

PROSPECTUS GLOSSARY

A

Access control

The method used to ensure that access to meter data is only available to properly authorised parties.

Activation charge

A charge made by DCC for activating each WAN communications module. This would recover costs associated with bringing each WAN connection into service as well as an appropriate share of central communications costs and the administrative costs of connection set up.

Agency Services Agreement

Agreement for the provision of information, data processing, invoicing and supply point administration services in relation to the transmission and distribution of gas in the United Kingdom.

Automated Meter Reading (AMR)

A non-domestic specific variant of Smart metering capable of one way communications for meter readings. It is not technically or functionally rich as the Smart Meters proposed in the Prospectus for Domestic and SME consumers.

Auxiliary switches

Circuits within the home such as electric storage heating or immersion heaters found in some Economy 7 installations.

B

Balancing and Settlement Code (BSC)

The BSC contains the rules and governance arrangements for the electricity balancing and settlement in Great Britain. All licensed electricity suppliers must be party to it (see codes).

C

Catalogue

The functional requirements of the Smart metering system are brought together in our proposed Smart Metering System Functional Requirements Catalogue (the Catalogue"). This covers the Smart metering system for both domestic and smaller non-domestic sectors.

Centre for Protection of National Infrastructure (CPNI)

The Centre for the Protection of National Infrastructure (CPNI) is the government authority that provides protective security advice to the national infrastructure

Codes

Industry codes establish detailed rules that govern market operation, the terms for connection and access to energy networks. The supply and network licences require the establishment of a number of industry codes that underpin the gas and electricity markets.

The electricity codes are:

- Balancing and Settlement Code (BSC),
- Connection and Use of System Code (CUSC)
- Distribution Code
- Grid Code
- Master Registration Agreement (MRA)
- System Operator-Transmission Owner Code (STC)
- Distribution Connection and Use of System Agreement (DCUSA).

The gas codes are:

- Uniform Network Code (UNC)
- Independent Gas Transporter
- (IGT) Network Codes
- Supply Point Administration Agreement (SPAA).

Code Governance Review

Review of the governance of industry codes carried out by Ofgem. Final proposals and consultation on the proposed licence drafting to implement those proposals were published on 31 March 2010.

Code of Practice

A mandatory agreement detailing a minimum set of standards that all participants can agree to protect consumers through the Smart Roll Out. They will be similar in format and content to the existing Codes of Practice for Sales Activity & Billing.

Commercial interoperability

The terms on which a new supplier can use the meter and related equipment when a customer changes supplier.

Communications hub

The device that houses communications equipment which enables communication of data between meters and the central data and communications function. Also referred as the WAN Module

Communications service providers

Providers of the communications infrastructure that will carry data to and from Smart meters in the domestic sector.

Consumer

Person or organisation using electricity or gas at a meter point.

Consumer Advisory Group (CAG)

The Consumer Advisory Group consists of members from groups representing a broad range of domestic consumers. It was set up to help inform the programme and

to promote understanding of key consumer issues, particularly more complex issues that cannot be fully explored through primary consumer research.

Consumer Focus

Consumer Focus is the consumer champion for England, Wales, Scotland and (for postal consumers) Northern Ireland. They operate across the whole of the economy, persuading businesses and public services to put consumers at the heart of what they do. Consumer Focus gives a strong voice to consumers on the issues that matter to them and works to secure a fair deal on their behalf. They work with consumers and a range of organisations to tackle the problems customers face and to achieve creative solutions that make a difference to people's lives.

Customer

Any person supplied or entitled to be supplied with electricity or gas by a supplier.

Customer premises equipment

All Smart metering equipment in a customer's home or business

Credit mode

Smart meters will be capable of switching between prepayment and credit mode. When operating in credit mode, customers will be billed for their energy after using it.

CPNI

Centre for the Protection of National Infrastructure

D

Data aggregation

Involves the aggregation of data from individual meters, and submission to ELEXON for settlement.

Data collector

A person qualified to retrieve, verify, process and validate meter reading data.

