



# Market Domain Data

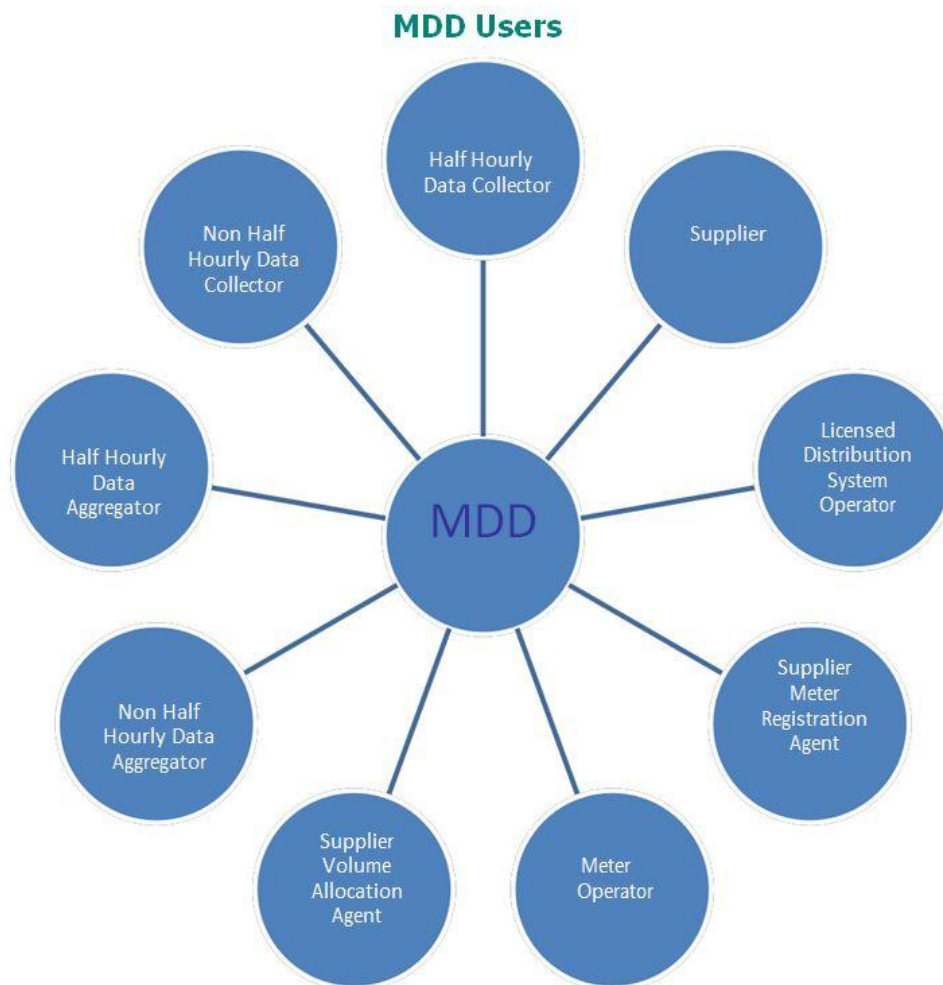
## A simplified guide to ELEXON's Market Domain Data

This document covers areas such as change request submissions, Meter Timeswitch Classes, Line Loss Factors and Standard Settlement Configuration. See [BSCP509 Appendix 2](#) on the [BSC Website](#) for more about MDD.

### 1 What is Market Domain Data?

Market Domain Data (MDD) is the reference data used by Suppliers, Supplier Agents and Licensed Distribution System Operators (LDSOs) in the retail electricity market. It allows the Supplier Volume Allocation (SVA) Trading Arrangements to operate.

It includes significant information such as Standard Settlement Configuration (SSC), Profile Classes (PC), and Grid Supply Point (GSP) Groups.



## How is MDD managed?

MDD ensures that everyone uses the same data. It is managed on a version control basis and updated **concurrently**. We use version control to ensure we manage, control and audit the MDD system effectively. ELEXON owns the MDD application, but Logica maintains the MDD software and database as the Supplier Volume Allocation Agent (SVAA).

## How is MDD structured?

The MDD application produces structured files which are loaded into your internal systems. A new version is created when MDD information is updated and distributed (Published) to market participants.

**The D0269 dataflow is the complete set of data (excluding Teleswitch and Balancing Mechanism (BM) Unit details). These are issued in the D0280 and D0299 flows respectively.**

**The D0270 dataflow contains only the incremental updates of the most recent version to be published.**

You are responsible for managing your own files and updating your systems. You can find further information on the structure of the MDD flows in the Data Transfer Catalogue (DTC) maintained by the [Master Registration Agent Service Company \(MRASCo\)](#).

## How are MDD files distributed?

We publish MDD in line with the release schedule about once a month. The [MDD Release Schedule](#), available on the [BSC Website](#), outlines key dates, and tells you the relevant dates for each MDD version.

