Balancing and Settlement Code

BSC PROCEDURE

SVA METER OPERATIONS FOR METERING SYSTEMS REGISTERED IN SMRS

BSCP514

Version 24.0

Date: 28 June 2012

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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 24.0 relating to SVA Meter Operations for Metering Systems registered in SMRS.

3. This BSC Procedure is effective from 28 June 2012.

4. This BSCP has been approved by the Panel.

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AMENDMENT RECORD

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[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

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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 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 (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:

For HH meters, the items listed in the Data Interface flow:

- D0268 HH Meter Technical Details

For smart meters, the items listed in the Data Interface flows:

- DXXX Meter Asset Details
- DYYY Meter Configuration Details

For all other NHH meters, the items listed in the Data Interface flows:

- D0150 Non Half Hourly Meter Technical Details
- D0149 Notification of Mapping Details and
- D0313 Auxiliary Meter Technical Details (where appropriate)

~~, the items listed in Data Interface flows D0268: Half Hourly Meter Technical Details (for Half Hourly trading) or D0150: Non Half Hourly Meter Technical Details, D0149: Notification of Mapping Details and (where appropriate) D0313: Auxiliary Meter Technical Details (for Non Half Hourly trading).~~

For NHH Metering Systems that can be read remotely, this also includes all appropriate information required by the NHHDC to retrieve data from the Metering System remotely

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(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.

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 Licensed Distribution System Operator (LDSO) and the BSCCo Transfer Co-ordinator 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.

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.

[Note this paragraph may prove useful in allowing Supplier and MOAs to establish their own working arrangements, especially when dealing with faults or errors, the exact details of which may not be envisaged by this BSCP]

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

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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 section will be modified as appropriate in line with any changes made to the BSC]

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 MOAs[3] under the BSC:

A MOA is required to:

1. 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));
2. 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

[3] 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.

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3. 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 S2.3.1(b)).

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

1.5 Associated BSC Procedures

BSCP01	Overview of Trading Arrangements
BSCP32	Metering Dispensations
BSCP68	Transfer of Registration of Metering Systems between CMRS and SMRS
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.

BSC	Balancing and Settlement Code
BSCP	BSC Procedure
CMRS	Central Meter Registration Service
CoMC	Change of Measurement Class
CoP	Code of Practice

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CoS	Change of Supplier
CT	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}
HH	Half Hourly
HHDA	Half Hourly Data Aggregator
HHDC	Half Hourly Data Collector
HHMOA	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
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
SMRS	Supplier Meter Registration System
SMSO	Smart Metering System Operator
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

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WD	Working Day

1.6.2 Definitions

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

‘Manually intervened (with regard to proving tests)’ is defined under Appendix 8.3 ‘Proving of Half Hourly Metering Systems’

‘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).

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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.

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- 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 Electricity Central Online Enquiry Service (ECOES)

a) The MOA shall notify the Electricity Central Online Enquiry Service (ECOES) 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 'Notification of Meter Information to ECOES' (D0312) flow. A D0312 flow should not be sent where none of the above items have been changed e.g. when Meter Technical Details are sent on change of Supplier or change of Meter Operator Agent.

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~~ may 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.

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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.

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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.

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) 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.

c) The MOA shall set Non Half Hourly 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, 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.

e) When installing a NHH multi-register Meter, or when attending the site to carry out significant[4] 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 identified[5] 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.).

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

[5] 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” or “R2”. (When installing or attending the site to carry out significant work requiring re-registration).

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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.

g) The MOA shall seal and reseal Metering Equipment in accordance with 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.

2.4 Interface to Other Party Agents

2.4.1 Information to Data Collectors

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, commissioning details and access details of the SVA Metering System and its energisation status at feeder level to its Associated Data Collector.

b) 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) 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 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.

d) The MOA shall provide initial / final Meter readings to its Associated Data Collector following installation, removal, reprogramming, energisation, de-energisation or replacement of a Meter by the MOA in accordance with this BSCP.

e) In the case where the outgoing Non Half Hourly Collector returns Meter readings to the MOA, as the Non Half Hourly Data Collector has been de-appointed 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.

f) Where the MOA has collected data from a SVA Metering System, other than for the circumstances described in Section 2.4.1 d) the Metered Data shall be

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provided to the Associated Half Hourly Data Collector via the Associated Supplier.

g) Where the MOA is transferring information in respect of a smart meter, it may meet the requirements in this section by issuing relevant data to the Supplier, in accordance with the detailed processes specified by this BSCP.

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 Not Used

4 Not Used

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5 Interface and Timetable Information - Half Hourly

5.1 Market Data Activities

5.1.1 Market Domain Data[6]

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.1.1.1	If required	Request MDD.	HHMOA	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	HHMOA	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.	HHMOA	MDDM	P0035 Invalid Data.	Electronic or other method, as agreed.
5.1.1.4	After receiving notification	Send corrected MDD.	SVAA	HHMOA	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[7] of receipt of MDD.	HHMOA	MDDM	P0024 Acknowledgement.	Electronic or other method, as agreed.
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.	HHMOA			Internal Process

[6] 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.
[7] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.1.1.7	As soon as possible after data in correct format	Update records.	HHMOA			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.	HHMOA			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.				

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5.2 Registration Activities

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

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.2.1.1	As required.	Send appointment.	Supplier	New HHMOA	D0155 Notification of Meter Operator or Data Collector Appointment and Terms.	Electronic or other method, as agreed.
5.2.1.2	If appointment rejected and within 5 WD of 5.2.1.1	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	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 de-appointment.	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.
5.2.1.6	On appointment of new HHMOA and between 5 WD[8] and 10 WD of 5.2.1.4	Send notification of HHMOA appointment / de-appointment.	Supplier	New HHMOA / HHDC	D0148 Notification of Change to Other Parties. D0302 Notification of Customer Details.	Electronic or other method, as 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.

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

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.2.1.8	Within 5 WD of 5.2.1.7	Send MTD.	Current HHMOA[29]	New HHMOA[9]	D0268 Half Hourly Meter Technical Details[10] 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.
5.2.1.9	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.
5.2.1.10	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.

[9] 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' 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.

[10] 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).

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5.2.2 New Connection[11]

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.2.2.1	As required	Send appointment.	Supplier	HHMOA	D0155 Notification of Meter Operator or Data Collector Appointment and Terms.	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.	HHMOA	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.	HHMOA	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.	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 5.2.2.8[12]	Request installation, commissioning and energisation of MS.	Supplier	HHMOA[13]	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.	HHMOA	LDSO	D0170 Request for Metering System Related Details.	Electronic or other method, as agreed.
5.2.2.7	Within 5 WD of 5.2.2.6	Send Site Technical Details.	LDSO[14]	HHMOA	D0215 Provision of Site Technical Details.	Electronic or other method, as agreed.

[11] If the new connection is a Transfer of Registration from CMRS, proceed in accordance with section 5.2.5.
[12] This step could be completed in shorter timescales where the Supplier and MOA have reached mutual agreement.
[13] Where it is necessary to involve the LDSO, the HHMOA shall arrange this.
[14] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.2.2.8	On the date requested or agreed in 5.2.2.5[15]	Install and Commission HH MS in accordance with appropriate Codes of Practice. If requested energise MS and note initial Meter register reading.	HHMOA			Internal Process.
5.2.2.9	If MS cannot be installed or energised, as soon as possible and within 5 WD of 5.2.2.8	Inform Supplier.	HHMOA	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.
5.2.2.10	Within 5 WD of 5.2.2.8	Send energisation status, MTD and initial Meter register reading.	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. D0010 Meter readings.	Electronic or other method, as agreed.
5.2.2.11	Within 10 WD of 5.2.2.8	Send the relevant Meter information.	HHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.
5.2.2.12	In accordance with timescales in Appendix 8.3.5	Prove MS.	HHMOA	HHDC	Refer to Appendix 8.3.5.	Electronic or other method, as agreed.

[15] 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

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5.2.3 Change of HHDC for an existing Metering System[16]

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.2.3.1	As required	Send notification of new HHDC.	Supplier	HHMOA	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.	HHMOA	New HHDC	D0002 Fault Resolution Report or Request for Decision on Further Action. D0268 Half Hourly Meter Technical Details.[10] 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.	HHMOA	New HHDC	Refer to Appendix 8.3.5.	Electronic or other method, as agreed.

[16] 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.

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

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.2.4.1	As required	Send appointment.	New Supplier	New HHMOA	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 de-appointment 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[17]	Send notification of HHDC and current HHMOA.	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.

[17] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.2.4.8	Within 5 WD of 5.2.4.7	Send MTD.	Current HHMOA[29]	New HHMOA[9]	D0268 Half Hourly Meter Technical Details.[10] 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	Within 5 WD of 5.2.4.8	Send MTD.	New HHMOA	New Supplier / HHDC / LDSO	D0268 Half Hourly Meter Technical Details.[10] 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.
5.2.4.10	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.

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5.2.5 Registration Transfers from CMRS to SMRS

REF	WHEN	ACTION	FROM	TO	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.[18]	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.	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.[19]	Electronic or other method, as agreed.

[18] The HHMOA for the MS must be Qualified in both CVA and SVA. 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.

[19] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.2.5.8	By the confirmed EFSD {REGI}	Send MTD.	CVA MOA[20]	SVA HHMOA[9]	D0268 Half Hourly Meter Technical Details.[10] 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.[10] 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.	HHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.
5.2.5.11	Within 5 WD of the confirmed EFSD {REGI}	Take an initial Meter register reading.	SVA HHMOA			Internal Process.
5.2.5.12	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.
5.2.5.13	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.

[20] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.2.5.14	If required and within 5 WD of confirmed EFSD {REGI}	Request initial Meter register reading.[21]	CDCA	SVA HHMOA	D0170 Request for Metering System Related Details.	Electronic or other method, as agreed.
5.2.5.15	Within 5 WD of confirmed EFSD {REGI}	Send initial Meter register reading.	SVA HHMOA	CDCA	D0010 Meter readings.	Electronic or other method, as agreed.

5.2.6 Registration Transfers from SMRS to CMRS

REF	WHEN	ACTION	FROM	TO	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[20]	CVA MOA[9]	D0268 Half Hourly Meter Technical Details.[10]	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.

[21] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
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 de-appointment.	Current SVA 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.

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

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.2.7.1	As required	Send appointment.	New Supplier	HHMOA	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.	HHMOA	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.	HHMOA	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	HHMOA	D0151 Termination of Appointment or Contract by Supplier	Electronic or other method, as agreed.
5.2.7.5	On appointment of new Supplier and between 5 WD and 10 WD of 5.2.7.3	Send notification of HHDC and HHMOA.	New Supplier	HHDC/ HHMOA/ LDSO	D0148 Notification of Change to Other Parties D0302 Notification of Customer Details	Electronic or other method, as agreed.
5.2.7.6	Within 1 WD of 5.2.7.5	Request MTD.	New Supplier	HHMOA	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.	HHMOA	New Supplier / HHDC / LDSO	D0268 Half Hourly Meter Technical Details.[10]	Electronic or other method, as agreed.

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5.3 Metering Activities

5.3.1 Energise a Metering System

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
If HHMOA Energises						
5.3.1.1	As required	Send request to energise MS.	Supplier	HHMOA	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	Send notification of rejection including the reason why the request has been rejected.	HHMOA	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.	HHMOA			Internal Process.
5.3.1.4	Within 5 WD of attempting to change energisation status or Following the HHMOA becoming aware of a discrepancy between the energisation status on site and that held by the Supplier/HHDC	Send change of energisation status and the initial Meter register reading. Send change of energisation status and, if requested, the initial Meter register reading.	HHMOA	Supplier / LDSO HHDC	D0139 Confirmation or Rejection of Energisation Status Change.[22] [23]	Electronic or other method, as agreed.
If LDSO Energises						

[22] 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 HHDC.

[23] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
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.[22]	Electronic or other method, as agreed.
5.3.1.6	Within 5 WD of 5.3.15	Send change of energisation status and, if requested, the initial Meter register reading.	HHMOA	HHDC	D0139 Confirmation or Rejection of Energisation Status Change.	Electronic or other method, as agreed.

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5.3.2 De-energise a Metering System[24]

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
If HHMOA De-energises						
5.3.2.1	As required	Send request to de-energise MS.	Supplier	HHMOA	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	Send notification of rejection including the reason why the request has been rejected.	HHMOA	Supplier	P0211 Site Visit Rejection. (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 de-energisation.	Arrange with HHDC to collect final HH Metered Data.	HHMOA	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	HHMOA	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.
5.3.2.6	Immediately following 5.3.2.5	Note final Meter register reading, if available. If final HH Metered Data was not uploaded by the HHDC, download final HH Metered Data, if available. De-energise MS.	HHMOA			Internal Process.

