ELEXON

CODE CHANGE AND DEVELOPMENT GROUP

Glossary and Acronyms

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GLOSSARY OF TERMS

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Advanced Data Service (ADS)

The Advanced Data Service is the 'Qualified' service that provides the Advanced Retrieval and Processing Service (ARP).

Advanced Meter

The electricity supply licence defines an Advanced Meter as electricity Meter that, either on its own or with an ancillary device, and in compliance with the requirements of any relevant Industry Code:

- a) Provides measured electricity consumption data for multiple time periods, and is able to provide such data for at least half-hourly time periods; and
- b) Is able to provide the licensee with remote access to such data.

Advanced Market Segment

The Advanced Market Segment is the Market Segment where Settlement Level Period data is collected for Settlement purposes from Advanced Meters. For the avoidance of doubt where the Advanced Meter communications are faulty, the Advanced Meter would remain in this Market Segment, processed by the Advanced Retrieval and Processing Service (ARP). The communications' fault would be fixed by the Advanced Metering Service (MSA).

Advanced Retrieval and Processing Service (ARP)

The Advanced Retrieval and Processing Service (ARP) is the service that retrieves and processes Settlement Period Level data from Advanced Meters that are in the Advanced Market Segment.

В

Balancing and Settlement Code (BSC)

The BSC is the document that sets out the terms for electricity balancing and Settlement in Great Britain, including the governance process for modifications to the BSC.

Balancing and Settlement Code (BSC) Panel

The Balancing and Settlement Code (BSC) Panel is established and constituted pursuant to and in accordance with Section B of the BSC. It is responsible for ensuring that the provisions of the BSC are given effect fully, promptly, fairly, economically, efficiently, transparently and in such a manner as will promote effective competition in the generation, supply, sale and purchase of electricity.

Balancing and Settlement Code Procedures (BSCPs)

Balancing and Settlement Code Procedures (BSCPs) are a type of Code Subsidiary Documents (CSDs) used under the BSC that set out procedures relating to Settlement activities.

Balancing Mechanism Unit (BMU)

Balancing Mechanism Units (BMU) are used as units of trade within the Balancing Mechanism. Each BMU accounts for a collection of plant/apparatus and is considered the smallest grouping that can be independently controlled. It can relate to metering at a physical site or be a non-physical grouping of Metering Systems for a Balancing Responsible Party (BRP) (or other party such as flexibility aggregators) within a region. As a result most BMUs contain either a generating unit or a collection of consumption Meters. Any energy produced or consumed by the contents of a BMU is accredited to that BMU.

Balancing Responsible Party (BRP)

The Balancing Responsible Party is used in these requirements to refer to the future party that provides the role currently undertaken by the Supplier. This could potentially be a bundled services company where the provision of electricity is only one of the services provided.

C

Categories

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A set of categories defined for which Load Shapes are to be provided by the Load Shaping Service (LSS).

Categorisation

The process of mapping MPANs to categories for Load Shaping processes.

Central Data Collection Agent (CDCA)

The Central Data Collection Agent as the BSC Agent that collects Meter data from Central Volume Allocation (CVA) registered Metering Systems.

Central Volume Allocation (CVA)

Central Volume Allocation refers to the allocation of active energy from:

- a) BM Units other than Interconnector BMUs and BRP BMUs;
- a) Interconnectors;
- b) Grid Supply Points; and
- c) GSP Groups.

Code Subsidiary Document (CSD)

Code Subsidiary Documents (CSDs) sit under the BSC that set out more detail on the requirements of the BSC and can be changed from time to time in accordance with BSCP40.

Consumption Component Class (CCC)

A classification of half hourly Consumption which comprises one element from each of a number of categories e.g. Measurement Quantity, Consumption or Losses

D

Daily Advance Estimate (DAE)

The Daily Advance Estimate (DAE) is the consumption or export value used by a smart Processing Service (PSS), in estimating SP level data, where a Meter Advance is not available. It is a value derived for each MPAN based on the latest available meter advance divided by the number of days in the Meter Advance. It could also be a default value where no Meter Advance is available for an MPAN.