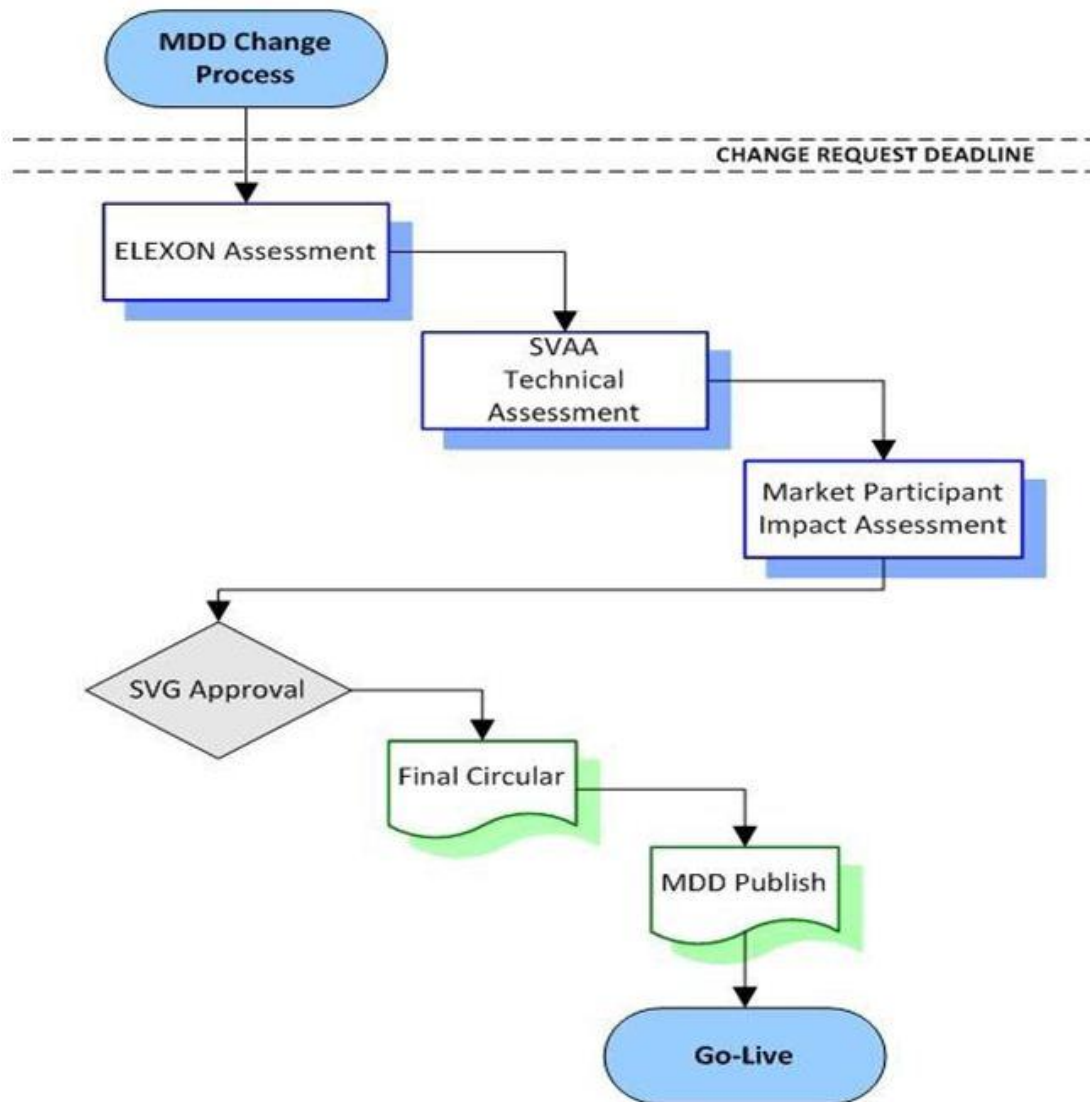
The SVAA distributes the MDD files to you. You can get MDD files over the Data Transfer Network (DTN) or by email. Please let the SVAA or the MDD Coordinator know which you prefer. When requesting files over the Data Transfer Network you must specify Market Participant ID and Role Code.

**MDD** is also available on the [ELEXON Portal](#).

## 2 The MDD Change Process

MDD is managed using version control and change procedure. This process is administered by [BSCP509: Changes to Market Domain Data](#).

The key activities in the MDD change process are illustrated below:



**Change Request (CR) Deadline:** This is the last date for when you can submit a proposed MDD change for a particular version.

## More about the MDD Change Diagram

We explain the terms in the diagram on the previous page:

**ELEXON Assessment / SVAA Technical Assessment:** We issue all changes to the SVAA (for technical assessment) following an internal review.

The SVAA sends back all changes within three working days with any issues or errors that may occur during its assessment.

**Market Participant Impact Assessment:** You must review all proposed changes to be incorporated in a particular version of MDD. This review enables you to raise comments on changes that may impact processes or systems. You must return comments within five working days of receiving the changes.

**SVG Approval:** All changes are approved by the Supplier Volume Allocation Group (SVG) before they can be committed into an MDD Publish. The SVG considers the issues raised during the market participant impact assessment, and either approves or rejects the change. Changes are presented for decision at the monthly SVG meetings.

**Final Circular:** The final circular is issued once the SVG has decided on the changes presented for approval. The final circular details all the changes to be included in a version of MDD.