[24] Where the MS has been de-energised by the LDSO as part of an Urgent Metering Service (UMetS), the LDSO shall provide the change of energisation status and final Meter register reading to the HHMOA only, and the HHMOA shall provide this information to the Supplier.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.3.2.7	Within 5 WD of changing energisation status or Following the HHMOA becoming aware of a discrepancy between the energisation status on site and that held by the Supplier/HHDC	Send change of energisation status and final Meter register reading, if available. Send change of energisation status and, if requested, final Meter register reading, if available.	HHMOA	Supplier / LDSO HHDC	D0139 Confirmation or Rejection of Energisation Status Change.[22 23]	Electronic or other method, as agreed.
If LDSO De-energises						
5.3.2.8	Within 2 WD of request to de-energise Metering System.	Agree date and time for de-energisation.	LDSO	HHMOA		Telephone.
5.3.2.9	Within 2 WD of 5.3.2.8 and before planned date for de-energisation	Arrange with HHDC to collect HH final HH Metered Data.	HHMOA	HHDC	D0005 Instruction on Action.	Electronic or other method, as agreed.
5.3.2.10	On date and time agreed in 5.3.2.8	Collect final HH Metered Data.	HHDC			Internal Process.
5.3.2.11	Immediately following 5.3.2.10	Confirm final HH Metered Data collection.	HHDC	LDSO (or HHMOA if appropriate)	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.
5.3.2.12	On the date requested	Note final Meter register reading, if available. De-energise MS.	LDSO			Internal Process.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.3.2.13	Within 5 WD of 5.3.2.12	Send change of energisation status and final Meter register reading, if available.	LDSO	Supplier / HHMOA	D0139 Confirmation or Rejection of Energisation Status Change.[22]	Electronic or other method, as agreed.
5.3.2.14	Within 5 WD of 5.3.2.13	Send change of energisation status and, if requested, final Meter register reading, if available.	HHMOA	HHDC	D0139 Confirmation or Rejection of Energisation Status Change.	Electronic or other method, as agreed.

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5.3.3 Removal of a Metering System[25] [26] [27]

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.3.3.1	As required	Send request to remove MS.	Supplier	HHMOA.	D0142 Request for Installation or Change to a Metering System Functionality or the Removal of All Meters.	Electronic or other method, as agreed.
5.3.3.2	If request rejected and within 2 WD of 5.2.3.1	Send notification of rejection including the reason why the request has been rejected.	HHMOA	Supplier	P0211 Site Visit Rejection. (Go to 5.3.3.1 if required)	Electronic or other method, as agreed.
5.3.3.3	On the date requested or agreed in 5.3.3.1 or as the HHMOA sees necessary	Note final Meter register reading, if available and remove MS.[28]	HHMOA			Internal process.
5.3.3.4	Within 5 WD of removing MS or of receiving notification from the LDSO that a Metering System was disconnected.	Liaise with LDSO to recover Meter if necessary. Send MTD and notification that the MS has been removed.	HHMOA[29]	LDSO Supplier / HHDC / LDSO	D0268 Half Hourly Meter Technical Details.[10] If site is Complex, send Complex Site Supplementary Information Form. Refer to Appendix 8.4 Guide to Complex Sites.	Telephone/Fax/e-mail/letter Electronic or other method, as agreed.

[25] 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.
[26] 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, steps 5.3.2.3 to 5.3.2.5 (Collection of HH Data by the HHDC) of section 5.3.2 shall also be carried out.
[27] 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).
[28] If the MS cannot be removed at the appointed time, the MOA shall liaise with the Supplier to agree the way forward.
[29] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
		Send final Meter register reading or notification that Meter register reading not obtainable.		HHDC	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action.	
5.3.3.5	Within 10 WD of removing MS or of receiving notification from the LDSO that a Metering System was disconnected.	Send the relevant Meter information changes.	HHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.

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5.3.4 Reconfigure or Replace Metering System (No Change of Measurement Class)[30]

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.3.4.1	As required	Send request to reconfigure or replace MS.	Supplier	HHMOA	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.	HHMOA	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.[31]	Arrange with HHDC to collect final HH Metered Data.	HHMOA	HHDC	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	HHMOA	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.

[30] Note that prior to the replacement of the MS, a de-energisation shall be carried out in accordance with section 5.3.2.
[31] The need to replace or reconfigure the MS could also be from CoP4 requirements, Ofgem or Customer driven.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.3.4.6	Immediately following 5.3.4.5	Note final Meter register reading, if available. 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.[32] Note initial Meter register reading.	HHMOA			Internal Process.
5.3.4.7	Within 5 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.	HHMOA[29]	Supplier / HHDC / LDSO HHDC Supplier / HHDC / LDSO	D0010 Meter Readings, or D0002 Fault Resolution Report or Request for Decision on Further Action. 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.
5.3.4.8	Within 10 WD of the replacement / reconfiguration of the MS	Send the relevant Meter information changes.	HHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.

[32] If the MS cannot be reconfigured or replaced at the appointed time, the MOA shall liaise with the Supplier to agree the way forward.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.3.4.9	In accordance with timescales in Appendix 8.3.5	Prove MS.	HHMOA	HHDC	Refer to Appendix 8.3.5.	Electronic or other method, as agreed.

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

REF	WHEN	ACTION	FROM	TO	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.[33] 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[34]	HHMOA	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.

[33] If the MS cannot be reconfigured or replaced at the appointed time, the LDSO shall liaise with the Supplier to agree the way forward.
[34] 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.

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REF	WHEN	ACTION	FROM	TO	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 Send initial Meter register reading for replacement MS. Send MTD for replacement MS.	HHMOA[29]	HHDC Supplier / HHDC	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.	Electronic or other method, as agreed.
5.3.5.6	Within 10 WD of 5.3.5.4	Send the relevant Meter information changes.	HHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.
5.3.5.7	In accordance with timescales in Appendix 8.3.5	Prove MS.	HHMOA	HHDC	Refer to Appendix 8.3.5.	Electronic or other method, as agreed.

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5.3.6 Change of Feeder Status – Energise Feeder[35]

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.3.6.1	As required	Send request to change feeder status.	Supplier	HHMOA[36]	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.	HHMOA	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.	HHMOA			Internal Process.
5.3.6.4	Within 5 WD of changing feeder status	If requested, send Meter register reading. Send MTD.	HHMOA.[29]	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.	HHMOA	HHDC	Refer to Appendix 8.3.5.	Electronic or other method, as agreed.

[35] 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.
[36] The LDSO may perform this role.

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5.3.7 Change of Feeder Status – De-energise Feeder[35]

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.3.7.1	As required.	Send request to change feeder status.	Supplier.	HHMOA.[36]	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.	HHMOA.	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.	HHMOA.	HHDC.	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.	HHMOA.	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.	HHMOA.			Internal Process

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REF	WHEN	ACTION	FROM	TO	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. Send MTD.	HHMOA.[20]	HHDC Supplier / HHDC / LDSO	D0010 Meter Readings. D0268 Half Hourly Meter Technical Details.[10] 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.

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5.4 Meter Operation Activities

5.4.1 Half Hourly Metering System Investigation Process

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.4.1.1	As appropriate	Send request to investigate MS.	Any Participant [37]	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	HHMOA	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.	HHMOA			Internal process.
5.4.1.4	If fault resolved within 5 WD of receipt of D0001	Go to 5.4.1.12.	HHMOA			
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[38]		D0005 Instruction on Action.[39] Fault resolution plan (if required).	Electronic or other method, as agreed. Fax, Email or other method, as agreed.

[37] 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.
[38] The HHMOA should contact and liaise with the Supplier if appropriate
[39] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.4.1.6	As soon as possible after 5.4.1.5, if appropriate	Send decision on further action.	HHDC	HHMOA	D0005 Instruction on Action.	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.	HHMOA	HHDC / Supplier		Internal Process.
5.4.1.8	If fault resolved within 15 WD of receipt of D0001	Go to 5.4.1.12.	HHMOA			
5.4.1.9	If fault remains unresolved 15 WD after receipt of D0001	Notify that the fault remains unresolved.	HHMOA	HHDC	D0005 Instruction on Action.	Electronic or other method, as agreed.
5.4.1.10	As soon as possible following 5.4.1.9	Progress resolution of outstanding fault.	HHMOA		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 regarding investigation on regular basis (as agreed) until fault resolved.	HHMOA[38]	HHDC	D0005 Instruction on Action.	Electronic or other method, as agreed.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
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.	HHMOA	HHDC / Supplier	D0002 Fault Resolution Report or Request for Decision on Further Action.	Electronic or other method, as agreed.
5.4.1.13	If appropriate, within 5 WD of 5.4.1.12	Report resolution of fault.	Supplier [40]	Relevant Participant	As appropriate: D0002 Fault Resolution Report or Request for Decision on Further Action. Details of resolution.	Electronic or other method, as agreed.
5.4.1.14	If appropriate, at the same time as 5.4.1.12	Send MTD, if changed or corrected.	HHMOA	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.	HHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.
5.4.1.16	In accordance with timescales in Appendix 8.3.5	If MTD manually intervened or there has been a key field change, prove MS.	HHMOA	HHDC	Refer to Appendix 8.3.5 and process 5.5.	Electronic or other method, as agreed.

[40] 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'.

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5.5 Proving a Metering System[41]

5.5.1 Proving of a Metering System by Method 1[42]

REF	WHEN	ACTION	FROM	TO	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.	HHMOA		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	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.	HHMOA	HHDC	D0005 Instruction on 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.	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.

[41] 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.
[42] 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.

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REF	WHEN	ACTION	FROM	TO	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.[43] If unable to collect metering data for Settlement Period requested, send alternative Settlement Period HH Metered Data.	HHDC	HHMOA	D0001 Request Metering System Investigation. D0003 Half Hourly Advances.	Electronic or other method, as agreed.
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. 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.	HHMOA			Internal Process.

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

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5.5.2 Proving of a Metering System by Method 2[42]

REF	WHEN[44]	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.5.2.1	When instructed by Supplier	Install or reconfigure commission to CoP4 and record MTD while on site.	HHMOA		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.	HHMOA	HHDC	D0005 Instruction on 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.	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.	HHMOA			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.[43] If unable to collect HH Metered Data for agreed Settlement Period, send alternative Settlement Period HH Metered Data.	HHDC	HHMOA	D0001 Request Metering System Investigation. D0003 Half Hourly Advances.	Electronic or other method, as agreed.

[44] 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

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REF	WHEN[44]	ACTION	FROM	TO	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.	HHMOA			Internal Process.

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5.5.3 Proving of a Metering System by Method 3[42]

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.5.3.1	When instructed by Supplier	Install or reconfigure, commission to CoP4,[45] retrieve HH Metered Data for a specific HH Settlement Period and note MTD while on site. From the office, use own data retrieval system to read remotely for the same HH Settlement Period as collected during site visit. Compare HHMOA HH Metered Data from data retrieval system against that collected during site visit.[46] If problem with readings taken from data retrieval system, investigate and rectify the problem then re-do the steps above.	HHMOA		See 5.2.2 or 5.3.4 as required.	Internal Process.
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.[47]	HHMOA	HHDC	D0005 Instruction on 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.	Electronic or other method, as agreed.

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

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
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.
5.5.3.4	Following 5.5.3.3	Send raw HH Metered Data or notification that Metered Data cannot be collected.	HHDC	HHMOA	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.	HHMOA			Internal Process.

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5.5.4 Proving of a Metering System by Method 4[42]

REF	WHEN	ACTION	FROM	TO	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.	HHMOA		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.	HHMOA	HHDC	D0005 Instruction on 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.	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.	HHDC	HHMOA	D0001 Request Metering System Investigation. D0003 Half Hourly Advances.	Electronic or other method, as agreed.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
5.5.4.5	Following 5.5.4.4	Use manufacturer's software 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. 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 re-test.	HHMOA			Internal Process.

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

REF	WHEN	ACTION	FROM	TO	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.	HHMOA			Internal Process.
5.5.5.2	In accordance with timescales in Appendix 8.3.5	Send notification of successful proving test / re-test.	HHMOA	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.	HHMOA	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 re-do the proving test.	HHMOA			Internal Process.