Data Aggregator (DA)

As part of the current Settlement process, the agent appointed by an electricity supplier in accordance with Section S of the BSC to aggregate metered consumption data to meet the requirements set out in the BSC.

Data Access and Privacy framework

The government has developed a <u>data access and privacy policy framework</u> to determine the levels of access to energy consumption data from smart Meters which BRPs, network operators and third parties may obtain. It also establishes the purposes for which data can be collected and the choices available to consumers.

Data Collector (DC)

As part of the Settlement process, the agent appointed by an electricity supplier in accordance with Section S of the BSC to retrieve, validate and process Meter readings to meet the requirements set out in the BSC.

Data and Communications Company (DCC)

The DCC is the company that manages the data and communications to and from domestic consumers' smart Meters.

Demand-side response (DSR)

Actions taken by consumers to change the amount of energy they take off the grid at particular times in response to a signal, such as a price.

DCC User Interface Specification (DUIS)

DCC User Interface Specification (DUIS) is the specification the document that set out in the communications interface designed to allow the communications with smart Meters. The DUIS set out valid Service Request types and the data items returned for each request type.

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Device ID

The Device ID is the unique identifier associated with each smart Meter serviced by the DCC.

Distribution Network Operator (DNO)

See definition for Licenced Distribution Network Operator

Dynamic time-of-use tariff

A dynamic time-of-use tariff is one that provides for price or pricing structures for consumers to vary at short notice their energy usage, in response to market events, (subject to contractual terms with the BRP).

Е

Electricity Supplier

A company licensed by Ofgem to sell energy to and bill customers in Great Britain.

Elexon

Elexon (as BSC Co) is the organisation responsible for administering the BSC and provide and procure the services needed to implement it. The role, powers, functions and responsibilities of Elexon are set out in Section C of the BSC.

Electricity System Operator (ESO)

ESO is the System Operator for the electricity transmission system in Great Britain, with responsibility for making sure that electricity supply and demand stay in balance and the system remains within safe technical and operating limits.

F

Faster Switching Programme

The Faster Switching Programme is the Ofgem initiative to deliver next-day switching (of gas or electricity supplier) as a new industry standard. It also aims to improve reliability of the switching process through better management and oversight of industry data.

Feed-in-Tariff (FiT)

A government programme designed to promote the uptake of renewable and low-carbon electricity generation technologies. It consists of payments made by Energy Suppliers to Consumers for the electricity the customer's installation has generated and exported.

The FIT scheme closed to new applicants from 1 April 2019, barring some exceptions, and was replaced by the Smart Export Guarantee (SEG).

G

Great Britain Companion Specification (GBCS)

The Great Britain Companion Specification (GBCS) for smart metering describes the detailed requirements for communications between smart metering Devices in consumers' premises, and between these Devices and users of the smart metering system (such as Energy Suppliers and Network Operators) via the Data and Communications Company (DCC).

Grid Supply Point (GSP)

A Grid Supply Point (GSP) is a point at the boundary of Transmission and Distribution Networks, where Metering Systems measure import to, and export from, the Distribution Network.

Grid Supply Point Group (GSPG)

There are currently 14 GSP Groups consisting of: (i) the Distribution System(s) which are connected to the Transmission System at (and only at) Grid Supply Point(s) which fall within one Group of GSPs, and (ii) any Distribution System which: (1) is connected to a Distribution System in paragraph (i), or to any other Distribution System under this paragraph (ii), (2) is not connected to the Transmission System at any Grid Supply Point and the total supply into which is determined by metering for each half hour.

GSP Group Take (GSPGT)

GSP Group Take is the data provided to the Volume Allocation Service (VAS), by the CDCA, giving the net volume of energy within a GSPG for each Settlement Period.