**MDD Publish:** The SVAA sends the most recent MDD files to market participants from the Publish date.

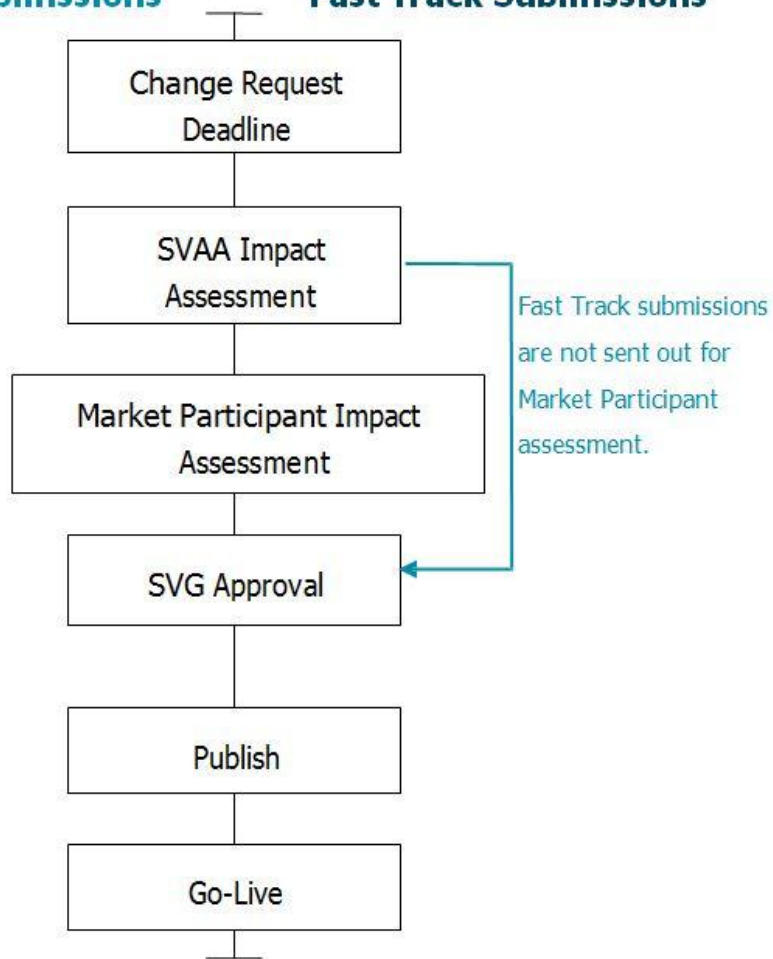
**Go-Live:** All MDD changes for a particular version become effective from the go-live date.

MDD changes are split into General and Fast Track submissions. **General changes relate to amending existing data items in MDD** and **Fast Track changes relate to submissions from new entrants and ELEXON housekeeping**. The Fast Track option was introduced to allow new participants get their changes into MDD in less time.

The diagram over the page demonstrates how General and Fast Track submissions are handled.

## General Submissions

## Fast Track Submissions



## MDD Entities

MDD consists of 64 Entities and are a breakdown of data items in MDD. [BSCP509 Appendix 1](#) lists all MDD Entities and the authorised participant to amend the entity.

Entity Form	Entity Name	Entity Description
Entity 1	Market Participant ID	Defines an organisation that participates in the GB electricity market.
Entity 2	GSP Licensed Distribution System Operator	A party that holds the Distribution Licence regarding distribution activities within a GSP Group.
Entity 3	SVA Agent Appointment	An association between the Market Participant Identifier of an SVA Agent, and the GSP Groups in which it's active.
Entity 4	Supplier Meter Registration Agent (SMRA) Appointment	An association of the SMR Agent and the GSP groups in which it's active.
Entity 11	Average Fraction of Yearly Consumption Set	A set of data specifying how average consumption is split across registers for a particular GSP group, SSC and Profile Class.
Entity 12	Average Fraction of Yearly Consumption	The fraction of the annual demand that a profile allocates to the Settlement Periods covered by a Time Pattern Regime (TPR).
Entity 13	GSP Group Profile Class Average Estimated Annual Consumption (EAC)	A profile classification representing an exclusive category of customers whose consumption can be reasonably approximated to a common profile, for the purpose of attributing an EAC or Annualised Advance (AA) to individual half hours for settlement purposes.
Entity 17	Line Loss Factor Class (LLFC)	The reference for a Line Loss Factor in a distributor's system, that applies to a group of metering systems.
Entity 18	GSP Group	A set of Distribution Systems which form a distinct electrical system and are treated as a group for the purpose of allocating errors in settlement, i.e. GSP Group Correction.
Entity 20	GSP Group Profile Class Default EAC	The default EAC is based on the mean consumption value for that Suppliers customer.
Entity 27	Clock Interval	Sets the time periods for a particular day of the week (within a calendar period) when the Time Pattern Regime is active.
Entity 29	Measurement Requirement	The set of Time Pattern Regimes for a Standard Settlement Configuration.
Entity 32	Standard Settlement Configuration	The unique Non-Half Hourly metering configuration supported by the settlement process.
Entity 33	Teleswitch Time Pattern Regime	The setup details for a Time Pattern Regime that relates specifically to a Radio Teleswitch controlled pattern of switching.
Entity 34	Teleswitch Register Rules	Allows you to maintain the list of Teleswitch Register Rules.
Entity 35	Teleswitch Contact Rule	Allows you to maintain Teleswitch Contact Rules.
Entity 36	Teleswitch Contact	Allows you to maintain the list of Teleswitch Contact Codes.
Entity 37	Teleswitch Group	Allows you to maintain the list of Teleswitch Groups.