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6 Interface and Timetable and Information – Non-Half Hourly

6.1 Market Data Activities

6.1.1 Market Domain Data[6]

REF	WHEN	ACTION	FROM	TO	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	NHHMOA	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.	NHHMOA	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 Incremental Set.	Electronic or other method, as agreed.
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

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REF	WHEN	ACTION	FROM	TO	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			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.				

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6.2 Registration Activities

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

REF	WHEN	ACTION	FROM	TO	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 de-appointment.	Current 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.
6.2.1.7	Between 5 WD[8] 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. D0302 Notification of Customer Details.	Electronic or other method, as agreed.
For legacy meters						

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
6.2.1.8	Within 2 WD of 6.2.1.6	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 6.2.1.6	Send MTD.	Current NHHMOA[29]	New NHHMOA[9]	D0149 Notification of Mapping Details. D0150 Non-Half Hourly Meter Technical Details.[48] [49] 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	D0149 Notification of Mapping Details. D0150 Non-Half Hourly Meter Technical Details.	Electronic or other method, as agreed.
				Supplier / NHHDC	D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3)	
		Send notification of appointment.		MAP	D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP.	
For smart meters						

[48] 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.
[49] The NHHMOA will send the D0150 Non Half-hourly Technical Details to the relevant parties in all cases, even when no Meter is present.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
6.2.1.11	Within 2WD of 6.2.1.6	Send MTD	Supplier	New NHHMOA	DXXX Meter Asset Details DYYY Meter Configuration Details (as determined by Supplier)	Electronic or other method, as agreed.
6.2.1.12	Upon receipt of 6.2.1.11	Send notification of appointment	New 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.

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6.2.2 New Connection

REF	WHEN	ACTION	FROM	TO	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	Within 5 WD of 6.2.2.5	Send Site Technical Details.	LDSO[14]	NHHMOA	D0215 Provision of Site Technical Details.	Electronic or other method, as agreed.
For legacy meters						
6.2.2.7	Following 6.2.2.3 and at least 10 WD[12] before 6.2.2.8	Request installation, commissioning and energisation of MS.[50]	Supplier	NHHMOA	D0142 Request for Installation or Changes to a Metering System Functionality or the Removal of all Meters.[51] For Prepayment Meters see Appendix 9.2	Electronic or other method, as agreed.

[50] Note that currently the extent of Commissioning for NHH MS is not defined in CoP4.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
6.2.2.8	On date requested or agreed in 6.2.2.7	Install and commission MS. If requested energise MS and note initial Meter register reading.	NHHMOA			Internal Process.
6.2.2.9	If MS cannot be installed or energised, as soon as possible and within 5 WD of 6.2.2.8	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.
6.2.2.10	Within 10 WD of 6.2.2.8	Send change of energisation status and MTD.[52] Send initial Meter register reading. Send notification of Meter installation, Supplier ID and NHHMOA's appointment.	NHHMOA	Supplier / NHHDC / LDSO Supplier / NHHDC NHHDC MAP	D0149 Notification of Mapping Details. D0150 Non Half Hourly Meter Technical Details. D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3) D0010 Meter readings. D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP.	Electronic or other method, as agreed.
6.2.2.11	Within 10 WD of 6.2.2.8	Send the relevant Meter information.	NHHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.

[51] If the MSID is for Export purposes, the 'Additional Information' field should state this, and therefore a physical site visit may not be required.
[52] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
6.2.2.12	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
6.2.2.13	Within 10 WD of 3.2.1.11	Send initial Meter register reading	NHHMOA, Supplier	NHHDC[53]	D0010 Meter Readings	Electronic or other method, as agreed
For smart meters						
6.2.2.14	Following 6.2.2.3 and at least 10 WD[12] before 6.2.2.8	Request installation, commissioning and energisation of MS.[54]	Supplier	NHHMOA	D0142 Meter Installation Request OR DZZZ Smart Meter Installation Request	Electronic or other method, as agreed.
6.2.2.15	On date requested or agreed in 6.2.2.14	Install and commission MS. If requested by Supplier, configure Meter. Energise MS and note initial Meter register reading. Establish communication with DCC SMSO.	NHHMOA			Internal Process.

[53] If more than one Meter register reading is provided, the NHHDC shall process and use the first reading provided.
[54] Note that currently the extent of Commissioning for NHH MS is not defined in CoP4.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
6.2.2.16	If MS cannot be installed or energised, as soon as possible and within 5 WD of 6.2.2.15	Inform Supplier.	NHHMOA	Supplier	D0221 Notification of Failure to Install or Energise Metering System. (Go to 6.2.2.14 if required)	Electronic or other method, as agreed.
6.2.2.17	If MS cannot establish communication with DCC or SMSO	Inform Supplier.	NHHMOA	Supplier	Details of communication failure	Telephone/Email or other method as agreed
6.2.2.18	Upon completion of 6.2.2.15	Send change of energisation status and MTD. If required by Supplier, send initial meter register reading. Send notification of Meter installation, Supplier ID and NHHMOA's appointment. Send relevant Meter Information	NHHMOA NHHMOA	Supplier MAP ECOES	DXXX Meter Asset Details DYYY Meter Configuration Details (if Meter reconfigured) D0010 Meter Readings D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP D0312 Notification of Meter Information to ECOES.	Electronic or other method, as agreed.
6.2.2.19	Following 6.2.2.15	Configure Meter	Supplier	[via DCC or SMSO]	Details of required Meter configuration	[via DCC or SMSO]

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
6.2.2.19	Within 10WD of 6.2.2.16	Send Meter Technical Details Collect initial Meter register reading Send initial Meter register reading	Supplier	NHHDC/ LDSO	DXXX Meter Asset Details DYYY Meter Configuration Details D0010 Meter Readings	Electronic or other method, as agreed.

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6.2.3 Change of NHHDC for an existing Metering System[55]

REF	WHEN	ACTION	FROM	TO	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.
For legacy meters						
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 Technical Details.[49] D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3)	Electronic or other method, as agreed.
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.[49] D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3)	Electronic or other method, as agreed.

[55] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
For smart meters						
6.2.3.5	At same time as 6.2.3.1	Send current MTD	Supplier	New NHHDC	DXXX Meter Asset Details DYYY Meter Configuration Details	Electronic or other method, as agreed.

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6.2.4 Concurrent change of Supplier and NHHMOA (No Change to Metering System)

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
6.2.4.1	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.
6.2.4.2	If appointment rejected and within 10 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. (Go to 6.2.4.1 if required)	Electronic or other method, as agreed.
6.2.4.3	If appointment accepted and within 10 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 de-appointment.	Current NHHMOA	Current 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.
6.2.4.7	On appointment of NHHMOA and within 5 WD of 6.2.4.3[56]	Send notification of NHHDC and current NHHMOA.	New Supplier	New NHHMOA / NHHDC	D0148 Notification of Change to Other Parties. D0302 Notification of Customer Details.	Electronic or other method, as agreed.

For legacy meters

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

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
6.2.4.8	Within 2 WD of 6.2.4.6	Request MTD.	New NHHMOA	Current NHHMOA	D0170 Request for Metering System Related Details.	Electronic or other method, as agreed.
6.2.4.9	Within 5 WD of 6.2.4.8	Send MTD.	Current NHHMOA[29]	New NHHMOA[9]	D0149 Notification of Mapping Details. D0150 Non Half Hourly Meter Technical Details.[49] D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3)	Electronic or other method, as agreed.
6.2.4.10	Within 5 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.[49] D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3)	Electronic or other method, as agreed.
For smart meters						
6.2.4.11	Within 5WD of 6.2.4.3	Send MTD	Current Supplier	New Supplier	DXXX Meter Asset Details	Electronic or other method, as agreed.

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

REF	WHEN	ACTION	FROM	TO	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 10 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 10 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.	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.
6.2.5.6	If de-appointment rejected and within 5 WD of 6.2.5.4	Send notification of rejection of de-appointment.	NHHMOA	Current 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.
6.2.5.7	On appointment of NHHMOA and within 5 WD of 6.2.5.3[56]	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.
For legacy meters						

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
6.2.5.8	Within 5 WD of 6.2.5.7	Send MTD. Send notification of Supplier and NHHMOA's appointment.	NHHMOA	New Supplier / NHHDC / LDSO New Supplier / NHHDC MAP	D0149 Notification of Mapping Details. D0150 Non Half Hourly Meter Technical Details.[49] 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.
For smart meters						
6.2.5.9	Following 6.2.5.7	Send MTD.	NHHMOA	New Supplier MAP	DXXX Meter Asset Details DYYY Meter Configuration Details D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP.	Electronic or other method, as agreed.
6.2.5.10	Within 5WD of 6.2.5.9	Send MTD. [Note these two steps are subject to consultation]	New Supplier	NHHDC / LDSO	DXXX Meter Asset Details DYYY Meter Configuration Details	Electronic or other method, as agreed.

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6.3 Metering Activities

6.3.1 Energise a Metering System

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
6.3.1.1	As required and at least 10 WD[12] 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.	NHHMOA			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 NHHMOA	NHHDC / Supplier / LDSO NHHDC	D0139 Confirmation or Rejection of Energisation Status Change.[22] For Prepayment Meters see Appendix 9.2 D0010 Meter Readings.	Electronic or other method, as agreed.
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
6.3.1.6	Within 10 WD of 6.3.1.5	Send initial Meter register reading	NHHMOA / Supplier	NHHDC[92]	D0010 Meter Readings	Electronic or other method, as agreed

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6.3.2 De-energise a Metering System

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
6.3.2.1	As required and at least 10 WD[12] 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	P0211 Site Visit Rejection. (Go to 6.3.2.1 if required)	Electronic or other method, as agreed.
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.[57]	NHHMOA NHHMOA	NHHDC / Supplier / LDSO NHHDC	D0139 Confirmation or Rejection of Energisation Status Change.[22] For Prepayment Meters see Appendix 9.2 D0010 Meter Readings.	Electronic or other method, as agreed.
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		Post / Fax / Email
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

[57] Where the MS has been de-energised by the LDSO as part of an Urgent Metering Service (UMetS), the LDSO shall provide the change of energisation status and final Meter register reading to the NHHMOA, and the NHHMOA shall provide this information to the Supplier and the NHHDC.

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6.3.3 Removal of a Metering System [58] [59] [60]

REF	WHEN	ACTION	FROM	TO	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	NHHMOA	D0142 Request for Installation or change to a Metering System Functionality or the Removal of all Meters.[51] OR DZZZ Smart Meter Installation Request	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	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.[28]	NHHMOA			Internal Process.
6.3.3.4	Within 10 WD of removing MS or of receiving notification from the LDSO that a Metering System was disconnected.	Liaise with LDSO to recover Meter if necessary.	NHHMOA[29]	LDSO		Telephone/Fax/e mail/letter
For legacy meters						

[58] 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.
[59] 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.
[60] 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).

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
6.3.3.5	Following 6.3.3.3	Send MTD and notification that the MS has been removed.[61]	NHHMOA	Supplier / NHHDC / LDSO Supplier / NHHDC	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 final Meter register reading or notification that Meter register reading not obtainable. Send notification of Meter removal.	NHHMOA	NHHDC MAP	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP.	
6.3.3.65	Within 10 WD of removing MS or of receiving notification from the LDSO that a Metering System was disconnected.	Send the relevant Meter information changes.	NHHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.
6.3.3.76	If required and no valid Meter register reading received within 10 WD of the removal.	Request final Meter register reading	NHHDC	NHHMOA Supplier		Post / Fax / Email
6.3.3.87	Within 10 WD of 6.3.3.76	Send final Meter register reading	NHHMOA / Supplier	NHHDC	D0010 Meter Readings	Electronic or other method, as agreed

[61] Where the MS has been removed by the LDSO as part of an Urgent Metering Service (UMetS), 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
For smart meters						
6.3.3.9	Following 6.3.3.3	Send MTD and notification that the MS has been removed Send final Meter register reading Send notification of Meter removal. Send the relevant Meter information changes.	NHHMOA NHHMOA NHHMOA	Supplier MAP ECOES	DXXX Meter Asset Details D0010 Meter Readings. D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. D0312 Notification of Meter Information to ECOES.	Electronic or other method, as agreed
6.3.3.10	Within 10WD of 6.3.3.3 [this timescale could/should be shorter]	Send MTD and notification that the MS has been removed Send final Meter register reading	Supplier	NHHDC / LDSO	DXXX Meter Asset Details D0010 Meter Readings	Electronic or other method, as agreed

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6.3.4 Reconfigure or Replace Metering System (No Change of Measurement Class)[62]

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
For legacy meters						
6.3.4.1	As required and at least 10 WD[12] 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 [31]	Note final Meter register reading, if available. Reconfigure MS or replace and energise MS.[32] 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.[52]	NHHMOA[29]	NHHDC 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.