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Half Hourly Settlement (HHS)

Half Hourly Settlement (HHS) is the process that covers the services and governance procedures from the electricity meter to the imbalance settlement function (meter-to-bank process). This describes the processes of using half-hourly usage (and longer time periods of energy usage) data collected from an electricity meter for use in Imbalance Settlement.

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Imbalance Settlement

Imbalance Settlement is the process for determining if the total energy produced or consumed by a participant in the electricity market (mainly a generator or supplier) matches with energy they have purchased/sold in the forward market. Any mismatches incur 'imbalance' charges; therefore participants are incentivised to match their contracted and actual positions

Industry Standing Data (ISD)

Industry Standing Data (ISD) is the data used by the Services to interpret the information relating to each Metering System. This data will include some of the data in the current Market Domain Data (MDD) and will have new standing data included.

L

Load Shape

A Load Shape is a set of daily average consumption or export data for each Settlement Period in Coordinated Universal Time (UTC) for a Categorisation of Metering System in the population. It is derived and provided by the Load Shaping Service.

Load Shaping Service (LSS)

The Load Shaping Service (LSS) is the service that calculates load shapes from valid Settlement Period level data accessed from the Processing Services. The Load shape data will then be used by the Processing Services (PSS) to convert Register Readings (RRs) or Daily Consumption values into Settlement Period level data.

Licenced Distribution System Operators (LDSOs)

LDSOs are the companies that are licensed by Ofgem to maintain and manage the electricity distribution networks in Great Britain.

M

Market Participants Identifier (MPID)

Market Participants are any party that interact with Settlement or other industry process. Each valid participant has a Market Participant Identifier (MPID) defined in <u>Market Domain Data</u> (MDD). MDD will be replaced by revised or new standing data which is referred to as Industry Standing Data (ISD) in the TOM design.

Market Segments

The three Market Segments are:

- The Smart and Non-smart (S)
 - Smart Meters with Settlement Period level data available
 - Smart Meters with only Register Readings available
 - Non-smart Meters with Register Readings
- Advanced
 - Advanced Metering Systems with Settlement Period level data available
- Unmetered
 - Unmetered Supplies.

Market-wide

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Market-wide in the context of the Significant Code Review (SCR) means the Settlement of Settlement Period data where such data can be accessed subject to data privacy and data access policy. Market-wide in the context of Services means a service which would provide cross-segment-aggregation.

Market-wide Data Service (MDS)

The Market-wide Data Service (MDS) is the service that provides integrity checks and calculations on Settlement Period level data ingested by BSC Central Settlement Systems from the Processing Service(s) (Smart), the Advanced Retrieval and Processing Service and the Unmetered Supplies Data Service.

Meter Advance

The Meter Advance is the energy value (kWh) calculated by differencing the latest Register Reading from the previous Register Reading obtained from a Metering System.

Meter Point Administration Number (MPAN)

A Meter Point Administration Number, also known as MPAN, Metering System Identifier (MSID) under the BSC, Supply Number or S-Number, is a 21-digit reference used in Great Britain to uniquely identify electricity supply points.

Measurement Class

A classification of Metering Systems which indicates how Consumption is measured:

Measurement Class Id	Description
Α	Non Half Hourly Metering Equipment
В	Non Half Hourly Unmetered Supplies
С	Half Hourly Metering Equipment at above 100 kW Maximum Demand Premises
D	Half Hourly Unmetered Supplies
E	Half Hourly Metering Equipment at below 100kW Premises with current transformer
F	Half Hourly Metering Equipment at below 100kW Premises with current transformer or whole current, and at Domestic Premises
G	Half Hourly Metering Equipment at below 100kW Premises with whole current and not at Domestic Premises

N

Non-Half Hourly Settlement (NHH)

As part of the Settlement process, NHH Settlement is the arrangement for estimating how much energy a supplier's customer's use (or export) in each Settlement period (where their meter is not capable of recording energy usage for a Settlement Period. The arrangement uses Meter readings spanning longer intervals, e.g. days, weeks and months.