Entity Form	Entity Name	Entity Description
Entity 38	Time Pattern Regime	Unique market wide reference for the pattern of switching behaviour through time, that one or more settlement registers uses. The Time Pattern Regime is used to calculate money owed for energy used by each customer.
Entity 39	Valid Measurement Requirement Profile Class	This links a measurement requirement to a valid Standard Settlement Configuration and Profile Class set.
Entity 40	Valid Settlement Configuration Profile Class	The record linking a valid Standard Settlement Configuration to a Profile Class.
Entity 45	Market Participant Role	Defines the role within the electricity market that a participant will perform. Each Market Participant must have at least one role code.
Entity 52	Meter Timeswitch Class (MTC)	A three digit code representing the type of metering system serving a customer's premise.
Entity 53	Meter Timeswitch Class for Distributor	Indicates that a particular Meter Timeswitch Class is supported by a Distributor.
Entity 54	Valid MTC SSC Combinations	A valid combination of Meter Timeswitch Class and Standard Settlement Configuration.
Entity 55	Valid MTC LLFC Combinations	A valid combination of Meter Timeswitch Class and Line Loss Factor Class.
Entity 56	Valid MTC SSC LLFC Combinations	Allows the user to link specific Line Loss Factor Classes to Valid MTC SSC combinations.
Entity 57	MTC Meter Types	Indicates the capability of the meter with the exception of Code of Practice 1-5 meters currently being used for register load billing (i.e. Profiled) which will be treated as TP (Timeswitch Programmable).
Entity 58	MTC Payment Type	Allows the user to maintain details of MTC Payment Type.
Entity 60	GSP Group Profile Tolerances	Profile Class Tolerances are used during the EAC/AA calculation and are GSP Group specific.
Entity 61	Base Balancing Mechanism (BM) Unit for Supplier in GSP Group	A BM unit is an association of generation units or consumption. Every Supplier ID has a Base BM unit in each GSP Group; Additional BM Units are extra units that a Supplier may want to register.
Entity 62	Details of Proposed Change to Unmetered Supplies Operational Information	Proposed changes to Unmetered Supplies Operational Information is incorporated in the MDD Impact Assessment Circular but is not added to any DTC flow.
Entity 63	Valid MTC SSC LLFCPC Combinations	Provides a full valid combination of Meter Timeswitch Class, Standard Settlement Configuration, Line Loss Factor Class and Profile Class.
Entity 64	SMETS Version	Describes the available versions of the Smart Metering Equipment Technical Specification (SMETS) established under the Smart Energy Code (SEC).

## How do I submit a New Change Request?

To submit a new Change Request, you need to fill out a BSCP509/01 cover form with details of the change and attach the Entity forms. See [BSCP509 Appendix 1 Entity Forms](#) for a complete list of entity forms. Where you need to submit large volumes of data, you can convert the Entity forms into Excel spreadsheets for easy data entry. All headers must be accurate and in the same format as in the Word versions.

Please make sure your changes are submitted before the MDD Change Request deadline for the upcoming MDD release. We will not accept late entries.

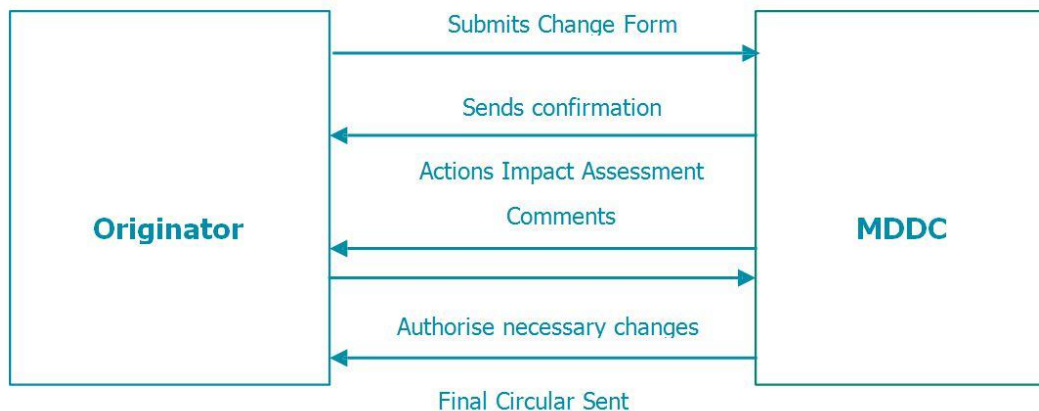
[BSCP509 Appendix 2](#) is useful to refer to while you are completing your submissions, as it lists the rules surrounding each entity including which fields you must fill out.

All completed changes are sent to the [Market Domain Data Coordinator](#) who will confirm receipt within two working days.

From now on, your involvement will depend on impact assessment comments. If there are any issues with a change, the MDDC will contact the originator.

After the SVG has approved or rejected changes for a version, we issue a Final Circular containing all changes which we will incorporate into that version of MDD.

The diagram below shows the expected interactions between the originator of a change and the MDDC:



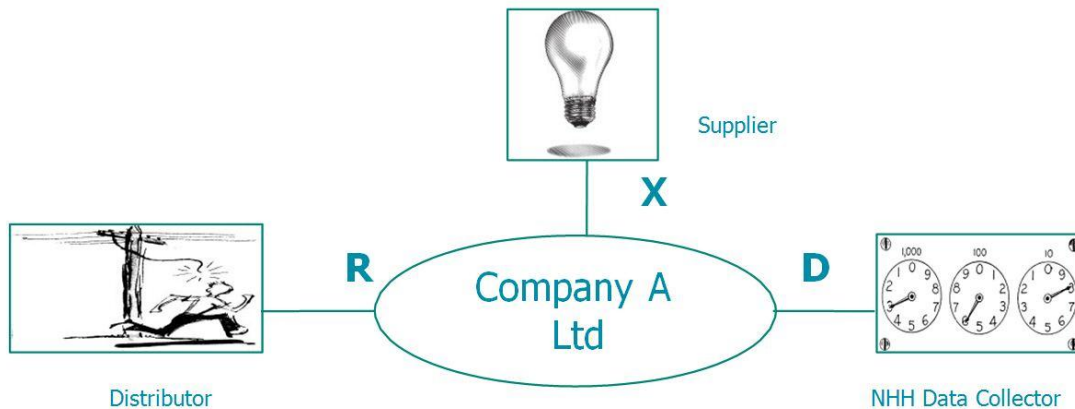


## How do I set up a new Role Code?

You can register multiple role codes against your MPID. The role codes define the roles and activities the organisation undertakes within the SVA Trading Arrangements.