[62] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
				NHHDC / Supplier /	D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3)	
		Send notification of removal of old Meter. Send notification of installation of new Meter.		MAP of removed Meter MAP of installed Meter	D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP. D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP.	
6.3.4.5	Within 10 WD of the replacement / reconfiguration of the MS	Send the relevant Meter information changes.	NHHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.
6.3.4.6	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
6.3.4.7	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
For smart meters						

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
6.3.4.8	As required, if remote reconfiguration	Collect final Meter reading Reconfigure Meter Collect initial Meter reading	Supplier	[via DCC or SMSO]		[via DCC or SMSO]
6.3.4.9	As required and at least 10 WD[12] before local reconfiguration or replacement	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. Or DZZZ Smart Meter Installation Request	Electronic or other method, as agreed.
6.3.4.10	On the date requested or agreed in 6.3.4.9	Note final Meter register reading, if available. Reconfigure MS or replace and energise MS.[32] Note initial Meter register reading.	NHHMOA			Internal Process
6.3.4.11	Following 6.3.4.10,	If required by Supplier, send final Meter register reading for replaced / reconfigured MS or notification that Meter register reading not obtainable. If required by Supplier, send initial Meter register reading for replacement MS / new configuration Send MTD for replacement MS / new configuration.[52]	NHHMOA	Supplier	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action. D0010 Meter Readings. DXXX Meter Asset Details DYYY Meter Configuration Details (if new configuration applied by MOA)	Electronic or other method, as agreed.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
		Send notification of removal of old Meter. (if appropriate)	NHHMOA	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. (if appropriate)	NHHMOA	MAP of installed Meter	D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP.	
		Send the relevant Meter information changes.	NHHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	
6.3.4.12	Within 10WD of replacement / reconfiguration of the MS	Send completed MTD and meter readings.	Supplier	NHHDC NHHDC / LDSO	D0010 Meter Readings. DXXX Meter Asset Details DYYY Meter Configuration Details	Electronic or other method, as agreed.

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

[The working assumption for this process is that LDSO may replace smart meters as part of an emergency metering service but would not be responsible for re-establishing communications with DCC or SMSO.]

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
6.3.5.1	As required[63]	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[33] Note initial Meter register reading	LDSO			Internal Process.
For legacy meters						
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[64]	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.

[63] 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.
[64] 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.

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REF	WHEN	ACTION	FROM	TO	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. Send initial Meter register reading for replacement MS. Send MTD for replacement MS. Send notification of removal of old Meter. Send notification of installation of new Meter.	NHHMOA[29]	NHHDC Supplier / NHHDC MAP of removed Meter MAP of installed Meter	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. 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. D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP.	Electronic or other method, as agreed.
6.3.5.6	Within 10 WD of 6.3.5.4	Send the relevant Meter information changes.	NHHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.
For smart meters						

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
6.3.5.7	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	NHHMOA	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action. DXXX Meter Asset Details D0010 Meter Readings.	Electronic or other method, as agreed.
6.3.5.8	Following 6.3.5.7	Send final Meter register reading for replaced MS or notification that Meter register reading not obtainable. Send initial Meter register reading for replacement MS. Send MTD for replacement MS.	NHHMOA	Supplier	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action. D0010 Meter Readings. DXXX Meter Asset Details	Electronic or other method, as agreed.
		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.	
		Send the relevant Meter information changes.		ECOES	D0312 Notification of Meter Information to ECOES.	

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
6.3.5.9	Within 10WD of 6.3.5.3	Send final Meter register reading for replaced MS Send initial Meter register reading for replacement MS. Send MTD for replacement MS.	Supplier	NHHDC	D0010 Meter Readings	Electronic or other method, as agreed.

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6.4 Meter Operation Activities

6.4.1 Investigate Inconsistencies

REF	WHEN	ACTION	FROM	TO	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[65]	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 De-energise 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.

[65] 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.

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REF	WHEN	ACTION	FROM	TO	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[66] NHHDC	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.
For legacy meters						
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 / MAP	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	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.

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

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
6.4.1.10	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
6.4.1.11	Within 10 WD of 6.4.1.10	Send initial Meter register reading	NHHMOA / Supplier	NHHDC		Electronic or other method, as agreed
For smart meters						
6.4.1.12	Within 10 WD of resolving problem	Send MTD if appropriate. Notify relevant MAP of corrections as required.	NHHMOA	Supplier MAP	DXXX Meter Asset Details DYYY Meter Configuration Details (if revised). D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP.	Electronic or other method, as agreed.
6.4.1.13	If required and no valid initial Meter register reading received 5 WD after SVA MS fault rectified	Request initial Meter register reading	NHHDC	Supplier		Email
6.4.1.14	Within 10 WD of 6.4.1.9	Send initial Meter register reading	Supplier	NHHDC		Electronic or other method, as agreed
6.4.1.15	If appropriate and within 10 WD of resolving problem	Send the relevant Meter information changes.	NHHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.

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7 Interface and Timetable Information - Change of Measurement Class

7.1 Change of Measurement Class from NHH to HH Metering System[67] [68]

The most likely kind of CoMC for a smart meter would be to move into HH elective. The metering would need to be CoP10 compliant but would be exempt from the Proving Test requirements. A move into mandatory HH could involve replacing the meter, followed by a Proving Test.

The process below has been modified at a basic level to accomodate the smart arrangements, however it doesn't recognise some of the possibilities of remote reconfiguration. A more developed alternative follows.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.1.1	As required	Send appointment.	Supplier	HHMOA	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.	HHMOA	Supplier	D0261 Rejection of Agent Appointment. (Go to 7.1.1 if required)	Electronic or other method, as agreed.
7.1.3	If appointment accepted and within 5 WD of 7.1.1	Send notification of acceptance of appointment.	HHMOA	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.	Supplier	NHHMOA	D0151 Termination of Appointment or Contract by Supplier.[69]	Electronic or other method, as agreed.

[67] 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.
[68] Note that the Change of Meter shall not occur until on or after the SSD.
[69] The Supplier shall indicate in the D0151 via the 'Termination Reason' field that this is a CoMC.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.1.5	If de-appointment accepted and within 5 WD of 7.1.4	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.
7.1.6	Within 5 WD of 7.1.4	Send notification of rejection of de-appointment.	Current 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.
7.1.7	Between 5 WD[8] 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.
7.1.8	Following 7.1.3 and at least 12 WD[12] prior to date of CoMC	Request HH MS functionality.[70]	Supplier	HHMOA[13]	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.	HHMOA	LDSO	D0170 Request for Metering System Related Details.	Electronic or other method, as agreed
7.1.10	Within 5 WD of 7.1.9	Send Site Technical Details.	LDSO[14]	HHMOA	D0215 Provision of Site Technical Details.	Electronic or other method, as agreed.
For legacy meters						
7.1.11	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.

[70] 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 and HHMOA is also Qualified as a NHHMOA).

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.1.12	Within 10 WD of 7.1.11	Send MTD.	NHHMOA[29]	HHMOA	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.
For smart meters						
	Within 10 WD of 7.1.11	Send MTD.	Supplier	HHMOA	DXXX Meter Asset Details. DYYY Meter Configuration Details.	Electronic or other method, as agreed.
For all meters						
7.1.13	On the date requested or agreed in 7.1.8, subject to the completion of steps 7.1.9-7.1.12	Note final NHH Meter register reading, if available from NHH MS. Install HH MS[71] or invoke HH capabilities in existing NHH MS (where current MS has both HH and NHH capabilities and HHMOA is also Qualified[18] as a NHHMOA). Commission and energise HH MS. Note initial HH Meter register reading.	HHMOA			Internal Process.

[71] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.1.14	If HH MS cannot be installed or energised, as soon as possible and within 5 WD of 7.1.13	Inform Supplier.	HHMOA	Supplier	D0221 Notification of Failure to Install or Energise Metering System.	Electronic or other method, as agreed.
7.1.15	Within 5 WD of 7.1.13	Send MTD and initial HH Meter register reading.	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. D0010 Meter Readings.	Electronic or other method, as agreed.
7.1.16	In accordance with timescales in Appendix 8.3.5.	Prove MS.	HHMOA	HHDC	Refer to Appendix 8.3.5.	Electronic or other method, as agreed.
7.1.17	Within 5 WD of 7.1.13	Send final NHH Meter register reading or notification that Meter reading not obtainable and that this is a CoMC.	HHMOA	NHHMOA	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action.	Electronic or other method, as agreed.
7.1.18	Following 7.1.17	Re-date Meter register reading to ETSD {MOA}, set time of reading to midnight and map onto Meter registers.	NHHMOA			Internal Process.
For legacy meters						

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.1.19	Within 10 WD of 7.1.17	Send final NHH Meter register reading[72] 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.
			NHHMOA	Supplier / NHHDC / LDSO	D0150 Non-Half Hourly Meter Technical Details.	
				NHHDC / Supplier /	D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3)	
		Notification of Meter removal.		MAP of old Meter	D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP.	
7.1.20	Within 10 WD of 7.1.17	Send the relevant Meter information changes.	NHHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.
7.1.21	If CoMC only, and 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
7.1.22	Within 10 WD of 3.3.1.8	Send final Meter register reading	NHHMOA / Supplier	Current NHHDC	D0010 Meter Readings	Electronic or other method, as agreed
For smart meters						

[72] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
	Following 7.1.18	Send final NHH Meter register reading[73] or notification that Meter register reading not obtainable and that this is a CoMC.	NHHMOA	Supplier	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action. DXXX Meter Asset Details	Electronic or other method, as agreed.
		Notification of Meter removal.		MAP of old Meter	D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP.	
		Send the relevant Meter information changes.	NHHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.
	Within 10 WD of 7.1.18	Send final NHH Meter register reading	Supplier	NHHDC NHHDC / LDSO	D0010 Meter Readings DXXX Meter Asset Details	Electronic or other method, as agreed.

[73] 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.

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ALTERNATIVE SMART NHH-HH CoMC *NOT* COINCIDENT WITH CoS

This is a more developed version of the process, which applies only to smart meters.
It is still possible that a meter replacement is required, especially if the Supplier wants to move to mandatory HH and install a CoP5 meter, for example.
The key steps in this process are:

- *Supplier notifies HHMOA of CoMC and confirms whether a meter replacement is involved or not*
- *Supplier provides current MTDs to HHMOA*
- *HHMOA may request site technical details even if it's not planning to work on site, as is its right as the responsible Meter operator*
- *If meter replacement required:*
    - *HHMOA notes final NHH meter reading, carries out the replacement work and notes initial meter reading*
    - *HHMOA sends final NHH meter reading to Supplier*
    - *Note the Supplier is free to collect these readings remotely as well*
- *If remote reconfiguration is required:*
    - *Supplier reconfigures meter remotely via DCC*
    - *Supplier collects final and initial readings via DCC*
    - *Supplier sends initial readings to HHMOA*
- *Then for any CoMC:*
    - *HHMOA creates D0268 and forwards this along with initial reading (either collected directly or received from Supplier) to HHDC and LDSO*
    - *Supplier sends final NHH readings to its relevant NHH agents, including NHHMOA, confirming that the CoMC has concluded*

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.1.1	As required	Send appointment.	Supplier	HHMOA	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.	HHMOA	Supplier	D0261 Rejection of Agent Appointment. (Go to 7.1.1 if required)	Electronic or other method, as agreed.
7.1.3	If appointment accepted and within 5 WD of 7.1.1	Send notification of acceptance of appointment.	HHMOA	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.	Supplier	NHHMOA	D0151 Termination of Appointment or Contract by Supplier.[74]	Electronic or other method, as agreed.
7.1.5	If de-appointment accepted and within 5 WD of 7.1.4	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.
7.1.6	Within 5 WD of 7.1.4	Send notification of rejection of de-appointment.	Current 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.
7.1.7	Between 5 WD[8] 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.

