within 10 WD of Change of Measurement Class / Change of Supplier. | Notification of New Supplier. | Ñew MOA. | MAP. | D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | Electronic or other method, as agreed. |

7.7 Change of Measurement Class from HH to NHH for Supplier-serviced HH Metering Systems.

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-------|--|---|-----------|------------------------|--|--|
| 7.7.1 | On receipt of appointment confirmation from the NHHDC. | Send associated Agent details. | Supplier. | NHHMOA . | D0148 Notification of Change to Other Parties. If required: D0302 Notification of Customer Details. | Electronic or other method, as agreed. |
| 7.7.2 | If Supplier reconfigures the Time of Use registers. | Send Smart Meter Configuration Details. | Supplier. | NННМОА . | D0367 Smart Meter Configuration Details (or alternative method, as agreed bilaterally between the Supplier and MOA). | Electronic or other method, as agreed. |
| 7.7.3 | Within 10 WD of NHHDC appointment date in D0148 received in step 7.7.1. | Send MTD. If the Supplier is unable to configure the Meter (for example, due to a communications failure), the SSC and TPR will be those held while the Metering System was being traded HH. | NHHMOA. | Supplier / NHHDC/LDSO. | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. | Electronic or other method, as agreed. |
| 7.7.4 | If Meter information has changed and within 10 WD of changes being made. | Send the relevant Meter information changes. | NHHMOA. | SMRS. | D0312 Notification of Meter Information to MPAS. | Electronic or other method as agreed. |
| 7.7.5 | Immediately following 7.7.4 or 7.7.7 | Perform validation checks and send response D0312. | SMRS | NHHMOA Supplier | D0312 Notification of Meter Information to MPAS with 'MOP Flow Response Code' populated | Electronic or other method, as agreed |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-------|-----------------------|--|--------|------|--|---------------------------------------|
| 7.7.6 | | If response is "Accepted", end process, otherwise proceed to 7.7.7. | | | | |
| 7.7.7 | Within 5 WDs of 7.7.5 | Where the rejection is of a type the NHHMOA can resolve without involving other industry parties, send a corrected D0312. If the NHHMOA needs to involve other industry parties to resolve the issue, then reasonable endeavours should apply. Proceed to 7.7.5. | NHHMOA | SMRS | D0312 Notification of Meter Information to MPAS. | Electronic or other method, as agreed |

Coincident Change of Measurement Class from HH to NHH and Change of Supplier for Supplier-serviced Metering Systems. **7.8**

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|-------|--|---|-------------------|----------------------|--|--|
| 7.8.1 | As required. | Send appointment. | New Supplier. | New NHHMOA. | D0155 Notification of New Meter Operator or Data Collector Appointment and Terms. | Electronic or other method, as agreed. |
| 7.8.2 | If appointment rejected and within 10 WD of 7.8.1. | Send notification of rejection of appointment including the reason why the request has been rejected. | New NHHMOA. | New Supplier. | D0261 Rejection of Agent Appointment. (Go to 7.4.1 if required). | Electronic or other method, as agreed. |
| 7.8.3 | If appointment accepted and within 10 WD of 7.8.1. | Send notification of acceptance of appointment. | New NHHMOA. | New Supplier. | D0011 Agreement of Contractual Terms. | Electronic or other method, as agreed. |
| 7.8.4 | Within 5 WD of notification from SMRS or by last date of Supplier Appointment. | Send notification of termination of appointment. | Current Supplier. | Current MOA. | D0151 Termination of Appointment or Contract by Supplier ⁹⁸ . | Electronic or other method, as agreed. |
| 7.8.5 | If de-appointment rejected and within 5 WD of 7.8.4. | Send notification of rejection of deappointment. | Current MOA. | Current Supplier. | Note that rejection of deappointment shall only occur if the old MOA has a contract with the customer. | Electronic or other method, as agreed. |
| 7.8.6 | Within 5 WD of 7.8.3. | Send notification of associated Agent details. | New Supplier. | New NHHMOA. | D0148 Notification of Change to Other Parties. D0302 Notification of Customer Details. | Electronic or other method, as agreed. |
| 7.8.7 | Within 2 WD of 7.8.6. | Request MTD. | New NHHMOA. | Current MOA. | D0170 Request for Metering System Related Details. | Electronic or other method, as agreed. |

| REF | WHEN | ACTION | FROM | то | INFORMATION REQUIRED | METHOD |
|--------|---|--|-----------------------------|------------------------------------|--|--|
| 7.8.8 | Within 5 WD of 7.8.7. | Send MTD. | Current MOA ¹⁵ . | New NHHMOA. | D0149 Notification of Mapping Details. | Electronic or other method, as agreed. |
| | | | | | D0150 Non Half-hourly Meter Technical Details. | |
| 7.8.9 | Within 1 WD of configuration or within 1 WD of SSD as applicable | Send Smart Meter Configuration Details. If unable to re-configure the Time of Use registers within 5 working days, or no re-configuration required, the Supplier will notify the existing configuration details, where known. | New Supplier. | New NHHMOA. | D0367 Smart Meter Configuration Details (or alternative method, as agreed bilaterally between the Supplier and MOA). | Electronic or other method, as agreed. |
| 7.8.10 | Within 5 WD of 7.8.8. | Send MTD. | New NHHMOA. | New Supplier / NHHDC / LDSO. | D0149 Notification of Mapping Details. D0150 Non Half-hourly Meter Technical Details. | Electronic or other method, as agreed. |
| 7.8.11 | Within 10 WD of Change of Measurement Class/Change of Supplier. | Send notification of New Supplier. | New NHHMOA. | MAP. | D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. | |

8 Appendices - Half Hourly

8.1 Sealing

All ME shall be sealed in accordance with the relevant sections of the Meter Operation Code of Practice Agreement and the relevant Code of Practice (CoP).