There are currently 34 roles codes active in MDD. A full list of role codes with their descriptions can be found in MDD, or the online tables on the [ELEXON Portal](#).

The diagram below shows "Company A Ltd" is set up against multiple roles.



When setting up a new role code, you must complete Entity 1 (Market Participant ID) and 45 (Market Participant Role) including details of the role code. The 'Effective From Date {Market Participant Role}' is the date when the Market Participant role will become effective. You must fill in Address Line 1 of the Entity 45 form with your company name, and use subsequent lines for the organisation's address. Role code details are set out like this:

<b>Market Participant ID</b>	JACK
<b>Market Participant Role</b>	X
<b>Effective From Date</b>	01/12/2010
<b>Effective To Date {MPR}</b>	
<b>Address Line 1</b>	Justin Enterprises Ltd
<b>Address Line 2</b>	1 Waterway Crescent
<b>Address Line 3</b>	
<b>Address Line 4</b>	
<b>Post Code</b>	DT6 1TB
<b>Distributor Short Code</b>	

## How do I set up New Data Items?

Depending on your role, you can set up new data items in MDD. Other participants may own some data items and therefore both parties must agree these before submitting them formally.



## Meter Timeswitch Class

Meter Timeswitch Codes (MTCs) are three digit codes allowing Suppliers to identify the metering installed in Customers' premises. They indicate whether the meter is single or multi rate, pre-payment or credit, or whether it is "related" to another meter.

A related meter refers to where there are two meters in a property and is one for general load and one for heating. In this case a Supplier must register both meters.

## MTC Categories

<b>000-399</b>	Specific to Distribution Networks
<b>400-499</b>	Currently not in use
<b>500-509</b>	Common codes for Related Metering
<b>510 - 799</b>	Specific to Distribution Networks for Related Metering
<b>800 - 999</b>	Common Codes

You can set up a new MTC by completing an Entity 52 "Meter Timeswitch Class" form.

To enable the MTC in a particular distribution area, you will need to complete an Entity 53 form.

Where a Supplier puts this request forward, the relevant Distributor must approve this before making a formal submission.

When setting up a new MTC you need to specify:

**MTC Meter Type:** the physical capabilities and purpose of the meter and categories such as Teleswitch, Timeswitch, Import/Export, Unmetered and Code of Practice (CoP) related Meters.

**MTC Payment Type ID:** method of payment used for any Metering Systems against that MTC. Categories can include methods such as token and key meters or credit and prepayment.

**MTC Type Indicator:** determines whether the Meter is Non Half Hourly (NHH), Half Hourly (HH) or Non-specified.

**MTC Related Metering System Indicator:** indicates Meters that are capable of being used in a related Meter Point Administration Number (MPAN) setup. A related MPAN setup could include a number of physical meters to deal with separate demand loads.

### Line Loss Factor Class

Line Loss Factors Classes (LLFCs) relate to the Distribution Network Operator (DNO) and DNOs must maintain these values.

### New Line Loss Factor Classes

You can set up a new LLFC can by completing an Entity 17 Form. The Distributor submits the desired values, Effective From Date, and an appropriate description for the LLFC. Metering System Specific LLF Class indicator types are:

A	General LLFC for Import Active Energy
B	MS Specific LLFC for Import Active Energy
C	General LLFC for Export Active Energy
D	MS Specific LLFC for Export Active Energy

When submitting new LLFC values in MDD, the Distributor should send the associated Calculation Self-Assessment Document (CSAD) with the D0265 (Line Loss Factor Data File) flow. This speeds up the LLF validation process and helps us to sort out any issues before Go-Live Date. All D0265 and supporting CSAD information should be sent to [llfs@elexon.co.uk](mailto:llfs@elexon.co.uk)

### End dating Line Loss Factor Classes

To end date an LLFC, you will need to complete an Entity 17 form with an Effective To Settlement Date. The LLFC will remain valid for all Settlement Dates up to and including the Effective to Settlement Date {LLFC}. The Distributor must also send an updated D0265 flow in the event that an LLFC has been end dated.

### Amending Line Loss Factor Class Descriptions

A Distributor can amend the description of an LLFC as required by completing the Line Loss Factor Description field on the Entity 17 form. The description field should contain no more than 30 characters including spaces. The Effective From Date remains unchanged.

### Standard Settlement Configurations

The Standard Settlement Configuration defines how a NHH Meter is configured for Settlement. It defines how many registers (TPRs) the meter has and the times at which the registers record consumption.