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

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.1.8	Following 7.1.3 and at least 12 WD[12] prior to date of CoMC	Request HH MS functionality.[75]	Supplier	HHMOA[13]	D0142 Request for Installation or Changes to a Metering System Functionality or the Removal of all Meters. [include statement on whether MOA is required to replace meter or await further instruction from Supplier]	Electronic or other method, as agreed.
7.1.9	Within 2 WD of 7.1.8	Request Site Technical Details.	HHMOA	LDSO	D0170 Request for Metering System Related Details.	Electronic or other method, as agreed
7.1.10	Within 5 WD of 7.1.9	Send Site Technical Details.	LDSO[14]	HHMOA	D0215 Provision of Site Technical Details.	Electronic or other method, as agreed.
~~7.1.11~~	~~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.~~
7.1.12	Within 10 WD of 7.1.8~~11~~	Send MTD.	~~NHHMOA[29]~~Supplier	HHMOA	DXXX Meter Asset Details. DYYY Meter Configuration Details. ~~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.

[75] 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 and HHMOA is also Qualified as a NHHMOA).

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
If meter replacement required						
7.1.13	On the date requested or agreed in 7.1.8, subject to the completion of steps 7.1.9-7.1.12	Note final NHH Meter register reading, if available from NHH MS. Install HH MS[76] or invoke HH capabilities in existing NHH MS (where current MS has both HH and NHH capabilities and HHMOA is also Qualified[18] as a NHHMOA). Commission and energise HH MS. Note initial HH Meter register reading.	HHMOA			Internal Process.
7.1.14	If HH MS cannot be installed or energised, as soon as possible and within 5 WD of 7.1.13	Inform Supplier.	HHMOA	Supplier	D0221 Notification of Failure to Install or Energise Metering System.	Electronic or other method, as agreed.
A	Within 5 WD of 7.1.13	Send final NHH Meter register reading or notification that Meter reading not obtainable and that this is a CoMC.	HHMOA	Supplier	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action.	Electronic or other method, as agreed.
If remote reconfiguration required						

[76] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
	On date required by Supplier	Collect final NHH Meter register reading Establish HH capability in existing NHH MS Collect initial HH Meter register reading	Supplier	[via DCC or SMSO]	[via DCC or SMSO]	
B	Following above	Send initial HH Meter register reading	Supplier	HHMOA	D0010 Meter Readings.	
For all CoMC						
7.1.15	Within 5 WD of ~~7.1.13~~ A or B	Send MTD and initial HH Meter register reading.	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. D0010 Meter Readings.	Electronic or other method, as agreed.
7.1.16	As required and i~~I~~n accordance with timescales in Appendix 8.3.5.	Prove MS.	HHMOA	HHDC	Refer to Appendix 8.3.5.	Electronic or other method, as agreed.
7.1.17	Within 5 WD of 7.1.13	Send final NHH Meter register reading or notification that Meter reading not obtainable and that this is a CoMC.	HHMOA	NHHMOA	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action.	Electronic or other method, as agreed.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.1.18	Following 7.1.17	If required, r~~R~~e-date Meter register reading to ETSD {MOA}, set time of reading to midnight and map onto Meter registers. [This step is only required so that the NHHDC is able to process a reading which in its original form would be dated outside its period appointment.]	~~NHHMOA~~Supplier			Internal Process.
7.1.19	Within 10 WD of ~~7.1.17~~ A	Send final NHH Meter register reading[77] and~~or~~ notification that ~~Meter register reading not obtainable and that~~ this is a CoMC. ~~Notification of Meter removal.~~	~~NHHMOA~~Supplier ~~NHHMOA~~	NHHDC ~~Supplier / NHHDC / LDSO~~ ~~NHHDC / Supplier /~~ ~~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.~~ ~~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.
7.1.20	Within 10 WD of 7.1.17	Send the relevant Meter information changes.	NHHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.

[77] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
~~7.1.21~~	~~If CoMC only, and 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~~
~~7.1.22~~	~~Within 10 WD of 3.3.1.8~~	~~Send final Meter register reading~~	~~NHHMOA / Supplier~~	~~Current NHHDC~~	~~D0010 Meter Readings~~	~~Electronic or other method, as agreed~~

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7.2 Coincident Change of Measurement Class from NHH to HH Metering System and Change of Supplier[68]

In this process, the Supplier is not available to coordinate the change and so the HHMOA requests details from the old NHHMOA. However, if the meter is smart it may be more appropriate for this information to be provided by the New Supplier.

The process below has been modified to accommodate smart at a minimum level, recognising the use of the proposed new flows but retaining the possibility of a site visit being required to make a physical metering replacement. A more developed alternative follows.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.2.1	As required	Send appointment.	New Supplier	HHMOA	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.	HHMOA	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.	HHMOA	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.[78]	Electronic or other method, as agreed.

[78] The Supplier shall indicate in the D0151 the reason for termination in the Additional Information field.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
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 de-appointment.	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.
7.2.7	Within 5 WD of 7.2.3	Send notification of appointment, de-appointment 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.[70]	New Supplier	HHMOA[13]	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.	HHMOA	LDSO	D0170 Request for Metering System Related Details.	Electronic or other method, as agreed.
7.2.10	Within 5 WD of 7.2.9	Send Site Technical Details.	LDSO[14]	HHMOA	D0215 Provision of Site Technical Details.	Electronic or other method, as agreed.
7.2.11	Within 2 WD of 7.2.7	Request MTD.	HHMOA	NHHMOA	D0170 Request for Metering System Related Details.	Electronic or other method, as agreed.
For legacy meters						

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.2.12	Within 10 WD of 7.2.11	Send MTD.	NHHMOA [29]	HHMOA	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.
7.2.13	On the date requested or agreed in 7.2.8, subject to the completion of steps 7.2.9-7.2.12	Note final NHH Meter register reading, if available from NHH MS. Install HH MS[71] or invoke HH capabilities in existing NHH MS (where current MS has both HH and NHH capabilities and HHMOA is also Qualified[18] as a NHHMOA). Commission and energise HH MS. Note initial HH Meter register reading.	HHMOA			Internal Process.
For smart meters						
	Within 2 WD of 7.2.7	Send MTD.	Supplier	HHMOA	DXXX Meter Asset Details. DYYY Meter Configuration Details.	Electronic or other method, as agreed.
For all meters						
7.2.14	If HH MS cannot be installed or energised, as soon as possible and within 5 WD of 7.2.13	Inform Supplier.	HHMOA	Supplier	D0221 Notification of Failure to Install or Energise Metering System.	Electronic or other method, as agreed.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.2.15	Within 5 WD of 7.2.13	Send MTD and initial HH Meter register reading.	HHMOA.	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.
7.2.16	In accordance with timescales in Appendix 8.3.5.	Prove MS.	HHMOA.	HHDC	Refer to Appendix 8.3.5.	Electronic or other method, as agreed.
7.2.17	Within 5 WD of 7.1.13	Send final NHH Meter register reading or notification that Meter reading not obtainable.	HHMOA	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.
	Within 10 WD of 7.2.17	Send the relevant Meter information changes.	NHHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.
7.2.18	Following 7.2.17	Re-date NHH Meter register reading to ETSD {MOA}, set time of reading to midnight and map onto Meter registers.	NHHMOA			Internal Process.
For legacy meters						

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.2.19	Within 10 WD of 7.2.17	Send final NHH Meter register reading[72] or notification that Meter register reading not obtainable and that this is a CoMC. Notification of Meter removal.	NHHMOA NHHMOA	NHHDC Supplier / NHHDC / LDSO NHHDC / Supplier / MAP	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action 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.
For smart meters						
	Following 7.2.17	Send final NHH Meter register reading[72] or notification that Meter register reading not obtainable and that this is a CoMC. Notification of Meter removal.	NHHMOA	Supplier MAP	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action DXXX Meter Asset Details. D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP.	Electronic or other method, as agreed.
	Within 10WD of 7.2.17	Send final NHH Meter register reading	Supplier	NHHDC/ LDSO	D0010 Meter Readings. DXXX Meter Asset Details.	Electronic or other method, as agreed.
~~7.2.20~~	~~Within 10 WD of 7.2.17~~	~~Send the relevant Meter information changes.~~	~~NHHMOA~~	~~ECOES~~	~~D0312 Notification of Meter Information to ECOES.~~	~~Electronic or other method as agreed.~~

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ALTERNATIVE SMART-SPECIFC NHH-HH CoMC COINCIDENT WITH CoS

As an alternative to 7.2 above, we have taken the non-coincident smart CoMC process from the previous section (7.1) and have adjusted it further to accommodate CoS. This is on the basis that the same general CoMC principles should apply, and ideally the two processes should be similar.

Key issues identified with this process:

- *At some point the HHMOA needs the existing NHH MTDs. If the New Supplier cannot get these from the meter direct then they would need to be transferred from the Old Supplier*
- *Once the process is complete, the New Supplier needs to send final NHH Meter readings back to the Old Supplier. It would seem sensible to use the D0291 flow but this particular from/to instance isn't currently supported by the DTC.*

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.1.1	As required	Send appointment.	New Supplier	HHMOA	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.	HHMOA	New Supplier	D0261 Rejection of Agent Appointment. (Go to 7.1.1 if required)	Electronic or other method, as agreed.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.1.3	If appointment accepted and within 5 WD of 7.1.1	Send notification of acceptance of appointment.	HHMOA	New 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.	Current Supplier	NHHMOA	D0151 Termination of Appointment or Contract by Supplier.[79]	Electronic or other method, as agreed.
7.1.5	If de-appointment accepted and within 5 WD of 7.1.4	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.
7.1.6	Within 5 WD of 7.1.4	Send notification of rejection of de-appointment.	Current NHHMOA	Current 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.
7.1.7	Between 5 WD[8] and 10 WD of 7.1.4	Send notification of appointment, de-appointment 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.
7.1.8	Following 7.1.3 and at least 12 WD[12] prior to date of CoMC	Request HH MS functionality.[80]	Supplier	HHMOA[13]	D0142 Request for Installation or Changes to a Metering System Functionality or the Removal of all Meters. [include statement on whether MOA is required to replace meter or await further instruction from Supplier]	Electronic or other method, as agreed.

[79] The Supplier shall indicate in the D0151 via the 'Termination Reason' field that this is a CoMC.
[80] 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 and HHMOA is also Qualified as a NHHMOA).

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.1.9	Within 2 WD of 7.1.8	Request Site Technical Details.	HHMOA	LDSO	D0170 Request for Metering System Related Details.	Electronic or other method, as agreed
7.1.10	Within 5 WD of 7.1.9	Send Site Technical Details.	LDSO[14]	HHMOA	D0215 Provision of Site Technical Details.	Electronic or other method, as agreed.
7.1.12	Within 10 WD of 7.1.8	Send current MTD. [Implication is that New Supplier needs to be able to ascertain the current NHH MTDs in order to provide to HHMO. Otherwise there is reliance on the Old Supplier]	New Supplier	HHMOA	DXXX Meter Asset Details. DYYY Meter Configuration Details.	Electronic or other method, as agreed.
If meter replacement required						
7.1.13	On the date requested or agreed in 7.1.8, subject to the completion of steps 7.1.9-7.1.12	Note final NHH Meter register reading, if available from NHH MS. Install HH MS[81] or invoke HH capabilities in existing NHH MS (where current MS has both HH and NHH capabilities and HHMOA is also Qualified[18] as a NHHMOA). Commission and energise HH MS. Note initial HH Meter register reading.	HHMOA			Internal Process.

[81] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.1.14	If HH MS cannot be installed or energised, as soon as possible and within 5 WD of 7.1.13	Inform Supplier.	HHMOA	New Supplier	D0221 Notification of Failure to Install or Energise Metering System.	Electronic or other method, as agreed.
A	Within 5 WD of 7.1.13	Send final NHH Meter register reading or notification that Meter reading not obtainable and that this is a CoMC.	HHMOA	New Supplier	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action.	Electronic or other method, as agreed.
If remote reconfiguration required						
	On date required by Supplier	Collect final NHH Meter register reading Establish HH capability in existing NHH MS Collect initial HH Meter register reading	New Supplier	[via DCC or SMSO]	[via DCC or SMSO]	
B	Following above	Send initial HH Meter register reading	New Supplier	HHMOA	D0010 Meter Readings.	
For all CoMC						

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.1.15	Within 5 WD of A or B	Send MTD and initial HH Meter register reading.	HHMOA	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.
7.1.16	As required and in accordance with timescales in Appendix 8.3.5.	Prove MS.	HHMOA	HHDC	Refer to Appendix 8.3.5.	Electronic or other method, as agreed.
7.1.17	Within 5 WD of 7.1.13	Send final NHH Meter register reading or notification that Meter reading not obtainable and that this is a CoMC.	HHMOA	NHHMOA	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action.	Electronic or other method, as agreed.
7.1.18	Following 7.1.17	If required, re-date Meter register reading to ETSD {MOA}, set time of reading to midnight and map onto Meter registers. [This step is only required so that the NHHDC is able to process a reading which in its original form would be dated outside its period appointment.]	New Supplier			Internal Process.
	Following 7.1.18	Send final NHH Meter register reading	New Supplier	Current Supplier	D0291 Notification of Register Readings on Change of Measurement Class Coincident with Change of Supplier	Electronic or other method, as agreed.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.1.19	~~Within 10 WD of A~~By SSD+8	Send final NHH Meter register reading[82] and notification that this is a CoMC.	New Supplier	NHHDC	D0010 Meter Readings	Electronic or other method, as agreed.
7.1.20	Within 10 WD of 7.1.17	Send the relevant Meter information changes.	NHHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.