8.2 Key SVA Meter Technical Details.

Below is a list of key fields of Meter Technical Details that shall cause the HH MS to be proved if any, or all, of them are changed whilst the MS is energised:

- Outstation Id;
- Meter Id (serial number);
- Outstation number of channels;
- Measurement Quantity Id;
- Meter multiplier;
- Pulse multiplier;
- CT and / or VT Ratios; and
- Access to ME at Password Level 3. 105

Where any, or all of the above are changed whilst a MS is de-energised, a proving test shall be initiated as soon as that MS becomes energised and completed in the timescales set out in Appendix 8.3.3.

ocument

8.3 Proving of Half Hourly Metering Systems

A proving test is required where:

- The MS is a Complex Site (including where Measurement Class F); or
- The MS has a separate Outstation; or
- The MS has an integral Outstation which can have a pulse multiple other than 1, as identified on the ELEXON website (compliance and protocol approval list).

8.3.1 Reasons for a Proving Test

Subject to 5.5, a proving test shall be carried out on both main and check MS and shall be carried out in any of the following circumstances:

As a result of new connection or Registration Transfers from CMRS to SMRS;

-

¹⁰⁵ Where access to the Metering Equipment at Password Level 3 has changed only the schedule for automated data transfer, a Proving Test will not be required

- Following a change of HHDC appointment but only in the event that the MTD was manually intervened;
- Following a change of HHMOA appointment but only in the event that the MTD was manually intervened;
- Following a concurrent Change of Supplier and HHDC but only in the event that the MTD was manually intervened;
- When a MS is reconfigured / replaced;
- Following a change of Measurement Class from NHH to HH;
- When there is a Key field change (refer to Appendix 8.2);
- Where there has been a key field change (refer to Appendix 8.2) whilst a site has been de-energised and the MS becomes energised;
- Whenever a shared SVA MS arrangement is carried out;
- Where a feeder is energised for the first time; or
- Where a Complex Site is created, modified or removed, or where one of the above changes impacts on a MS which is part of a Complex Site.

'Manually intervened (with regard to proving tests)' means that MTD have been entered, reentered or changed in a software system manually i.e. the data has not been automatically entered into systems via receipt of a data flow.

MS assigned to Measurement Class F and MS where Half Hourly data is sourced by the Supplier from a Meter compliant with the SMETS, are exempt from proving tests.

8.3.2 Methods of Proving

The HHMOA shall decide from methods 1 to 4 which method of proving test is appropriate in conjunction with the HHDC. A Complex Site shall always be proved using the Complex Site Validation Test.

Complex Sites shall be proven in the same way as non Complex Sites except the HHMOA shall use the aggregated data provided by the MS for comparison.

Method 1

The HHMOA installs / reconfigures the MS and commissions the MS and records the HH Metered Data reading while on site. The HHMOA then requests the HHDC to collect HH Metered Data for the same Settlement Period as collected by the HHMOA. The HHDC then collects the HH Settlement Period requested and sends this raw HH Metered Data to the HHMOA for comparison.

Method 2

The HHMOA installs / reconfigures the MS and commissions the MS and records the HH Metered Data reading while on site. The HHMOA then agrees with the HHDC a date and time

for the proving test. The HHMOA visits the site a second time and collects and records the HH Metered Data reading for the specified HH Settlement Period requested of the HHDC. The HHDC collects for the same HH Settlement Period and sends this raw HH Metered Data to the HHMOA for comparison.

Method 3

The HHMOA installs / reconfigures the MS and commissions the MS and records the HH Meter register reading while on site. When at the office, the HHMOA then uses its own data retrieval system to read the MS for the same HH Settlement Period as collected during the site visit. The HHMOA then compares the HH Metered Data collected on site with the data retrieved at the office. The HHDC collects for the HH Settlement Period of own choosing and sends this to the HHMOA. The HHMOA then uses its data retrieval system to read for the same HH Settlement Period as provided by the HHDC.

Method 4

The HHMOA installs / reconfigures the MS and commissions the MS and records the HH Metered Data reading while on site. The HHDC collects for the HH Settlement Period of own choosing and sends this to the HHMOA¹⁰⁶. The HHMOA then uses either the manufacturer's software or software which has a relevant protocol approval in accordance with BSCP601 'Metering Protocol Approval and Compliance Testing' to read the Meter constants, pulse multiplier, serial number etc, then collects Meter pulses or engineering data for the same HH Settlement Period as provided by the HHDC and calculates the reading.

Complex Site Validation Test

Complex Sites (including Measurement Class F Metering Systems) shall be proven in the same way as non Complex Sites except the HHMOA shall use the aggregated data provided by the MS for comparison.

8.3.3 Comparison of Data

After a proving test has been undertaken by any of the methods selected above, the HHMOA then compares the data received from the HHDC to determine a successful or a failed proving test.

8.3.4 Reporting

The HHMOA shall report both successful and non-successful proving tests to relevant parties.

8.3.5 Proving Test / Re-Test Timescales

Proving Test Timescales

A proving test may be undertaken prior to the appointment of the HHDC and / or HHMOA in the SMRS so long as there is agreement between the Supplier, HHMOA, HHDC and the customer.