Data & Communication Group (DCG)

One of the Expert Groups created by the SMIP to utilise the experience of industry participants and other relevant stakeholders. The Data and Communications Group, will cover the scope, set up and activities of DCC.

DataCommsCo (DCC)

New proposed entity which would be created and licensed to deliver central data and communications activities. DCC would be responsible for managing the procurement and contract management of data and communications services that will underpin the Smart metering system.

Data processing

Involves the validation of meter reading data, and the transfer of the relevant information to interested parties.

Data Protection Act 1998

The Data Protection Act defines UK law on the processing of data on identifiable living people. It is the main piece of legislation that governs the protection of personal data in the UK

Data retrieval

Obtaining a reading (either manually or remotely) from a meter.

Data service providers

Providers of any data service, including data retrieval, aggregation, processing and storage.

DCUSA

Distribution and Connection Use of Systems Agreement.

Demand-side management

Demand-side management (also known as load management) involves energy consumers managing demand in response to changes in the balance between supply and demand, usually in response to a price signal.

Department of Energy and Climate Change (DECC)

The Department of Energy and Climate Change (DECC) was created in October 2008, to bring together: energy policy and climate change mitigation policy.

Distribution Network Operators (DNOs)

DNOs take electricity off the high-voltage transmission system and distribute this over low-voltage networks to industrial complexes, offices and homes. DNOs must hold a licence and comply with all distribution licence conditions for networks which they own and operate within their own distribution services area. There are 14 DNOs covering discrete geographical regions of Britain.

Distributed generation

Any generation which is connected directly into the local distribution network, as opposed to the transmissions network, as well as combined heat and power schemes of any scale. The electricity generated by such schemes is typically used in the local system rather than being transported for use across GB.

Disability Advisory Forum

A group hosted by Ofgem that is attended by a range of organisations representing the interests of people with disabilities.

Dual fuel

A type of energy contract where a customer takes gas and electricity from the same supplier.

Dynamic teleswitching (DTS)

A particular type of electricity meter which has an integrated teleswitch, allowing the Supplier (or distribution company) to switch the metered supply remotely. The Radio Teleswitching Access Provider controls the radio switches, and therefore heating load, following instructions from the supplier.

E

Economies of scale

Where the average costs of producing a good or providing a service falls as output increases.

ECOES

Electricity Central Online Enquiry Service

Electricity meter

A measuring instrument that records the quantity of electricity supplied.

ELEXON

ELEXON is the Balancing and Settlement Code Company (BSCCo) defined and created by the BSC. The BSC places obligations on ELEXON, who consequently manage the balancing and settlement arrangements, in conjunction with the BSC Panel. ELEXON therefore procures, manages and operates services and systems, which enable the balancing and imbalance settlement of the wholesale electricity market and retail competition in electricity supply.

Energy Retail Association (ERA)

The Energy Retail Association (ERA), formed in 2003, represents the major electricity and gas suppliers in the domestic market in Great Britain. All the main energy suppliers, operating in the residential market, in Great Britain are members of the association - British Gas, EDF Energy, npower, E.ON, Scottish Power, and Scottish and Southern Energy.

The ERA is running the Supplier Requirements for Smart Metering (SRSM) Project on behalf of its members. (see SRSM)

Energy suppliers

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

End User Category

A Transco (gas system operator) defined 4 digit number indicating the profile which relates to geographical area, annual quantity offtake banding and winter consumption ratio of the gas supplied to a property, and hence helps determine the tariff to be applied to the customers bills.

Emergency credit

Credit applied by a supplier when a prepayment meter is out of credit to help the customer avoid interruption.

Estimated bills

Where a supplier is unable to obtain a meter reading, a customer's bill will be estimated based on past usage.