### Setting up a new SSC

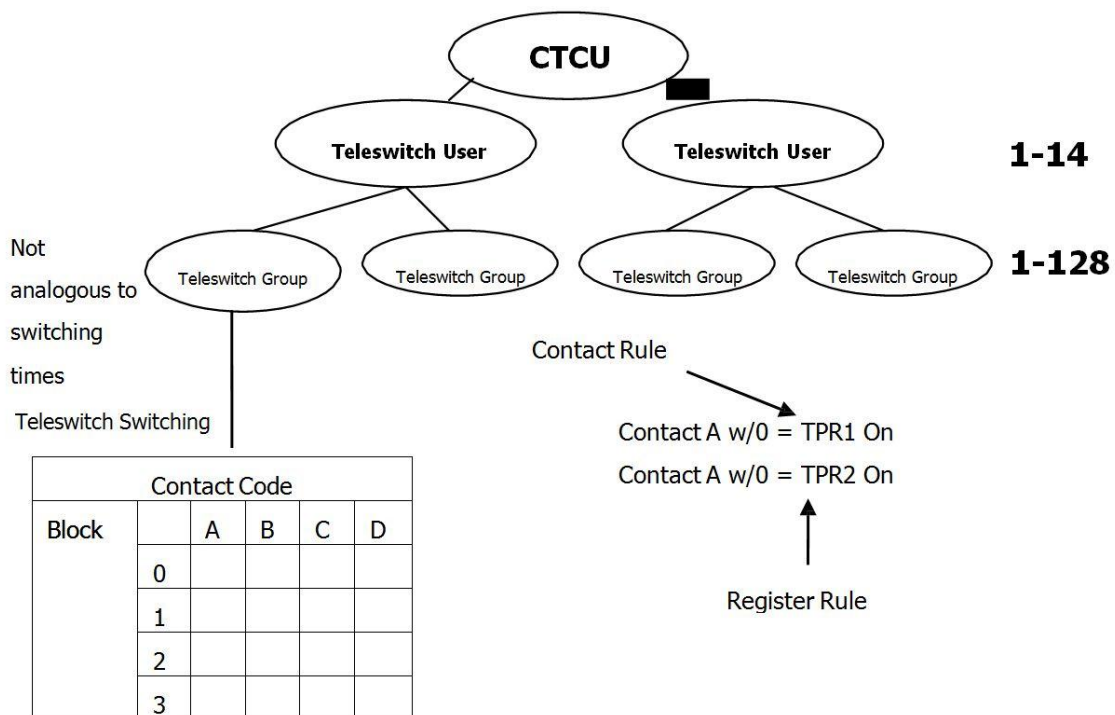
To set up an SSC, you need to ensure that the desired value is available in MDD. The MDD Coordinator can confirm this, or you can choose the next available four digit code in MDD. You can introduce a new SSC by completing an Entity 32 "Standard Settlement Configuration" form. There are two types of SSCs; Teleswitch and Timeswitch. The sections below detail how to set up the two types of SSC and which forms you need to complete. Please refer to Appendix A for the complete set of entity forms required for a new SSC.

## Teleswitch SSCs

Teleswitch Meters are centrally coordinated by the Teleswitch Agent using the Central Teleswitch Control Unit (CTCU). The CTCU forwards switching patterns to the BBC transmitter who sends out instructions by radio transmission.

The setup of Teleswitch SSCs relates to the Teleswitch Switching instructions which control heating and register load. A "Simple Teleswitch" setup turns the switched load on at set times during off peak periods. A "Double Teleswitch" setup controls both the base and switched load.

The diagram below shows a basic overview of the Teleswitch hierarchy. The Teleswitch User ID relates to an LDSO acting in its capacity as Radio Teleswitch Access Provider. The Teleswitch Group ID is a code relating to a number of Teleswitch metering systems controlled by a Teleswitch User



The Teleswitch Switching times for an SSC will not be held in MDD, as the times can be physically reprogrammed on the meter using the existing Teleswitch register rules. To find out more about Teleswitch Switching times, please contact the MDDC.

## Teleswitch information

<b>Teleswitch User ID</b>	A code representing the organisation which controls the Teleswitch group (LDSOs).
<b>Teleswitch Group ID</b>	This identifier is given to a group of Metering System Identifiers governed by a specific Teleswitch User ID.
<b>Teleswitch Switch ID</b>	A code representing one of the logical contacts supported by Teleswitch metering.
<b>Teleswitch Register Rule</b>	A number distinguishing between the switching relationships between Teleswitch contacts and settlement registers associated with a Time Pattern Regime.
<b>Teleswitch Contact Code</b>	A character identifier (A, B, C, D) identifying logical switching of the Teleswitch Register Rule.
<b>Teleswitch Contact Rule</b>	Indicates whether the TPR is '1' on or '0' off.

## Timeswitch SSCs

When setting up a Timeswitch SSC, you need to complete an Entity 38, with the Teleswitch/Clock indicator field set to "C". The GMT indicator simply means whether the meter operates only on Greenwich Mean Time or whether it switches to British Summer Time.

The Entity 27 '**Clock Interval**' form sets the configuration of the TPR's switching times in a meter.

<b>TPR</b>	<b>Week Day Id</b>	<b>Start Day</b>	<b>Start month</b>	<b>End Day</b>	<b>End Month</b>	<b>Start Time</b>	<b>End Time</b>
00423	1	1	1	31	12	00:00	16:00

The form is completed by ensuring that the switching times for each meter register (or TPR), for each day of the week is accounted for as seen in the example above.