¹⁰⁶ Ideally this should be the latest Settlement Period for which non-zero data is available. This is to prevent the data from being overwritten in the Meter's memory before the HHMOA has had time to collect it.

The timescale for carrying out the proving test shall vary depending on the Code of Practice that the MS is assigned to.

It is not necessary that all the steps of the relevant processes are carried out on the same day; the requirement is that the proving test in its entirety is completed by the timescale specified below and subject to the exceptions listed below. The maximum timescale between the initiation of a proving test as a result of the circumstances in 8.3.1 and the successful completion of the proving test by the HHMOA (by sending the D0214 Confirmation of Proving Tests) to the HHDC is listed below for each CoP.

Re-Test Timescales

Where the proving test has failed, the HHMOA shall initiate a re-test and the HHMOA and HHDC should ensure wherever possible that the timescale is the same as for the original proving test.

Extended Proving Test / Re-Test Timescales During the P272 Transition Period

For MS assigned to Code of Practice 10, the 'extended' timescale will be applied to any proving test and subsequent re-test where the original proving test is initiated during the period commencing on 5 November 2015 and ending on the last calendar day before the P272 Implementation Date inclusive. The 'standard' timescale will be applied where the original proving test is initiated on or before 4 November 2015 or on or after the P272 Implementation Date.

Any MS assigned to any other Codes of Practice will remain subject to standard proving test timescales at all times.

Timescales

| Code of Practice | WDs to Complete Proving Test ¹⁰⁷ | WDs to Complete Re-Test | Total |
|------------------|--|----------------------------|-------|
| One | 5 | 5 | 10 |
| Two | 5 | 5 | 10 |
| Three | 10 | 10 | 20 |
| Five | 15 | 15 | 30 |
| Ten (standard) | 15 | 15 | 30 |
| Ten (extended) | 30 | 30 | 60 |

In the event that timescales are exceeded and the proving test is not completed, the process shall proceed to completion and an audit trail will be maintained by Supplier Agents in order to explain the delay.

_

¹⁰⁷ The starting date for this time is either the Date of Meter Installation, the Date of Commissioning, the Effective From Date of the Meter, the Effective Date of a Change of Agent as described in Section 8.3.1, or the date when a Metering System becomes energised where there has been a key field change whilst the Metering System was de-energised, whichever is the later.

8.4 Guide to Complex Sites

'Complex Site' means; any site that requires a 'Complex Site Supplementary Information Form' to enable the HHDC to interpret the standing and dynamic Metered Data relating to SVA MS for Settlement purposes to be provided to the HHDC in addition to the D0268 'Half Hourly Meter Technical Details'.

The primary electronic data flow between the HHMOA and HHDC for Half Hourly Meter Technical Details is the D0268. In the case of Complex Sites, this data flow alone is insufficient to accurately describe to the HHDC how to allocate the various channels of data that should be utilised in Settlements, therefore the D0268 is supplemented with the 'Complex Site Supplementary Information Form'.

The HHMOA should identify a Complex Site by providing a 'Complex Site Supplementary Information Form' in addition to the D0268 data flow to the HHDC and Supplier and indicating in the D0268 data flow that the site is complex. The 'Complex Site Supplementary Information Form' shall be sent no later than the sending of the D0268 or preferably in advance of the D0268 data flow. This action shall alert the HHDC to expect a 'Complex Site Supplementary Information Form' from the HHMOA containing details of how to configure the data collection requirements and passing of information to the HHDA and Supplier. The 'Complex Site Supplementary Information Form' should be sent electronically or by any other method agreed.

It is the responsibility of Suppliers to manage and co-ordinate their Agents to achieve compliance and to intervene should any issues arise.

The Supplier should identify to the HHMOA which MSIDs relate to the Import energy and which MSIDs relate to the Export energy.

Where the Complex Site is subject to Shared Meter Arrangements, one D0268 data flow and therefore one 'Complex Site Supplementary Information Form' is required. The D0268 'Complex Site Supplementary Information Form' shall be sent by the HHMOA to the HHDC and the Primary Supplier. The Primary Supplier shall decide whether this information shall be copied to the Secondary Supplier(s) and provide this information if required.

In many cases, a Complex Site shall meet the conditions required to apply for a Metering Dispensation as described in BSCP32 'Metering Dispensations'. Where Complex Sites use MS which are not fully compliant with the relevant CoP, a Metering Dispensation should be applied for via BSCP32. Once a Dispensation has been granted, the information shall be available for all future Suppliers, so that they shall have the ability to understand the metering configuration at the Complex Site. As part of the dispensation application process, the Supplier shall need to submit a simplified schematic diagram of the Complex Site connection arrangements and the proposed metering points, as required in BSCP32.

A Complex Site Validation Test in accordance with section 5.5.6 shall be carried out by the HHMOA. The purpose of this test is to verify that the Complex Site Supplementary Information Form has been correctly interpreted by the HHDC. The information to be provided by the HHDC shall be the aggregated volumes of all the relevant Outstation channels associated with the Complex Site. The HHMOA will confirm the data provided is consistent with the complex rule or otherwise.

This Appendix 8.4.1 to 8.4.8 provides a non-exhaustive list of Examples of Complex Sites and non-Complex Sites. These examples illustrate the need to create rules that accurately describe the aggregation necessary to derive the total energy for a customer. The aggregation rule contains terms that define each metered quantity at each Meter Point and form part of the total energy. The HHMOA is required to define the terms in the aggregation rule relative to the data.