F

Feed-in-tariff (FIT)

A feed-in tariff is a policy mechanism which came into effect in April 2010. It is designed to encourage the adoption of renewable energy sources. FITs consist of two elements of payment, made to generators, and paid for by licensed electricity suppliers. The first element is a generation tariff that differs by technology type and scale, and is paid for every kilowatt hour (kWh) of electricity generated and metered by a generator. This generation tariff will be paid regardless of whether the electricity is used onsite or exported to the local electricity network. The second element is an export tariff which is either metered and paid as a guaranteed amount that generators are eligible for, or, in the case of very small generation, assumed to be a proportion of the generation in any period without the requirement of additional metering.

Friendly credit

The facility on a prepayment meter to prevent disconnection if credit runs out during defined time periods such as overnight.

Functional requirements

The minimum functions that must be supported by the different elements of the Smart metering system to ensure the delivery of the benefits of Smart metering. Describes what the Smart metering system must do (not how it must do so).

Fuel poverty

Households are considered as being in “fuel poverty” if they would have to spend more than 10 per cent of their household income on fuel to keep their home adequately heated

G

Gas and Electricity Markets Authority (GEMA)

The Authority is Ofgem’s governing body. It consists of non-executive and executive members and a non-executive chair. The Authority determines strategy, sets policy priorities and takes decisions on a range of matters, including price controls and enforcement. The Authority’s principal objective is to protect the interests of existing and future consumers in relation to gas conveyed through pipes and electricity conveyed by distribution or transmission systems. The interests of such consumers are their interests taken as a whole, including their interests in the reduction of greenhouse gases and in the security of the supply of gas and electricity to them. The Authority's powers are provided for under the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998 and the Enterprise Act 2002.

Gas meter

A measuring instrument that records the volume of gas supplied.

Gas shipper

A company licensed by Ofgem, which arranges with a gas transporter for gas to be introduced into, conveyed and taken out of the pipeline system. Shippers must balance their input to and customer off take from the National Transmission System (NTS) each day. Ofgem licences all shippers

Gas transporter (GT)

A company, licensed by Ofgem, which transports gas through its network on behalf of a gas shipper.

Gas valve

A gas valve may be incorporated into a gas meter to regulate the flow of gas into consumer premises. It is distinct from the isolation valve.

Green tariffs

An energy tariff which is marketed as having environmental credentials. There is a scheme in place that certifies tariffs that have an environmental attribute. The scheme meets Ofgem's green supply guidelines.

Grid Supply Point (GSP)

A metering point at the boundary between the National Grid and the Regional Electricity Company (REC) area

H

Heat pump

In GB heat pumps are usually used as central heating systems, drawing energy from the ground, water or outside air to heat a fluid and then pump it into a house. Heat pumps may also work in reverse to cool a house, drawing heat from the inside air and transferring it to the ground, water or the outside air.

Home area network (HAN)

The Smart metering HAN will be used for communication between Smart meters, IHDs and other devices in consumers' premises.

I

Industry Co-ordination Group (ICG)

The Implementation Co-ordination Group will provide a forum to enable strategic coordinated engagement with industry and other stakeholders, including consumer groups. This forum will enable communications between the programme team and external stakeholders with key roles in delivery. The forum will also promote the more collaborative way of working that the programme team is seeking to maintain (and in some cases establish), as a wide range of industry participants become key delivery partners.

In-home display (IHD)

An in-home display is an electronic device, linked to a Smart meter, which provides information on a customer's energy consumption. The IHD has been referred to as CDU, this is no longer the correct terminology and only IHD should be used.

Industrial and Commercial (I&C) sector

The large non-domestic sector in general rather than any specific group of customers

Interoperability

The ability of diverse systems, devices or organisations to work together (interoperate). See also commercial interoperability and technical interoperability.

K

kWh

Kilowatt-hour is a unit used to measure energy consumption in both electricity and gas. The kilowatt-hour is a unit of energy equal to 1000 watt hours or 3.6 megajoules. Energy in watt hours is the multiplication of power in watts, and time in hours. A 100W light bulb left on for one day will consume 2.4 kWh (0.1*24).