Non-smart Meter

A non-smart Meter is a Meter that is either not compliant with the Smart Metering Equipment Technical Specifications (SMETS). These Meters include legacy non-smart Meters for customers refusing smart Meters, premises where smart Meters cannot be fitted, Meters with Advanced capability that cannot be moved into the Advanced Market Segment due to communication issues or Ofgem policy requirements.

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Ofgem

The Office of Gas and Electricity Markets (Ofgem) is responsible for protecting gas and electricity consumers in Great Britain. It is governed by the Gas and Electricity Markets Authority (GEMA).

Р

Profile Administrator (PrA)

This agent currently produces the Profiling deliverables that are used by the SVAA, Suppliers and the Supplier Agents.

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Profile Class (PC)

Consumers that are not settled using actual Meter readings for each Settlement period are grouped into one of eight Profile Classes. For each Profile Class, a load profile is created that estimates the consumption shape of the average consumer. This load profile (or variations of it) is used to determine the consumption in each half hour for all consumers assigned to the Profile Class. See also non-half hourly (NHH) Settlement.

Processing Service (Smart) [PSS]

The Processing Service (Smart) is responsible for obtaining and validating and estimating (where needed) raw meter readings (both Settlement Period and Register Reads) from smart and non-smart Meters.

Programme Implementation Plan

The Programme Implementation Plan is the detailed plan with timings that will need to be developed during the implementation phase for the TOM.

Q

Qualification

Qualification is the BSC process that assures that systems and processes (developed outside of BSC Central Systems control) which may interact with BSC Systems and other participant's systems will not introduce significant risks or issues to Settlement. This process currently applies to Supplier Agents. This process is part of the BSC performance assurance framework to manage settlement risks.

R

Related MPANs

A Related MPAN is where two NHH Meters, registered with a single Suppliers, are at the same site. This typically occurs where one MPAN covers the heating load and the other MPAN is the rest of the load for the site.

Registration Service (SMRS)

The Registration Service is the LDSO service that holds Meter point standing data information about each MPAN within its distribution Region. Data includes the BRP the processing and metering services appointed to the MPAN. It also includes information on the type of customer, the Measurement Class, Energisation Status and Line Loss Factor Class.

Register Readings (RRs)

Register Readings are the Meter readings obtained from a Settlement Meters tariff registers. This could be the cumulative register, daily consumption log data or daily readings these readings may be taken remotely or read from the meter.

S

Settlement Period (SP)

The period over which contracted and metered volumes are reconciled. This is currently defined as a period of 30 minutes. See also Settlement process.

Settlement Period level data

Settlement Period level data is consumption or export meter data that is the granularity of the Settlement Period. This is either actual data (as recorded by the Meter), or data derived from Register Readings, or data derived from the Unmetered Supply (that is calculated for a Settlement Period).

Settlement Period Level Consumption data

Settlement Period Level Consumption data is consumption data that is the granularity of the Settlement Period this could be actual data obtained directly from the Meter or data derived from Register Readings or Unmetered Supplies that is processed to Settlement Period granularity.

Settlement process

In the context of this report Settlement process refers to the Imbalance Settlement arrangements. Settlement places incentives on generators and suppliers to contract efficiently to cover what they produce or their customers consume (or produce) respectively. For suppliers, it operates by charging for any difference between the volumes of electricity that they buy and the volume that their customers consume.

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Significant Code Review (SCR)

The SCR process is an Ofgem led process that is designed to facilitate complex and significant changes to a range of industry codes. It provides a role for Ofgem to undertake a review of a code-based issue and play a leading role in facilitating code changes through the review process.

Smart Data Services (SDS)

The Smart Data Services comprise the Meter Data Retrieval Service, Processing Service (Smart) and Meter Reading Service, which together enable settlement of the Smart and Non-smart Market Segments.