The HHDC is required to establish gross energy for the site for each Settlement Period. This is achieved by applying the aggregation rule to the metered data values. If the resultant value applied to the rule is positive, the site is Exporting, and the Import value is zero. Conversely, if the result is negative, then the site is Importing, and the Export value is zero. Where the resultant is zero, the site is neither importing nor exporting and both values shall be zero.

When the HHMOA indicates Complex Site on the D0268 data flow, the HHMOA is required to provide all the information necessary, via the 'Complex Site Supplementary Information Form', for the HHDC to aggregate correctly. As part of the supplementary information, the HHMOA is required to provide a schematic diagram of the MS.

Form BSCP514/8.4.8 'Complex Site Supplementary Information Form' provides a means for the HHMOA to convey the information necessary for correct aggregation. BSCP514/8.4.8a gives an overview of the data source and BSCP514/8.4.8b shows the information needed to collect that data.

Where meter channel data is missing, incomplete or incorrect, the HHDC should attempt to use the associated check data indicated on BSCP514/8.4.8a.

Where duplicated Outstations are provided, two sets of BSCP514/8.4.8a shall be provided each clearly indicating primary and secondary Outstations.

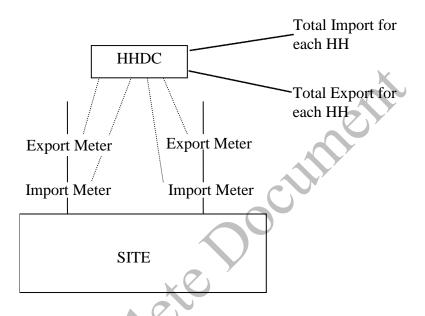
30°50/ETK

8.4.1 Off-site Totalisation

This example is an example of a non-Complex Site where multiple feeders exist. Each feeder is normally equipped with Code of Practice compliant Meter(s). The HH data is collected and summated off-site by the HHDC and then submitted for Settlement as a single set of HH data.

Where both Import and Export Meters are present, the Export Meter shall be totalled in the same way as Import metering so that both calculations are gross.

For this reason, the netting of Export energy from Import energy should not be carried out. The BSC also states that there must be only one HHMOA for a MS that measures both Export and Import active energy.



No. of Import MSIDs = 1

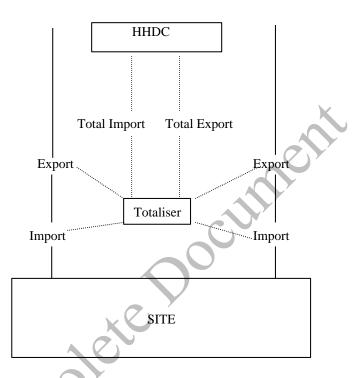
No. of Export MSIDs = 1

An alternative would be for each Import or Export Meter to have its own MSID. In this case, totalisation would be carried out by the HHDA as opposed to the HHDC, and the example above would have 2 Import MSIDs and 2 Export MSIDs. This arrangement would be more desirable since it is not a Complex Site and so would not require a Metering Dispensation.

8.4.2 On-site Totalisation

This is an example of a non-Complex Site, where totalisation is possible by intelligent Outstations, this is permitted provided Import and Export data are provided separately to the HHDC and then on to the HHDA for Settlement. In this example, two streams of data are sent from the on-site totaliser to the HHDC, one set of HH data for total Import and one set of HH data for total Export.

Netting of Exports and Imports shall not be permitted at site.



No. of Import MSIDs = 1 No. of Export MSIDs = 1

8.4.3 Customers on a Licence Exempt Distribution (Private) Networks requiring Third Party Access for a Supplier of their choice

This is an example where one or more customers within a Licence Exempt Distribution Network are supplied with electricity by a third party licensed Supplier and therefore customer have their own MSID. There are two ways the BSC can accommodate this:

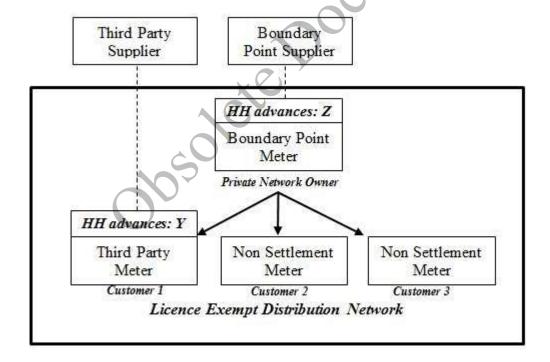
Full Settlement Option

If all customers on the private network have an MSID, a BSC Settlement Metering System with a Supplier of their choice, the private network becomes an 'Associated Distribution System'. MSIDs within an 'Associated Distribution System' will be similar to MSIDs connected to a Licensed Distribution Network, hence the same obligations shall be applicable.

Difference Metering Option

Where one or more customers (not all) have a BSC Settlement Metering System with a Supplier of their choice, this requires the deduction of the consumption through the Third Party Meter(s) from the Boundary Point Meter.

- Customer 1's HH advances: Y
- Private network owner's HH advances (Boundary Point Meter): Z Y



In the context of a private network, the following terms are defined:

- <u>Boundary Point Supplier:</u> The Supplier appointed at the Boundary Point of the private network; usually appointed by the private network owner;
- <u>Boundary Point Meter</u>: Code of Practice (CoP) Compliant Settlement Meter at the Boundary Point;

- <u>Third Party Supplier</u>: A Supplier appointed by a customer on the private network;
- <u>Third Party Meter</u>: CoP compliant Settlement Meter for the customer on the private network; and
- <u>Non Settlement Meter</u>: A meter that is not registered for Settlement purposes.