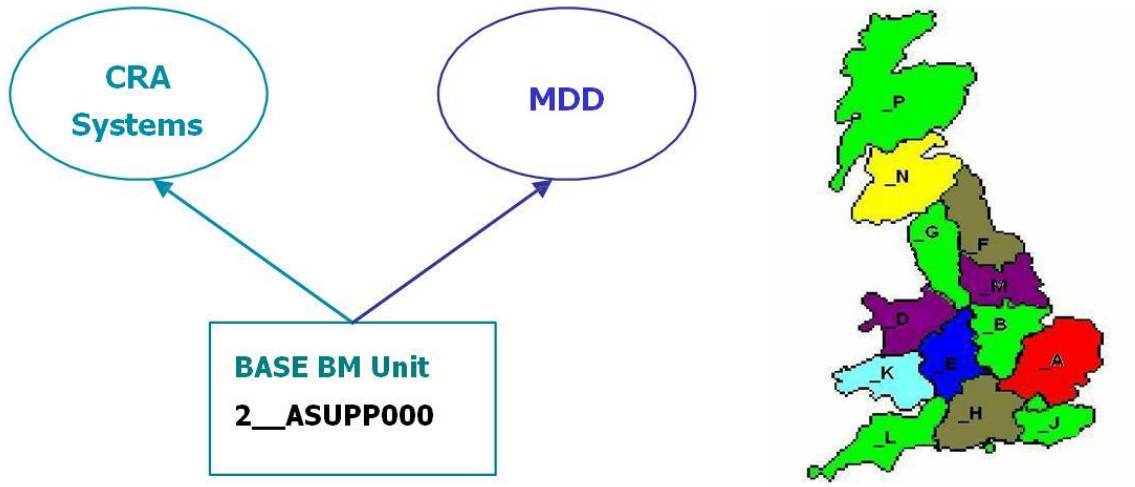
## How do I register BM Units in MDD?

BM Units are units of trade in the Balancing Mechanism for generation or consumption. All Suppliers must register a BM Unit (also known as Base BM Units) in every GSP Group once they become active in their Supplier role. They measure the amount of energy supplied by Suppliers and are a collection of meters aggregated into one set. All meters for a particular Supplier ID and GSP Group are amalgamated into a single BM Unit.

Supplier BM Units can be setup in MDD by completing a [BSCP509 Entity 61 form](#). This details the BM Unit ID, the GSP Group and MPID that they are registered for.

## Base BM Units

Every Supplier ID must have an initial Base BM Unit in each GSP Group for Settlement purposes.



The naming convention surrounding Base BM Units (as illustrated above) is as follows:

- (2\_) = Supplier BM Unit
- (\_A) = GSP Group \_A
- (SUPP) = four Character Supplier ID

## Additional BM Units

Suppliers can also register additional BM Units against their existing Supplier ID. There is no limit to the number of additional BM Units a Supplier can register in each GSP group.

Additional BM Units are named similarly to Base BM Unit, apart from the three digit code at the end which is incremented.

Additional BM Unit "2\_\_ASUPP001"

## How do I deregister BM Units from MDD?

When a Supplier ID is due to be terminated, all the BM Units associated with that ID will also be discontinued (unless another Supplier is taking over the responsibility of the BM Units). You can deregister these BM units by completing an Entity 61 form with the desired Effective To Date specified.

## Combination Data

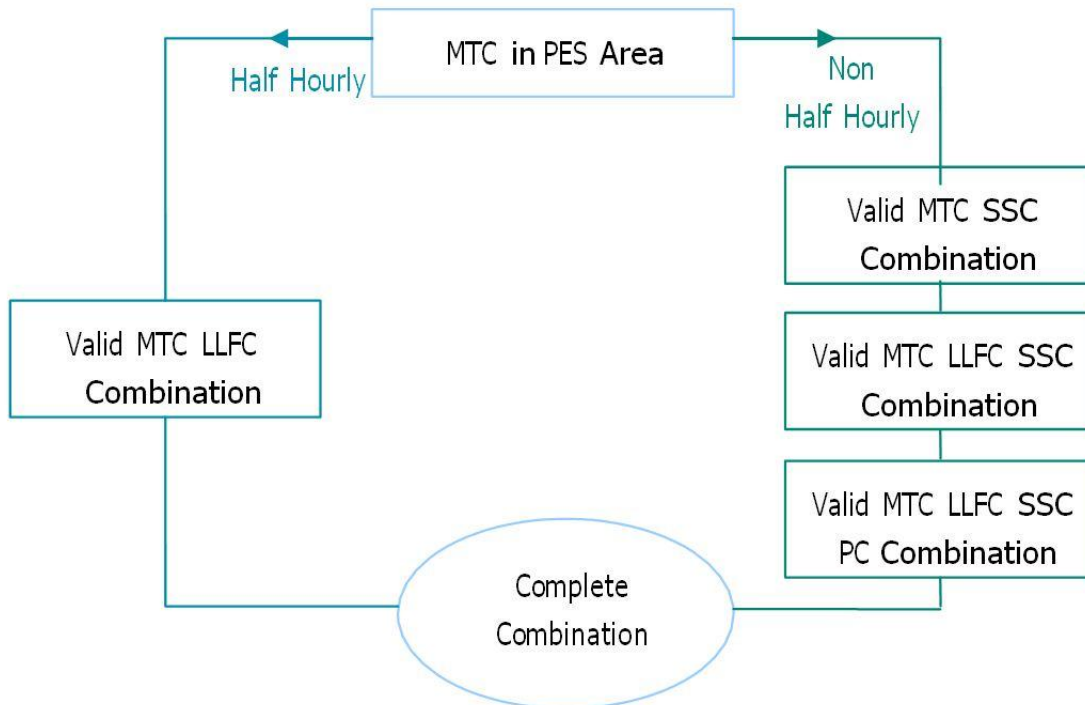
A number of data items are combined in MDD to give a full picture of what metering configurations are valid. The data items are as follows: Meter Timeswitch Classes, Line Loss Factor Classes, Standard Settlement Configuration and Profile Classes.

You are advised to link up these data items in MDD to give other participants an accurate view of what configurations are valid.

For Non Half Hourly combinations, the relevant combination tables are Valid MTC SSC Combination, Valid MTC LLFC SSC Combination and Valid MTC SSC LLFC PC Combination. For Half Hourly it is Valid

MTC LLFC Combination. LDSOs must update their combination data accordingly. Where a Supplier wants to operate a certain metering configuration in a LDSOs area, they need to get consent from the LDSO who will make the relevant submissions on their behalf.