[82] 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.

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7.3 Change of Measurement Class from HH to NHH Metering System [67,68]

REF	WHEN	ACTION	FROM	TO	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	HHMOA	D0151 Termination of Appointment or Contract by Supplier.[69]	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 de-appointment shall only occur if the current HHMOA has a contract with the customer.	Electronic or other method, as agreed.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.3.6	Between 5 WD[8] 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[12] prior to date of CoMC	Request NHH MS functionality.	Supplier	NHHMOA[83]	D0142 Request for Installation or Changes to a Metering System Functionality or the Removal of all Meters.	Electronic or other method, as agreed.
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	Within 5 WD of 7.3.8	Send Site Technical Details.	LDSO[14]	NHHMOA	D0215 Provision of Site Technical Details.	Electronic or other method, as agreed.
7.3.10	Within 2 WD of 7.3.7	Instruct HHMOA to send MTD to NHHMOA	Supplier	HHMOA	D0170 Request for Metering System Related Details.	Electronic or other method, as agreed.
7.3.11	Within 5 WD of 7.3.10	Send MTD.	HHMOA[29]	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.
7.3.12	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.
7.3.13	Within 3 WD of 7.3.12 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.

[83] The NHHMOA shall decide whether to replace the MS or to permanently disable the HH functionality (where current MS has both HH and NHH capabilities and NHHMOA is also Qualified as a HHMOA).

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.3.14	On date and time agreed in 7.3.13, subject to the completion of steps 7.3.8 - 7.3.11	Collect final HH Metered Data.	HHDC			Internal Process.
7.3.15	Immediately following 7.3.14	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.
7.3.16	Immediately following 7.3.15	Note final HH Meter register reading, if available from HH MS. Install NHH MS[84] or permanently disable the HH function within the current MS (where current MS has both HH and NHH capabilities and NHHMOA is also Qualified[18] as a HHMOA). Commission and energise NHH MS. Note initial NHH Meter register reading.	NHHMOA			Internal Process.
	Within 10 WD of 7.3.16	Send the relevant Meter information changes.	NHHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.
7.3.17	If NHH MS cannot be installed or energised, as soon as possible and within 5 WD of 7.3.16	Inform Supplier.	NHHMOA	Supplier	D0221 Notification of Failure to Install or Energise Metering System.	Electronic or other method, as agreed.

[84] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
For legacy meters						
7.3.18	Within 10 WD of 7.3.16	Send MTD.	NHHMOA	Supplier / NHHDC / LDSO NHHDC / Supplier /	D0149 Notification of Mapping Details. D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3)	Electronic or other method, as agreed.
		Send initial NHH Meter register reading. Send notification of Meter installation, Supplier and NHHMOA's appointment.		NHHDC MAP	D0150 Non-Half Hourly Meter Technical Details. D0010 Meter Readings. D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP.	
~~7.3.19~~	~~Within 10 WD of 7.3.16~~	~~Send the relevant Meter information changes.~~	~~NHHMOA~~	~~ECOES~~	~~D0312 Notification of Meter Information to ECOES.~~	~~Electronic or other method as agreed.~~
7.3.20	If no Meter register reading received within 10 WD of CoMC and initial reading required[85] and same Metering Equipment is in use.	Request initial Meter register reading If no request for initial Meter register reading required, proceed to 7.3.21.	NHHDC	NHHMOA, Supplier		Post / Fax / Email
For smart meters						

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

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.3.xx	Following 7.3.16, if MOA has visited site	Send MTD and initial NHH Meter register reading. Send notification of Meter installation, Supplier and NHHMOA's appointment.	NHHMOA MAP	Supplier	DXXX Meter Asset Details. DYYY Meter Configuration Details D0010 Meter Readings. D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP.	Electronic or other method, as agreed.
7.3.xx	Within 10WD of installation / reconfiguration of Metering System	Send MTD and initial NHH Meter register reading.	Supplier	NHHDC / LDSO	DXXX Meter Asset Details. DYYY Meter Configuration Details. D0010 Meter Readings.	Electronic or other method, as agreed
For all meters						
7.3.21	Within 10 WD of 7.3.20	Send initial Meter register reading	NHHMOA / Supplier	NHHDC	D0010 Meter Readings	Electronic or other method, as agreed
7.3.22	Within 10 WD of 7.3.16	Send final HH Meter register reading or notification that Meter register reading not obtainable and that this is a CoMC.	NHHMOA	HHMOA	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action.	Electronic or other method, as agreed.
7.3.23	Within 5 WD of 7.3.22	Send final HH Meter register reading or notification that Meter register reading not obtainable and that this is a CoMC.	HHMOA	HHDC	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action.	Electronic or other method, as agreed.

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ALTERNATIVE SMART-SPECIFIC HH-NHH CoMC NOT COINCIDENT WITH SUPPLIER

As with the NHH-HH processes, a simpler variation is presented that would apply to smart meters only. While the CoMC may still have involved a physical change of meter, the smart flows are used throughout, as is the revised supplier hub principle where the Supplier is responsible for providing readings to the NHHDC, rather than the NHHMOA.

REF	WHEN	ACTION	FROM	TO	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	HHMOA	D0151 Termination of Appointment or Contract by Supplier.[69]	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 de-appointment 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[8] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.3.7	Following 7.3.3 and at least 7 WD[12] prior to date of CoMC	Request NHH MS functionality.	Supplier	NHHMOA[86]	D0142 Request for Installation or Changes to a Metering System Functionality or the Removal of all Meters. [include statement on whether MOA is required to replace meter or await further instruction from Supplier]	Electronic or other method, as agreed.
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	Within 5 WD of 7.3.8	Send Site Technical Details.	LDSO[14]	NHHMOA	D0215 Provision of Site Technical Details.	Electronic or other method, as agreed.
7.3.10	Within 2 WD of 7.3.7	Instruct HHMOA to send MTD to NHHMOA	Supplier	HHMOA	D0170 Request for Metering System Related Details.	Electronic or other method, as agreed.
7.3.11	Within 5 WD of 7.3.10	Send MTD.	HHMOA[29]	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.
7.3.12	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.
7.3.13	Within 3 WD of 7.3.12 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.

[86] The NHHMOA shall decide whether to replace the MS or to permanently disable the HH functionality (where current MS has both HH and NHH capabilities and NHHMOA is also Qualified as a HHMOA).

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.3.14	On date and time agreed in 7.3.13, subject to the completion of steps 7.3.8 - 7.3.11	Collect final HH Metered Data.	HHDC			Internal Process.
If meter replacement required						
7.3.15	Immediately following 7.3.14	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.
7.3.16	Immediately following 7.3.15	Note final HH Meter register reading, if available from HH MS. Install NHH MS[87] or permanently disable the HH function within the current MS (where current MS has both HH and NHH capabilities and NHHMOA is also Qualified[18] as a HHMOA). Commission and energise NHH MS. Note initial NHH Meter register reading.	NHHMOA			Internal Process.
7.3.17	If NHH MS cannot be installed or energised, as soon as possible and within 5 WD of 7.3.16	Inform Supplier.	NHHMOA	Supplier	D0221 Notification of Failure to Install or Energise Metering System.	Electronic or other method, as agreed.

[87] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
A	Within 10 WD of 7.3.16	Send final HH Meter register reading or notification that Meter register reading not obtainable and that this is a CoMC.	NHHMOA	Supplier	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action.	Electronic or other method, as agreed.
If remote reconfiguration required						
B	On date required by Supplier	Collect final HH Meter register reading Establish NHH capability in existing HH MS Collect initial NHH Meter register reading	Supplier	[via DCC or SMSO]		
	Following above	Send initial NHH Meter register reading [this step not vital but acts as a prompt to send D0303/D0312?]	Supplier	NHHMOA	D0010 Meter Readings.	Electronic or other method, as agreed.
For all CoMC						
	Within 5 WD of A or B	Send final HH Meter register reading and notification that this is a CoMC.	Supplier	HHDC	D0010 Meter Readings	Electronic or other method, as agreed.
7.3.18	Within 10 WD of ~~7.3.16~~A or B	Send MTD.	~~NHHMOA~~Supplier	Supplier / NHHDC / LDSO ~~NHHDC / Supplier /~~	DYYY Meter Configuration Details~~D0149 Notification of Mapping Details.~~ ~~D0313 Auxiliary Meter Technical Details (in accordance with Appendix 9.3)~~	Electronic or other method, as agreed.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
		Send initial NHH Meter register reading. Send notification of Meter installation, Supplier and NHHMOA's appointment.	Supplier NHHMOA	NHHDC MAP	D0150 Non-Half Hourly Meter Technical Details. DXXX Meter Asset Details ~~D0010 Meter Readings.~~ D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP.	
7.3.19	Within 10 WD of 7.3.16	Send the relevant Meter information changes.	NHHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.
~~7.3.20~~	~~If no Meter register reading received within 10 WD of CoMC and initial reading required[88] and same Metering Equipment is in use.~~	~~Request initial Meter register reading~~ ~~If no request for initial Meter register reading required, proceed to 7.3.21.~~	~~NHHDC~~	~~NHHMOA, Supplier~~		~~Post / Fax / Email~~
~~7.3.21~~	~~Within 10 WD of 7.3.20~~	~~Send initial Meter register reading~~	~~NHHMOA / Supplier~~	~~NHHDC~~	~~D0010 Meter Readings~~	~~Electronic or other method, as agreed~~
~~7.3.22~~	~~Within 10 WD of 7.3.16~~	~~Send final HH Meter register reading or notification that Meter register reading not obtainable and that this is a CoMC.~~	~~NHHMOA~~	~~HHMOA~~	~~D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action.~~	~~Electronic or other method, as agreed.~~
~~7.3.23~~	~~Within 5 WD of 7.3.22~~	~~Send final HH Meter register reading or notification that Meter register reading not obtainable and that this is a CoMC.~~	~~HHMOA~~	~~HHDC~~	~~D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action.~~	~~Electronic or other method, as agreed.~~

~~[88] An initial Meter reading is required for a co-incident CoS and CoMC. It is optional for a CoMC only.~~

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7.4 Coincident Change of Measurement Class from HH to NHH Metering System and Change of Supplier [67] [68]

REF	WHEN	ACTION	FROM	TO	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	HHMOA	D0151 Termination of Appointment or Contract by Supplier.[78]	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 de-appointment.	Current HHMOA	New 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, de-appointment 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[12] prior to date of CoMC	Request NHH MS functionality.	New Supplier	NHHMOA[83]	D0142 Request for Installation or Changes to a Metering System Functionality or the Removal of all Meters.	Electronic or other method, as agreed.
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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.4.9	Within 5 WD of 7.4.8	Send Site Technical Details.	LDSO[14]	NHHMOA	D0215 Provision of Site Technical Details.	Electronic or other method, as agreed.
7.4.10	Within 2 WD of 7.4.7	Request MTD.	NHHMOA	HHMOA	D0170 Request for Metering System Related Details.	Electronic or other method, as agreed.
7.4.11	Within 5 WD of 7.4.10	Send MTD.	HHMOA[29]	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.
7.4.12	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.
7.4.13	Within 3 WD of 7.3.12 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.
7.4.14	On date and time agreed in 7.4.13, subject to the completion of steps 7.4.7 – 7.4.11	Collect final HH Metered Data.	HHDC			Internal Process.
7.4.15	Immediately following 7.4.14	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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.4.16	Immediately following 7.4.15	Note final HH Meter register reading, if available from HH MS. Install NHH MS[84] or permanently disable the HH function within the current MS (where current MS has both HH and NHH capabilities and NHHMOA is also Qualified[18] as a HHMOA). Commission and energise NHH MS. Note initial NHH Meter register reading.	NHHMOA			Internal Process.
	Within 10 WD of 7.4.16	Send the relevant Meter information changes.	NHHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.
7.4.17	If NHH MS cannot be installed or energised, as soon as possible and within 5 WD of 7.4.16	Inform Supplier.	NHHMOA	New Supplier	D0221 Notification of Failure to Install or Energise Metering System.	Electronic or other method, as agreed.
For legacy meters						
7.4.18	Within 10 WD of 7.4.16	Send MTD.	NHHMOA	New Supplier / NHHDC / LDSO New 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 NHH Meter register reading.		NHHDC	D0010 Meter Readings.	