As the Third Party Meters will not be at the Boundary Point, the Registrant for each Metering System must apply for a Metering Dispensation or if available, use any relevant Generic Metering Dispensation.

In order to maintain the integrity of Settlement under these arrangements it will be necessary for Registrants to:

- Be HH Settled;
- Appoint and maintain the same HHMOA as the Boundary Point Supplier;
- Appoint and maintain the same HHDC as the Boundary Point Supplier; and
- Account for electrical losses between the Defined Metering Point (DMP) and the Actual Metering Point (AMP). (DMP and AMP are definitions taken from the CoPs)

There are two options for how losses on a private network may be accounted for:

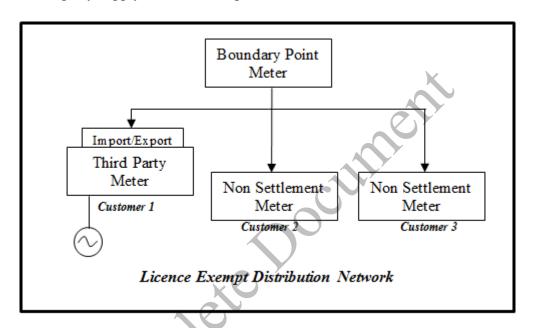
- By the appropriate application of factors either within the Meters as compensations or within the HHDC system as constants identified within the Complex Site supplementary information (BSCP514/8.4.8); or
- No adjustment of Third Party Meter HH advances for losses on the private network. This means that all such losses remain the responsibility of the Boundary Point Supplier for BSC purposes (but does not preclude the private network owner from including an allowance for losses on the private network in the use of system charges made to Third Party Suppliers and/or customers).

The HHMOA at the Boundary Point of the private network will need to maintain the Complex Site supplementary information (BSCP514/8.4.8) to allow the HHDC to correctly difference the consumption between Boundary Point Meters and Third Party Meters.

Export on Licence Exempt Distribution Network

On some private networks there may be on-site generation, and therefore the potential for individual customers and/or the private network as a whole to export as well as import. In such cases the possibility of Export will need to be taken into account in the differencing calculation performed by the single HHDC, in order to accurately determine the energy generated that gets used within the private network or exported on the Distribution System, such that each customers can be Settled accurately. The required calculation is essentially the same in all cases, irrespective of the location of the generator within the private network.

The example below illustrates the case in which the customer with generation equipment has opted for third party supply and has an Export MSID.



In this example, one customer on the private network has embedded generation. If customer 1 generates 100kWh active energy and consumes 20kWh, this will leave 80kWh of Active Export onto the private network (which will be recorded on the customer's Export MSID). If the other customers on the private network consume 20kWh each, this will leave 40kWh recorded on the Boundary Point Meter as Active Export to the Distribution System. Therefore, customer 1 will have 80kWh of Active Export entering Settlement, and the HHDC must accurately undertake the differencing to ensure that the 40kWh consumed on site by the two other customers is recognised as 40kWh Active Import and allocated to the Boundary Point Meter. The HHDC will perform the differencing calculation as shown below:

Total Boundary Generation or Demand, $T_{Boundary} = (AE \text{ at Boundary Point Meter} - AI \text{ at Boundary Point Meter}) - (AE customer 1 - AI for customer 1)$

If T_{Boundary} is positive then the Boundary Point Supplier is a net Exporter, and T_{Boundary} should be entered into Settlement as a positive quantity of Active Export.

If T_{Boundary} is negative then the Boundary Point Supplier is a net Importer, and T_{Boundary} should be entered into Settlement as a positive quantity of Active Import.

The required calculation remains the same if it is one of the customers with a Non Settlement Meter who has the generation. In the above example, if the 100kWh of generation belonged to customer 3 rather than customer 1, the Settlement meters would record 40kWh of Active Export at the Boundary Point Meter, and 20kWh of Active Import from customer 1. The differencing calculation would be performed as above, and result in a Total Boundary Demand of 60kWh of Active Export.

8.4.4 Feed Through Sites at the Same Voltage with no Embedded Generation

This is where a customer's network takes supply from the local Distribution System and feeds out from the customer's network at the same voltage to another part of the local Distribution System. In this example there is no embedded generation on the customer's network, and the isolated part of the local Distribution System is either incapable of being fed from any other source than via the customer's network, or would only be supplied from a different source (such as a restricted capacity feed from the main Distribution System) under abnormal conditions.

In this case, line losses within the customer network do not have to be considered since the feed into, and then out of, the customer network are assumed to have insignificant losses.

In this example, since there is no embedded generation, there is considered to be no Export. Import is derived as HH data:

Import Meter 'A'

Import Meter 'B'

BPt

Import Meter A + Import Meter B - Export Meter C.

BPt

Customer 's network

BPt

Export Meter 'C'

BPt

Isolated part of the local Distribution System capable of being supplied through Export Meter 'C'

BPt = Boundary Point

Import to the Customer's network = Import Meter 'A' + Import Meter 'B' – Export Meter 'C'

This is acceptable in SMRS since there is no on-site generation and an Export type Meter, Export Meter 'C', is measuring feed-through energy as opposed to embedded generation Export.