Smart Energy Code (SEC)

The Smart Energy Code (SEC) is a multi-Party agreement, coming into force under the DCC Licence, which defines the rights and obligations of energy suppliers, network operators and other relevant parties involved in the end to end management of smart metering in Great Britain.

Smart Export Guarantee (SEG)

A government-backed initiative that requires some electricity suppliers (SEG Licensees) to pay small-scale generators (SEG Generators) for low-carbon electricity which they export back to the National Grid, providing certain criteria are met.

Smart and Non-smart Market Segment

The Smart and non-Smart Market Segment is the Market Segment that covers smart Meters serviced by the DCC. This covers smart Meters with Settlement Period level data available and smart Meters where only Register Readings are available. It also covers non-smart Meters.

Smart Meter

A smart Meter is a Meter which is compliant with the Smart Metering Equipment Technical Specifications (SMETS). In addition to traditional metering functionality (measuring and registering the amount of energy that passes through it), a smart Meter is capable of providing additional functionality such as recording consumption/export in each half hour of the day and of being remotely read and configured.

Smart Meter Technical Specifications (SMETS)

Smart Meter Technical Specifications (SMETS) are the specifications that set out the minimum technical requirements for smart Meters. The SMETS are governed by the Smart Energy Code (SEC).

Static time-of-use tariff

A time-of-use tariff is a price or pricing structures for consumers that are fixed in advance (as set by the Supplier). Typically they set the peak and off-peak periods for electricity consumption (or export) and the prices applied at these times.

Supplier Volume Allocation (SVA) arrangements

Within the BSC, the SVA arrangements provide the mechanism for determining the allocation of energy volumes to Suppliers in each Settlement Period of the day.

Т

Target End State

The Target End State is deemed to be when the majority of customers will have a Meter capable of delivering Settlement Period level meter data for Settlement purposes.

Target Operating Model (TOM)

The Target Operating Model is the set of services and settlement arrangements designed to deliver Market-wide Half Hourly Settlement.

Teleswitch Data Services Agent (TSDA)

This agent monitors the messages concerning contact switching times sent under the Radio Teleswitch Agreement to SVA Metering Systems equipped with a teleswitch. The agent provides a daily service that prepares a data interface file of teleswitch contact switching times reflecting actual messages broadcast for that day and transmitting the file to the SVAA on a daily basis.

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It maintains a log archive recording the provision of details of teleswitch messages and reports to the SVAA any known or suspected failures in the monitoring and provision of messages. The teleswitch times are then used by the SVAA to calculate the half-hourly consumption values for Non Half Hourly meters.

Time-of-use (ToU) tariffs

Energy tariffs that charge different prices at different times of the day, week, month or year are known as time-of-use tariffs. See also dynamic time-of-use tariff and static time-of-use tariff.

Trading Party

Under the BSC a Trading Party means a Party, other than the Transmission Company, which holds energy accounts. These are typically suppliers, generators and energy traders.

Transition Approach

The Transition Approach sets out the key milestones and dependencies for moving to the TOM from the existing market services and Settlement arrangements.

U

Unmetered Supplies

Unmetered Supplies (UMS) means a supply of electricity to a particular inventory of equipment in respect of which a Licensed Distribution System Operator (LDSO) has issued an Unmetered Supply Certificate. For example, this equipment could be any electrical equipment that draws a current and is connected to the Distribution Network without a Meter, i.e. there is no Meter recording its energy consumption, e.g. street lights, traffic signs, zebra crossings, etc.

Unmetered Supplies Data Service (UMSDS)

The Unmetered Supplies Data Service (UMSDS) is the service that calculates Settlement Period Level consumption data for unmetered supplies.

Unmetered Supplies Market Segment

The Unmetered Supplies Market Segment is the Market Segment for Unmetered Supplies, e.g. street lights, traffic signs, zebra crossings, etc.