The diagram below show how each data item interlinks to create combination data:



## MDD Files

After each MDD Publish the SVAA will distribute the latest version of MDD through the DTN or by mail.

**D0269**– Market Domain Data Complete Set

**D0270**– Market Domain Data Incremental Set D0280– Teleswitch Contact to Register Mapping File

**D0299**– BM Unit Registration Data File

**D0278**– Teleswitch Pool Market Domain Data Interface File

**D0267**– Pool Settlements Timetable File

**D0227**– Standard Settlement Configuration Timetable file

**D0286**– Data Aggregation and Settlements Timetable file

**P0015**– Profile Data File

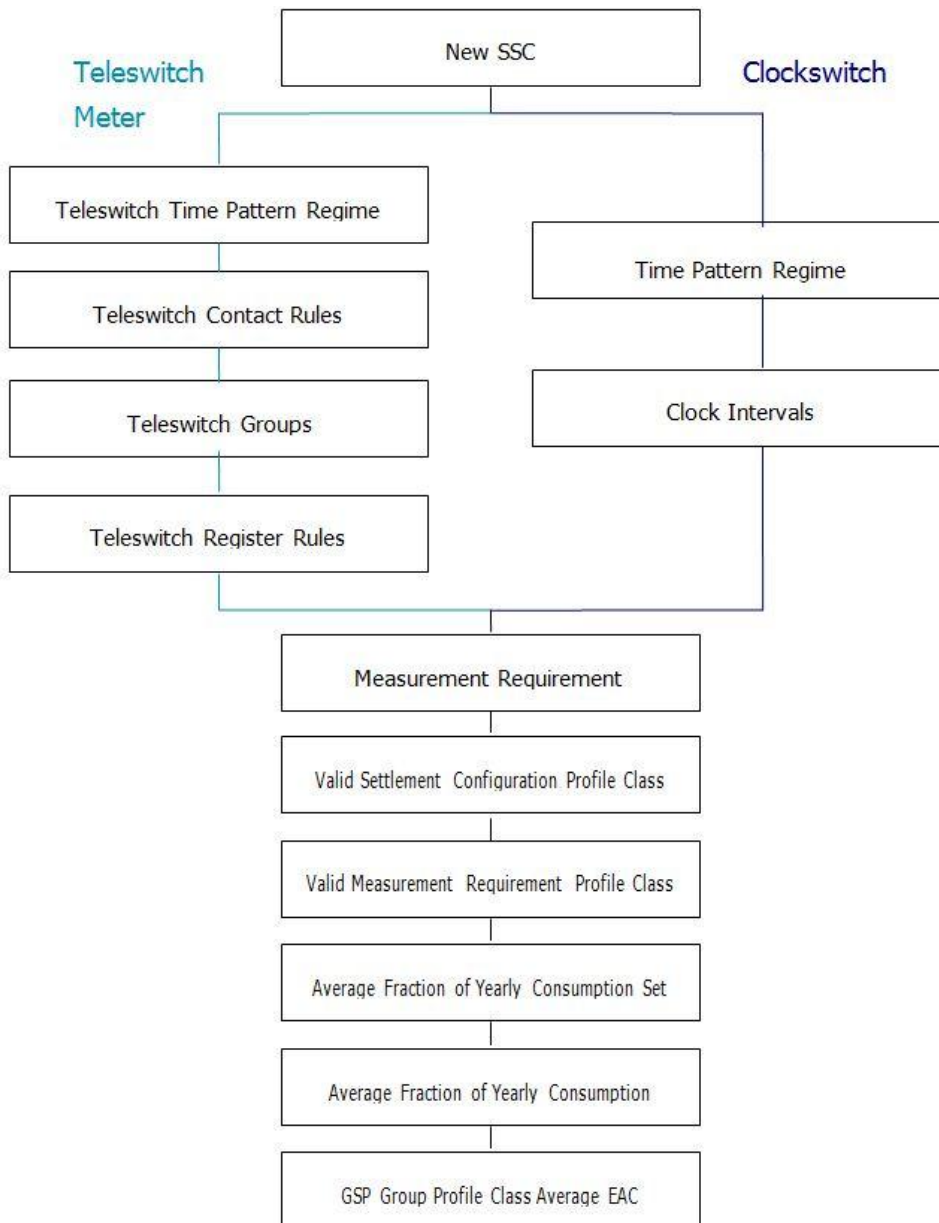
**P0186**– Half Hourly Default EAC

**P190**– GSP Group Profile Class Tolerances

GSP Group Profile Class Default EAC

## Appendix

The diagram below show the entities needed to set up a Standard Settlement Configuration. The flows diverge after the new SSC depending on whether you're setting up a Clock Switched Meter or a Teleswitch Meter.





## Need more information?

### Market Domain Data Contact Details

Market Domain Data Coordinator: [mddc@elexon.co.uk](mailto:mddc@elexon.co.uk)

### Related Items

- [BSCP509 Appendix 1: MDD Entity Change Request Forms](#)
- [BSCP509 Appendix 2: MDD Change Request Entity Validation](#)
- [ELEXON Portal](#)
- [Line Loss Factors](#)
- [Market Domain Data Feedback Form](#)
- [Market Domain Data Overview](#)
- [MRA](#)

For further information please contact the **BSC Service Desk** at [bscservicedesk@cgi.com](mailto:bscservicedesk@cgi.com) or call **0870 010 6950**.

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