No. of Import MSIDs = 1

No. of Export MSIDs = 0

Export Meter 'C' may have its own MSID allocated if it is also acting as a demand Meter to another customer, although this would be dealt with separately for Settlements.

8.4.5 Feed Through Sites at Different Voltages

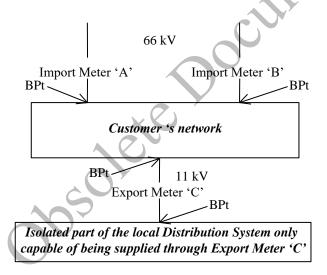
An example is where a factory takes supply at 66kV from the local Distribution System, and an 11kV feeder leaves the Complex Site to supply adjoining premises as part of the local Distribution System. In this example there is no embedded generation within the customer's network.

Voltage specific line losses can be applied to the HH data from Import Meter 'A', Import Meter 'B' and Export Meter 'C' to compensate for the losses incurred in the customer's network for passed through energy.

Totalisation would have to be carried out off-site by the HHDC, and after adjustment for line losses, Import is derived as HH data:

Import Meter A + Import Meter B - Export Meter C.

Since there is no embedded generation, there is considered to be no Export.



BPt = Boundary Point

Import to the Customer's network = Import Meter 'A' + Import Meter 'B' – Export Meter 'C'

This is acceptable in SMRS since there is no on-site generation and an Export type Meter, Export Meter 'C', is measuring feed through energy as opposed to embedded generation Export.

No. of Import MSIDs = 1

No. of Export MSIDs = 0

Export Meter 'C' may have its own MSID allocated if it is also acting as a demand Meter to another customer, although this would be dealt with separately for Settlements.

8.4.6 Feed-Through Sites with Embedded Generation

Where a customer's network has a feed through arrangement and has embedded generation within the Complex Site, the Complex Site demand and the true Export has to be determined.

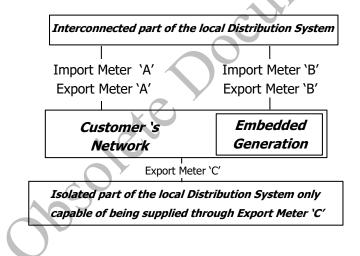
It is assumed that the network supplied through Export Meter 'C' is connected to the local Distribution System through Import Meter 'A' so that customers connected to the isolated part of the local Distribution System preserve system time, i.e. both parts of the Distribution System are in synchronisation (Export generation protection shall prevent 'island generating').

For any time period, for Settlement purposes, Customer's total demand or total generation is derived from the Algorithm:

If TCUST is positive then the Complex Site is a net Exporter.

If TCUST is negative then the Complex Site is a net Importer.

Both Total Import and Total Export may be non-zero for any HH Settlement Period.



Import to the Customer's network = Import Meter 'A' + Import Meter 'B' - Export Meter 'C'.

There is embedded generation. Export Meter 'C' can be getting its energy from either Import through 'A' / 'B' or from generation. By definition there may be at least 1 Export MSID.

No. of Import MSIDs = 1 or n

No. of Export MSIDs = 0 or n.

Export Meter 'C' may have its own MSID allocated if it is also acting as an Import Meter to another customer, although this would be dealt with Separately for Settlements.

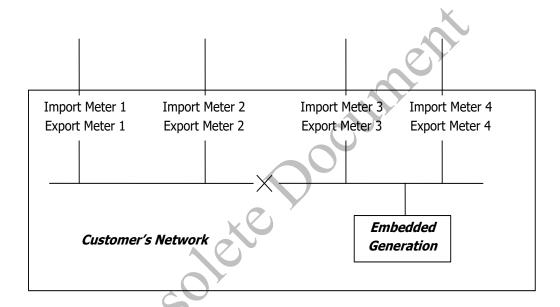
8.4.7 Separate Meter Points for Export and Import

In this example a customer is connected to a Distribution System via an intake busbar, with each feeder into the factory being separately metered, and with a section of busbar on two feeders having embedded generation connected.

In this case, each Import and Export Meter must either provide separate sets of HH data into Settlement, or if totalisation is achieved either on-site or by the HHDC, Import and Export HH data must be totalled separately and separate.

Import and Export sets of HH data provided to Settlement. Export HH data must not be netted off Import HH data, or vice versa.

Since this is an extension of the single feed Import / Export arrangement, this does not have to be considered as a 'Complex Site'.



Where totalisation is used:

Where totalisation is not used:

No. Import MSIDs = 1

No. Import MSIDs = 4

No. Export MSIDs = 1

No. Export MSIDs = 4

8.4.8 **Network Flows Impacting Settlement Meters**

In some cases it is possible for electrical flows (either on the distribution system or the customer's own network) to be recorded by the Settlement Meters unintentionally. These will usually appear as additional Imports and Exports and usually on different feeders. The diagrams below illustrate this principle. It should be noted that these flows may occur under exceptional circumstances only. It would not be reasonable to regard all multi feeder sites as Complex Sites in anticipation that such flows may exist at some point in the future.

Figure 1 shows an example where a distribution network flow passes through Settlement Meters M2 (as Import) and M1 (as Export). This is in addition to any flow from the distribution system to the customer. Therefore if this site was not considered a Complex Site then the resulting addition of Import Meter readings would not be correct because of the presence of distribution flows through Settlement Meters.