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
		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.	
For smart meters						
7.4.x	Following 7.4.16	Send MTD. Send initial NHH Meter register reading. Send notification of Meter installation and Supplier.	NHHMOA	New Supplier New Supplier MAP	DXXX Meter Asset Details. DYYY Meter Configuration Details. D0010 Meter Readings. D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP.	Electronic or other method, as agreed.
7.4.x	Within 10WD of 7.4.16 and by 8WD of SSD	Send MTD	New Supplier	NHHDC / LDSO	DXXX Meter Asset Details. DYYY Meter Configuration Details.	Electronic or other method, as agreed.
		Send initial NHH Meter register reading.		NHHDC	D0010 Meter Readings.	
For all meters						
~~7.4.19~~	~~Within 10 WD of 7.4.16~~	~~Send the relevant Meter information changes.~~	~~NHHMOA~~	~~ECOES~~	~~D0312 Notification of Meter Information to ECOES.~~	~~Electronic or other method as agreed.~~
7.4.20	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, New Supplier		Post / Fax / Email

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
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 7.4.16	Send final HH Meter register reading or notification that Meter register reading not obtainable and that this is a CoMC coincident with CoS.	NHHMOA	HHMOA	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.	HHMOA	HHDC	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action.	Electronic or other method, as agreed.

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ALTERNATIVE SMART-SPECIFIC HH-NHH CoMC COINCIDENT WITH COS

A variation of the above, this time redlined against the non-coincident HH-NHH CoMC process.

It appears there are no substantial variations from the 'proper' HH-NHH CoMC-CoS process. The same basic elements are present but ordered slightly differently.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.3.1	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.
7.3.2	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	New 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	New 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.	Current Supplier	HHMOA	D0151 Termination of Appointment or Contract by Supplier.[69]	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	Current 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.3.6	Between 5 WD[8] and 10WD of 7.3.4	Send notification of appointment, de-appointment 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.
7.3.7	Following 7.3.3 and at least 7 WD[12] prior to date of CoMC	Request NHH MS functionality.	New Supplier	NHHMOA[89]	D0142 Request for Installation or Changes to a Metering System Functionality or the Removal of all Meters. [include statement on whether MOA is required to replace meter or await further instruction from Supplier]	Electronic or other method, as agreed.
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	Within 5 WD of 7.3.8	Send Site Technical Details.	LDSO[14]	NHHMOA	D0215 Provision of Site Technical Details.	Electronic or other method, as agreed.
7.3.10	Within 2 WD of 7.3.7	Instruct HHMOA to send MTD to NHHMOA	New Supplier	HHMOA	D0170 Request for Metering System Related Details.	Electronic or other method, as agreed.
7.3.11	Within 5 WD of 7.3.10	Send MTD.	HHMOA[29]	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.
7.3.12	Within 2 WD of 7.3.7	Request that final HH Metered Data is collected.	New Supplier	HHDC	D0005 Instruction on Action.	Electronic or other method, as agreed.

[89] The NHHMOA shall decide whether to replace the MS or to permanently disable the HH functionality (where current MS has both HH and NHH capabilities and NHHMOA is also Qualified as a HHMOA).

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.3.13	Within 3 WD of 7.3.12 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.
7.3.14	On date and time agreed in 7.3.13, subject to the completion of steps 7.3.8 - 7.3.11	Collect final HH Metered Data.	HHDC			Internal Process.
If meter replacement required						
7.3.15	Immediately following 7.3.14	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.
7.3.16	Immediately following 7.3.15	Note final HH Meter register reading, if available from HH MS. Install NHH MS[90] or permanently disable the HH function within the current MS (where current MS has both HH and NHH capabilities and NHHMOA is also Qualified[18] as a HHMOA). Commission and energise NHH MS. Note initial NHH Meter register reading.	NHHMOA			Internal Process.

[90] 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.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
7.3.17	If NHH MS cannot be installed or energised, as soon as possible and within 5 WD of 7.3.16	Inform Supplier.	NHHMOA	New Supplier	D0221 Notification of Failure to Install or Energise Metering System.	Electronic or other method, as agreed.
A	Within 10 WD of 7.3.16	Send final HH Meter register reading or notification that Meter register reading not obtainable and that this is a CoMC.	NHHMOA	New Supplier	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action.	Electronic or other method, as agreed.
If remote reconfiguration required						
B	On date required by Supplier	Collect final HH Meter register reading Establish NHH capability in existing HH MS Collect initial NHH Meter register reading	New Supplier	[via DCC or SMSO]		
	Following above	Send initial NHH Meter register reading	New Supplier	NHHMOA	D0010 Meter Readings.	Electronic or other method, as agreed.
For all CoMC						
	Following [above]	Send final HH Meter register reading	New Supplier	Current Supplier	D0010 Meter Readings	Electronic or other method, as agreed.
	Within 5 WD of A or B	Send final HH Meter register reading and notification that this is a CoMC.	New Supplier	HHDC	D0010 Meter Readings	Electronic or other method, as agreed.
7.3.18	Within 10 WD of A or B and by SSD+8	Send MTD.	New Supplier	Supplier / NHHDC / LDSO	DYYY Meter Configuration Details	Electronic or other method, as agreed.

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REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
		Send initial NHH Meter register reading.	Supplier	NHHDC	D0010 Meter Readings. DXXX Meter Asset Details	
		Send notification of Meter installation, Supplier and NHHMOA's appointment.	NHHMOA	MAP	D0303 Notification of Meter Operator, Supplier and Metering Assets installed/removed by the MOP to the MAP.	
7.3.19	Within 10 WD of 7.3.16	Send the relevant Meter information changes.	NHHMOA	ECOES	D0312 Notification of Meter Information to ECOES.	Electronic or other method as agreed.

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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:

I. Outstation Id;

II. Meter Id (serial number);

III. Outstation number of channels;

IV. Measurement Quantity Id;

V. Meter multiplier;

VI. Pulse multiplier;

VII. CT and / or VT Ratios; and

VIII. Access to ME at Password Level 3.[91]

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.

8.3 Proving of Half Hourly Metering Systems

8.3.1 Reasons for a Proving Test

A proving test shall be carried out on both main and check MS and shall be carried out in the following circumstances:

1. As a result of new connection or Registration Transfers from CMRS to SMRS;
2. Following a change of HHDC appointment but only in the event that the MTD was manually intervened;
3. Following a change of HHMOA appointment but only in the event that the MTD was manually intervened;
4. Following a concurrent Change of Supplier and HHDC but only in the event that the MTD was manually intervened;
5. When a MS is reconfigured / replaced;
6. Following a change of Measurement Class from NHH to HH;
7. When there is a Key field change (refer to Appendix 8.2);
8. 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;

[91] 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

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9. Whenever a shared SVA MS arrangement is carried out; and
10. Where a feeder is energised for the first time.

'Manually intervened (with regard to proving tests)' means that MTD have been entered, re-entered 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 Code of Practice 10 are exempt from proving tests.

8.3.2 Methods of Proving

The HHMOA shall decide what method of proving test is appropriate in conjunction with the HHDC and has one of the four methods outlined below to choose from:

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.[92] 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 HHMOA[92]. The HHMOA then uses the manufacturer's software to read the Meter constants, pulse multiplier, serial number etc, then collects Meter

[92] 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.

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pulses or engineering data for the same HH Settlement Period as provided by the HHDC and calculates the reading.

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.

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.

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Timescales

Code of Practice	WDs to Complete Proving Test[93]	WDs to Complete Re-Test	Total
One	5	5	10
Two	5	5	10
Three	10	10	20
Five	15	15	30

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.

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

[93] The starting date for this time is either the Date of Meter Installation, 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.

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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.

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.

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.

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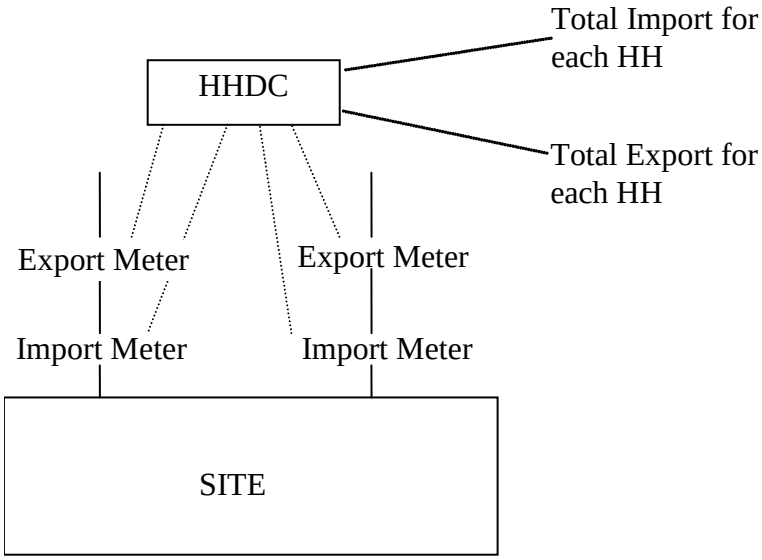
For this reason, the netting of Export energy from Import energy should not be carried out. The BSC also states that there must be only one HHMOA for a MS that measures both Export and Import active energy.



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.

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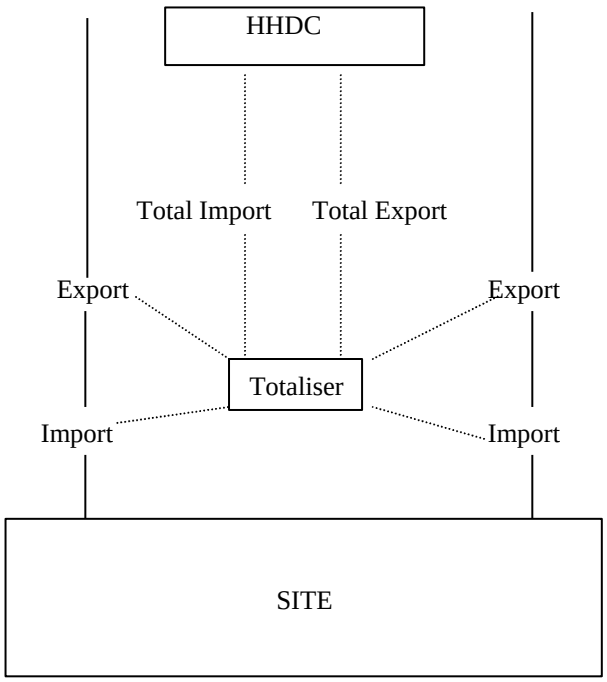
Netting of Exports and Imports shall not be permitted at site.



No. of Import MSIDs = 1

No. of Export MSIDs = 1

8.4.3 Embedded Customers within a Private Network

An example is where Customer 'A' within an industrial site takes energy directly from the landlord's internal network, but has a separate Supply contract with a licensed Supplier. The energy consumption of the landlord's network supply is determined by the netting of the Meters at the point of connection to the Distribution System and the individual Customer 'A' Meter.

This arrangement results in two distinct MSIDs. When traded in SMRS, to ensure the proper allocation of energy traded within the Settlement processes, **both the landlord's supply and the Customer 'A' supply shall have the same HHDC and HHMOA,** the same HHMOA being necessary for the processing of related D0268's. Different Suppliers and HHDAs would be acceptable.

A Metering Dispensation for each arrangement should be obtained before further MSIDs are created in SMRS for this type of customer.

The applied Line Loss Factors (LLFs) shall not take account of losses within the private network and should be left to the landlord and Customer 'A' to come to a mutual agreement. However, each traded MSID should have Voltage General or site Specific LLFs applied in the normal way for Settlement purposes.