Unmetered Supplies Operator (UMSO)

The Unmetered Supplies Operator (UMSO) is the service that interfaces with the Unmetered Supplies (UMS) customer and other industry stakeholders. The UMSO Service is provided by the Distribution Business.

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Volume Allocation Service (VAS)

The Volume Allocation Service (VAS) is the service that processes Settlement Period level data provided by the Market-wide Data Service (MDS). The processed data is allocated to Balancing Mechanism Units (BMUs).

Volume Allocation Run (VAR)

A Volume Allocation Run (VAR) is a scheduled Settlement run that allocated Supplier Metered volumes to BMUs for each GSP Group. The VAR ensures the BMU allocated energy is corrected such that the total volume matches the energy in the GSP Group Take for each Settlement Period.

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ACRONYMS

Acronyms used in this document are listed in the table below.

Acronym	Definition
ADS	Advanced Data Service
AE	Active Export
Al	Active Import
ARP	Advanced Retrieval and Processing Service
AWG	Architecture Working Group
ВМИ	Balancing Mechanism Unit
BRP	Balancing Responsible Party
BSC	Balancing and Settlement Code
BSCP	Balancing and Settlement Code Procedures
BST	British Summer Time
CCC	Consumption Component Class
CCDG	Code Change and Development Group
CDCA	Central Data Collection Agent
CLK	Clock Time
СоА	Change of Agent
CoMC	Change of Measurement Class (process)
CSD	Code Subsidiary Documents
CVA	Central Volume Allocation
DA	Data Aggregator
DAB	Design Advisory Board
DAE	Daily Advance Estimate
DC	Data Collector
DCC	Data and Communications Company
DLSC	Default Load Shape Coefficients
DNO	Distribution Network Operator
DSR	Demand Side Response
DUIS	DCC User Interface Specification
DWG	Design Working Group
EAC	Estimated Annual Consumption
ESO	Electricity System Operator
EV	Electric Vehicle
FiT	Feed-in-Tariff
GBCS	Great Britain Companion Specification
GSP	Grid Supply Point

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GSPG	Grid Supply Point Group
GSPGT	Grid Supply Point Group Take
GUID	Globally Unique Identifier
НН	Half Hourly
HHS	Half Hourly Settlement
ISD	Industry Standing Data
kWh	kilo-Watt hour
LDSO	Licenced Distribution System Operator
LLFs	Line Loss Factors
LSS	Load Shaping Service
MA	Meter Administrator
MDS	Market-wide Data Service
MHHS	Market-wide Half Hourly Settlement
MOA	Meter Operator Agent
MPAN	Metering Point Administration Number
MPID	Market Participant Identifier
MRA	Master Registration Agreement
MSA	Advanced Metering Service
MTD	Meter Technical Details
MWh	Mega-Watt hour
NGESO	National Grid Electricity System Operator
NHH	Non Half Hourly
PAB	Performance Assurance Board
PARMS	Performance Assurance Reporting and Monitoring System
P2P	Peer to Peer
PrA	Profile Administrator
PC	Profile Class
PSS	Processing Service (Smart)
RPU	Revenue Protection Unit
RR	Register Readings
SCR	Significant Code Review
SD	Settlement Day
SDS	Smart Data Services
SEC	Smart Energy Code
SEG	Smart Export Guarantee
SMETS	Smart Metering Equipment Technical Specification
SMRS	LDSO Registration Service

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SP	Settlement Period
SVA	Supplier Volume Allocation
SVAA	Supplier Volume Allocation Agent (BSC Agent)
TSDA	Teleswitch Data Services Agent
TOM	Target Operating Model
ToU	Time of Use
UMS	Unmetered Supplies
UMSDS	Unmetered Supplies Data Service
UMSO	Unmetered Supplies Operator
VAS	Volume Allocation Service
VAR	Volume Allocation
UTC	Coordinated Universal Time

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