The aggregation rule for such a site might be:

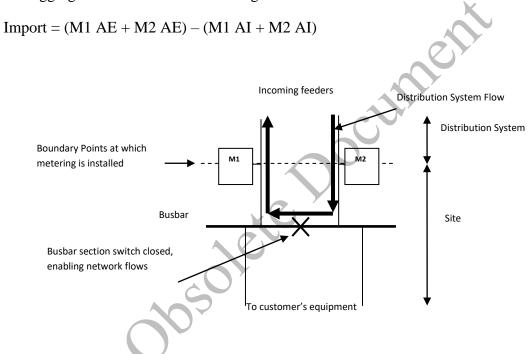


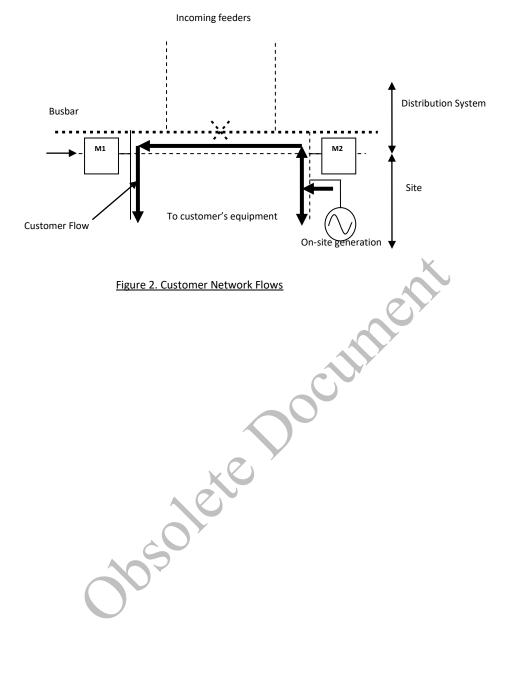
Figure 1. Distribution Network Flows

Similarly Figure 2 shows an example where the customer is generating a flow which passes through Meter M2 as Export and back into its system via Meter M1 as Import. Exports as well as Imports are accounted for in Settlements therefore it is necessary to apply aggregations to both the Import MSID as well as the Export MSID.

The aggregation rules for such a site might be:

Import
$$MSID = (M1 AE + M2 AE) - (M1 AI + M2 AI)$$
 and

Export
$$MSID = (M1 AE + M2 AE) - (M1 AI + M2 AI)$$



Complex Site Supplementary Information Form

BSCP514/8.4.8a

| | · · | |
|--|-----|--|
| | | |
| | | |
| | | |
| | | |

Complex Site Supplementary Information Form

Page 1 of 2

| From HHMOA | Metering System Arrangement |
|--------------------|-----------------------------|
| То ННОС | Description |
| Metering System ID | |
| Site Name | |
| Aggregation Rule | |

| | Import | Export | Import | Export | Import | Export |
|-------|---|---|------------------------------|---|---|---|
| Main | Ref: Page Description Feeder 1 kWh | Ref: Page Description Feeder 1 kWh | Ref: Page Description | Ref: Page Description Feeder 2 kWh | Ref: Page Description Feeder 3 kWh | Ref: Page Description Feeder 3 kWh |
| Check | Ref: Page Description | Ref: Page Description Feeder 1 kWh | Ref:/ Page Description | Ref: Page Description Feeder 2kWh | Ref: Page Description | Ref: Page Description Feeder 3kWh |
| | Form BSCP514 | /8.4.8b | Form BSCP514 | 1/8.4.8b | Form BSCP514 | /8.4.8b |

Signature______Date_____

Name

| BS | CP514/8.4.8b | Complex Site Supp | olementary Informa | tion Page 2 of 2 |
|-------|---|-------------------|---|---|
| | From HHMOA | | | Metering System Arrangement Description |
| Т | To HHDC | | | |
| | Metering System ID | | | |
| S | ite Name | | | |
| F | Geeder Name | | | |
| | | | | X |
| | | Import | E | xport |
| | Ref: | kWh | Ref: | kWh |
| Main | MSID Outstation ID Channel Number Comms Address Meter ID Pulse Multiplier Meter Register Cons CT Ratio VT Ratio | tant | MSID Outstation ID Channel Number Comms Address Meter ID Pulse Multiplier Meter Register Constant CT Ratio VT Ratio | |
| | Ref: | kWh | Ref: | kWh |
| Check | MSID Outstation ID Channel Number Comms Address Meter ID Pulse Multiplier Meter Register Cons CT Ratio VT Ratio | tant | MSID Outstation ID Channel Number Comms Address Meter ID Pulse Multiplier Meter Register Constant CT Ratio VT Ratio | |
| Si | gnature: | | Da | te: |

Name:

9 Appendices - Non Half Hourly

9.1 Sealing

All ME shall be sealed in accordance with the relevant sections of the Meter Operation Code of Practice Agreement and the relevant Code of Practice (CoP).