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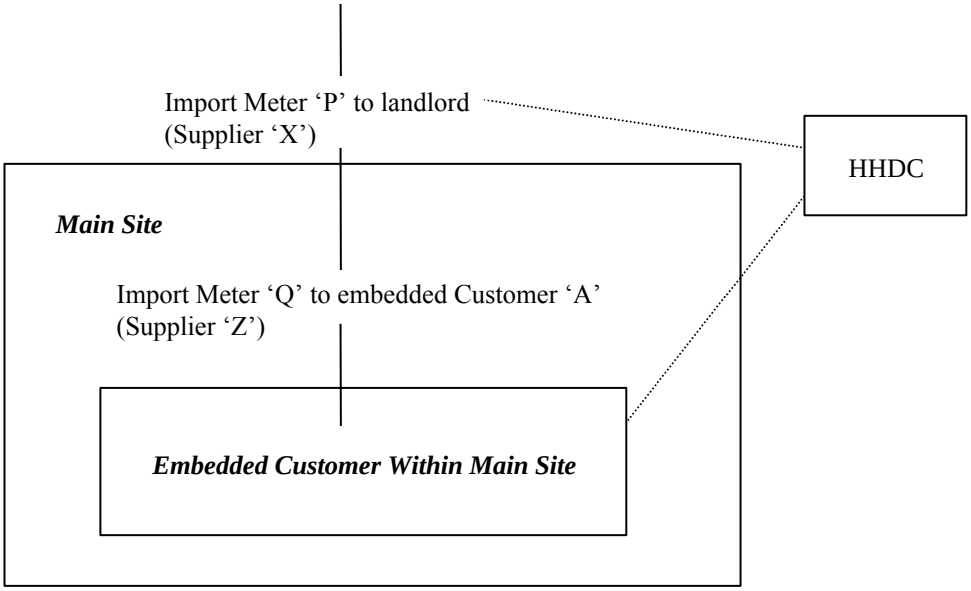

Landlord energy for Supplier 'X' = Meter 'P' – Meter 'Q' HH data: 1 Import MSID

Customer 'A' energy for Supplier 'Z' = Meter 'Q' HH data: 1 Import MSID

No. of Import MSIDs = 2 (1 MSID for embedded customer and 1 for the landlord or Main site)

No. of Export MSIDs = 0

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:

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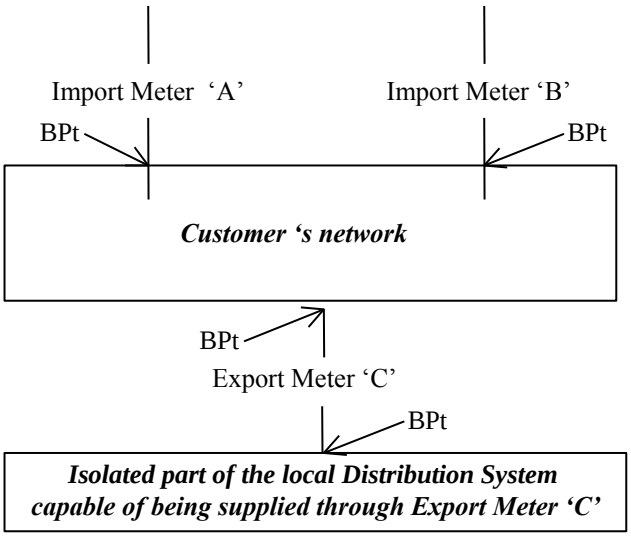
Import Meter A + Import Meter B - Export Meter C.



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.

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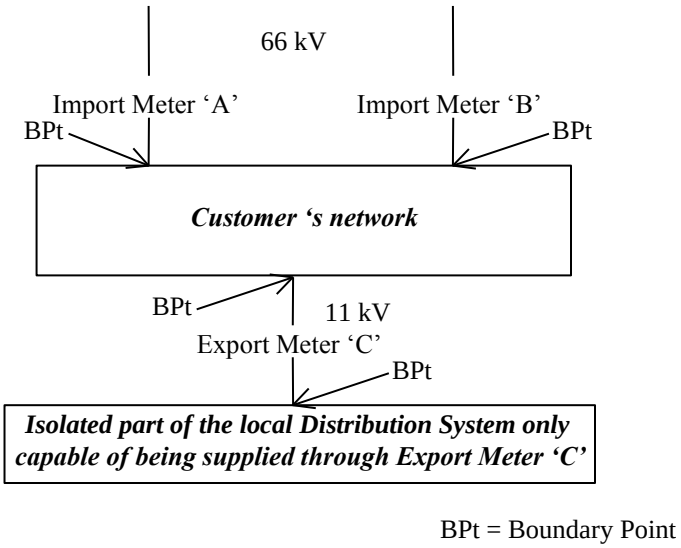

Import to the Customer's network = Import Meter 'A' + Import Meter 'B' – Export Meter 'C'

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:

TCUST = (Export 'A' – Import 'A') + (Export 'B' – Import 'B') + (Export 'C')

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.

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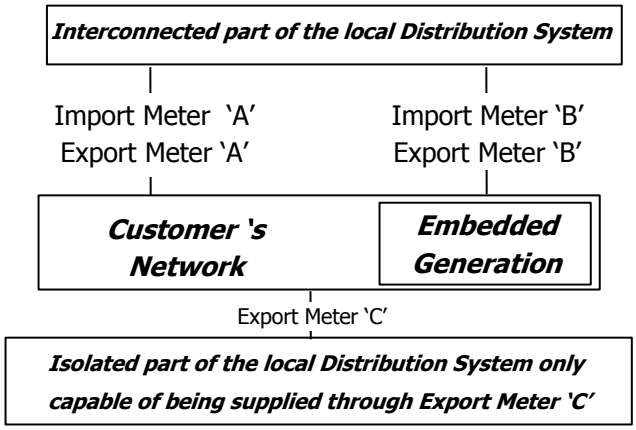

Import to the Customer's network = Import Meter 'A' + Import Meter 'B' – Export Meter 'C'.

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'.

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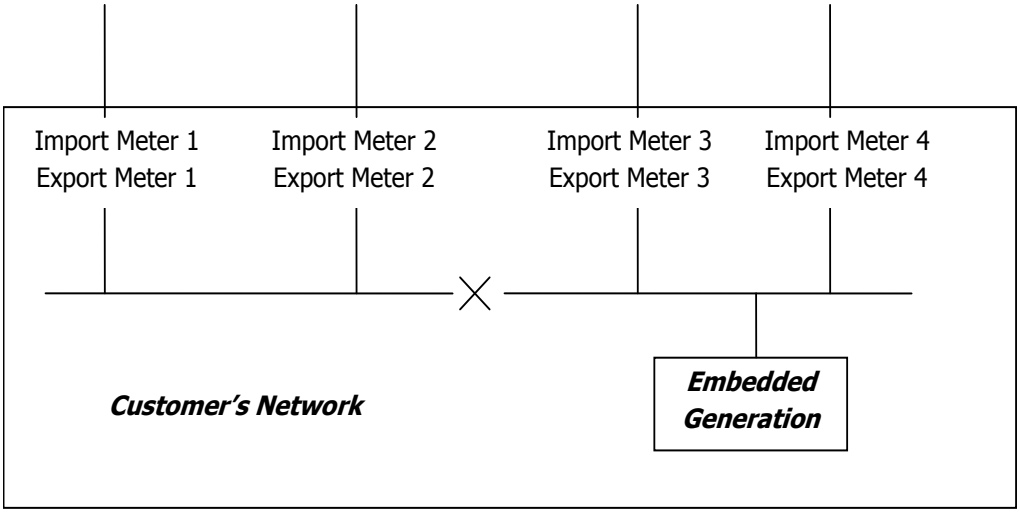

Where totalisation is used:	Where totalisation is not used:
No. Import MSIDs = 1	No. Import MSIDs = 4
No. Export MSIDs = 1	No. Export MSIDs = 4

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:

Import = (M1 AE + M2 AE) – (M1 AI + M2 AI)

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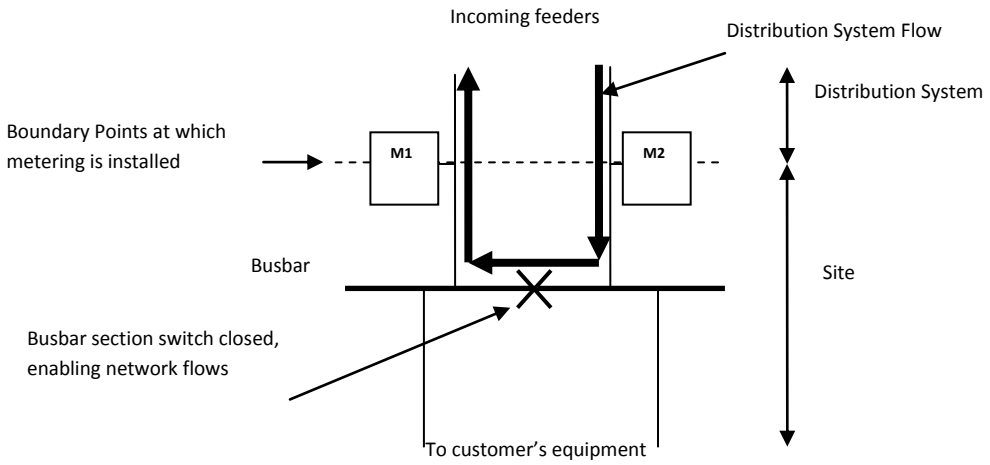

Figure 1. Distribution Network Flows

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)

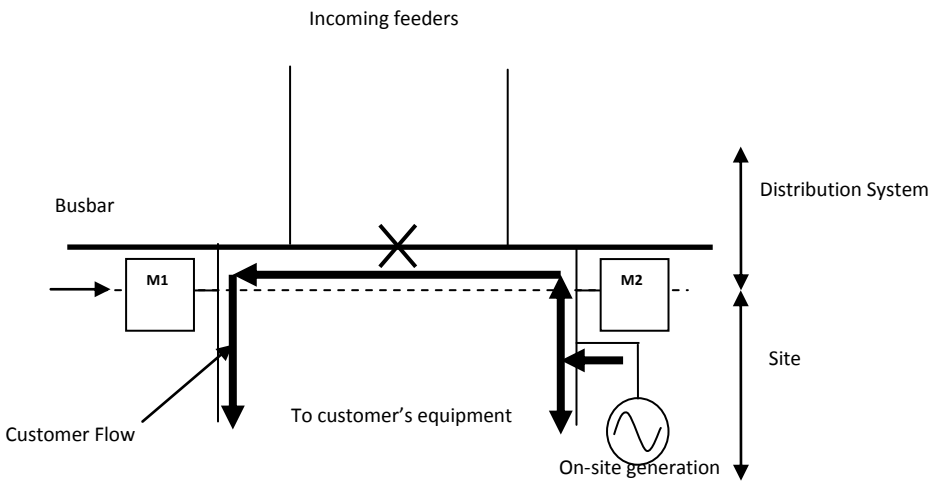

Figure 2. Customer Network Flows

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8.4.8 Complex Site Supplementary Information Form

BSCP514/8.4.8a **Complex Site Supplementary Information Form** **Page 1 of 2**

From HHMOA To HHDC Metering System ID Site Name	Metering System Arrangement Description
Aggregation Rule	

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

Signature_____Date_____

Name_____

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BSCP514/8.4.8b Complex Site Supplementary Information Page 2 of 2

From HHMOA	Metering System Arrangement Description
To HHDC	
Metering System ID	
Site Name	
Feeder Name	

	Import	Export
Main	Ref: kWh MSID Outstation ID Channel Number Comms Address Meter ID Pulse Multiplier Meter Register Constant CT Ratio VT Ratio	Ref: kWh MSID Outstation ID Channel Number Comms Address Meter ID Pulse Multiplier Meter Register Constant CT Ratio VT Ratio
Check	Ref: kWh MSID Outstation ID Channel Number Comms Address Meter ID Pulse Multiplier Meter Register Constant CT Ratio VT Ratio	Ref: kWh MSID Outstation ID Channel Number Comms Address Meter ID Pulse Multiplier Meter Register Constant CT Ratio VT Ratio

Signature_____Date_____

Name

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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[94]	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

[94] 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.

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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, 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.

Where the Meter Type identifies compliance with a version of the Smart Metering Equipment Technical Specification (SMETS), the meter shall be considered smart and the Meter Technical Details shall instead be comprised of the DXXX and DYYY, without a requirement for the D0313.

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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; and

(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.

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10.1 Half Hourly Meter Operator Agent Service Levels

Serial	Sender	Process	Sub-Process	Recipient	Performance Measure	Service Levels	Reporting Method
HM11	HHMOA	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	HHMOA	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	HHMOA	2.4 Interface to Other Party Agents	Quality of HH MTDs	HHDC	Accurate D0268s sent	None	[HHDC]
HM14	HHMOA	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]

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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]

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