9.2 Prepayment Meters

For Prepayment Meters, the following data flows may be used in place of the flows for credit Meters referenced in the Interface and Timetable Information section of this BSCP:

| Credit Flow | Prepayment Flow | Description of Prepayment Flow | Sender/Recipient of Prepayment Flows | BSCP Sections |
|----------------------|------------------------|--|---|----------------------|
| D0139 ¹⁰⁸ | D0179 | Confirmation of Energisation/De- energisation of Prepayment Meter | LDSO/MOA to Supplier | 6.3.1.4 and 6.3.2.4 |
| D0134 | D0180 | Request to Energise/De- energise/Shut down Prepayment Meter | Supplier to MOA | 6.3.1.1 and 6.3.2.1 |
| D0142 | D0194 | Request for Installation of Key Meter | Supplier to MOA | 6.2.2.7 |
| D0142 | D0200 | Request for Installation of Smart Card Meter | Supplier to MOA | 6.2.2.7 |
| D0142 | D0216 | Request for Installation of Token Meter | Supplier to MOA | 6.2.2.7 |

1/

¹⁰⁸ For the avoidance of doubt, the D0139 'Confirmation or Rejection of Energisation Status Change' must be sent by the MOA to the NHHDC on change of Energisation Status.

9.3 Remotely Read Non Half Hourly Meters

Metering Systems that are configured for remote reading may be identified by the NHHMOA through the J0483 Meter Type contained in the Non Half Hourly Meter Technical Details. Where the Meter Type is any one of the following:

- 'RCAMR' (Remotely Configurable Automated Meter Reading);
- 'NCAMR' (Non-Remotely Configurable Automated Meter Reading); or
- 'RCAMY' (Remotely Configurable Automated Meter Reading with Remote Shutdown Capability)

the NHHMOA shall maintain a set of Auxiliary Meter Technical Details and shall ensure that whenever a D0150 is required to be sent or processed by the NHHMOA in accordance with this BSCP, but with the exception of Meter removals, the D0313 Auxiliary Meter Technical Details flow is also sent or processed successfully for that Metering System. The NHHMOA shall be responsible for backfilling data for all Metering Systems impacted by the D0313 flow.

10 Meter Operator Agent Service Levels

This Appendix 10 has effect for the purposes of Section 2.5 to determine;

- (i) the functions to be performed by the MOA, as described in columns 2 to 5 of the table set out in this Appendix, in respect of which minimum standards of performance are required;
- (ii) the minimum standards of performance (Service Levels) relating to the functions referred to in paragraph (i) above, as described in columns 6 and 7 of the table set out in this Appendix; and
- (iii) a reference number (Serial) in respect of each Service Level, as described in column 1 of the table set out in this appendix.

For the purposes of this Appendix:

- (a) the references in column 3 of the table to a numbered paragraph are to the relevant paragraph in Section 2;
- (b) the references in column 4 of the table to a sub-process/data flow are to the relevant sub-process or data flow as described in the relevant BSC Procedure;
- (c) references to "Timescales" are to those specified by the relevant BSC Procedure and, if applicable, the SVAA Calendar;
- (d) references to a certain percentage of tasks being completed within a certain specified period are to be read as a reference to that percentage of tasks being completed during an applicable reporting period as specified by the relevant BSC Procedure:
- (e) references to an item being "valid" are to an item which conforms to an applicable SVA Data Catalogue item;

- (f) reference to an item being in "correct format" are to an item which complies with the applicable SVA Data Catalogue format or the format specified by the relevant BSC Procedure;
- (g) references to an item being "accurate" are to an item being correctly recorded;
- (h) in calculating percentages, the performance figures shall be rounded up or down to the nearest one decimal place (with 0.05 being rounded upwards).

It should be noted that the following tables include some serials for which the Agent itself is the Data Provider, and some serials which are reported on by another Agent. Where another Agent is responsible for reporting on an Agent's performance, that Agent is named in the Reporting Method column.



10.1 Half Hourly Meter Operator Agent Service Levels

| Serial | Sender | Process | Sub-Process | Recipient | Performance Measure | Service Levels | Reporting Method |
|--------|--------|---|--|---|---|--|---------------------|
| HM11 | ННМОА | 2.4 Interface to Other Party Agents | Timely Sending of HH MTDs to HHDCs | HHDC | D0268 transferred within timescales | 100% of D0268s received by HHDCs within 5 WD of the HHDC EFD | [HHDC] |
| HM12 | ННМОА | 2.4 Interface to Other Party Agents | Missing HH MTDs | New HHDC, current HHDC or new HHMOA | D0268 transferred within timescales | 100% of D0268s received by New and current HHDCs and New HHMOAs within 5 WD of agents EFD following a change of Agent. | [New HHMOA or HHDC] |
| HM13 | ННМОА | 2.4 Interface to Other Party Agents | Quality of HH MTDs | HHDC | Accurate D0268s sent | None | [HHDC] |
| HM14 | ННМОА | 2.4 Interface to Other Party Agents | Timely HH Meter Investigation Requests | HHDC | Total number of D0002s received since Date Fault Suspected/Detected | 100% of D0001 flows resolved within +15 WD | [HHDC] |

10.2 Non Half Hourly Meter Operator Agent Service Levels

| Serial | Sender | Process | Sub-process / Data Flow | Recipient | Performance Measure | Service Levels | Reporting Method |
|--------|--------|---|--|--|---|--|------------------------|
| NM11 | NHHMOA | 2.4 Interface to Other Party Agents | Timely Sending of NHH MTDs to NHHDCs | NHHDC | D0149/D0150 transferred within timescales | 100% of D0149/D0150 received by NHHDCs by +10 WD of the NHHDCs EFD | [NHHDC] |
| NM12 | NHHMOA | 2.4 Interface to Other Party Agents | Missing NHH TDs | New NHHMOA, current or new NHHDC | D0149/D0150 transferred within timescales | 100% of D0149/D0150 received by new or current NHHDCs and new NHHMOAs by +10 WD of the agent's EFD | [NHHDC] or [NHHMOA] |