L

Lead Supplier

The supplier that is the first to install a Smart meter (the lead supplier) will have an obligation to share use of the WAN and the HAN with the second supplier and the lead supplier will retain responsibility for maintenance. The sharing arrangement will be reflected in the charges made by DCC to each supplier (Prospectus P51)

Licence

Transporting, shipping and supplying gas; and generating, transmitting, distributing and supplying electricity are all licensable activities. Ofgem grants licences that permit parties to carry out these activities in the GB market. The licenses require the establishment of a number of multilateral industry codes that underpin the gas and electricity markets. Licensees need to be signed up as parties to codes in order to operate in the gas and electricity markets (see codes).

Licence application regulations

The regulations that will define the different steps in the competitive licence application process to grant the DCC licence.

Low Carbon Networks (LCN) Fund

As part of the new price control arrangements that run from 1 April 2010 to 31 March 2015, Ofgem has set up a Low Carbon Networks Fund. The Fund will allow up to £500 million of support to projects sponsored by the distribution network operators (DNOs) to try out new technology, operating and commercial arrangements.

M

Master Registration Agreement (MRA)

Along with its supporting documentation, the MRA provides a governance mechanism to manage the processes established between electricity suppliers and distribution companies to enable electricity suppliers to transfer customers.

Measuring Instruments Directive (MID)

The Measuring Instruments Directive is a European Directive (2004/22/EC) that covers a number of different measuring instrument types, including active electrical energy meters and gas meters. The MID enables EU conformity assessment certificates to be issued, and the instrument can then be used in any EU Member State. The aim of the Directive is to create a single market in measuring instruments for the benefit of manufacturers and, ultimately, consumers across Europe

Meter Asset Manager (MAM)

A person approved by the Authority as possessing sufficient expertise to provide gas meter-related services. A gas MAM essentially provides the services that would be provided by a Meter Asset Provider and Meter Operator in electricity.

Meter Asset Manager's Code of Practice (MAMCoP)

The Code of Practice for Gas Meter Asset Managers (MAMCoP) applies to natural gas only. The MAMCoP extends the duties of a MAM. It applies to Independent Gas Transporters undertaking meter asset management services, as part of a bundled gas transportation business, or MAMs who work on behalf of a gas customer, gas supplier or gas transporter to manage primary meter installations connected to the Network as defined by the Gas Safety (Management) Regulations.

Meter Asset Provider (MAP)

The party responsible for the ongoing provision of the meter installation at a meter point. In electricity the MAP is responsible for supplying electricity-metering equipment for the purpose of satisfying the electricity settlements process, the requirements of the relevant Use of System Agreement and the relevant primary and secondary legislation.

Meter Operation Code of Practice Agreement (MOCOPA)

An agreement between electricity distribution businesses and electricity meter operators in Great Britain. The agreement authorises meter operators to install and connect meters to the electricity network by clarifying that the equipment being provided, installed and maintained meets appropriate technical requirements and that work is carried out to adequate safety standards.

Meter Point Administration Number (MPAN)

A Meter Point Administration Number, also known as a Supply Number or S-number, is a 21-digit reference used to uniquely identify electricity supply points such as individual domestic residences. The gas equivalent is the Meter Point Reference Number.

Meter Point Administration Service (MPAS)

Electricity DNOs are required by licence to provide a Meter Point Administration Service to provide information regarding electricity supply to properties in that DNOs area. Information provided by the service consists of: The name of the electricity company registered to supply a property and the dates that they have supplied from, Customer supply number, Supply numbers to change suppliers. Information can be given to customers, suppliers and agents acting on behalf of customers such as Consultants, with permission from the customer.

Meter Point Reference Number (MPRN)

Meter Point Reference Number, also known as Supply Number or M-Number, is a reference used to uniquely identify gas supply points such as individual domestic residences. The electricity equivalent is the Meter Point Administration Number. Each property in the UK that has a mains gas supply has an MPRN, and in some circumstances more than one MPRN. The MPRN is unique to the property.

Meter reading or meter data services

A periodic reading of a meter. It involves two separate functions, namely data retrieval and data processing.

Metering Services

The provision to a customer of a meter that meets the prescribed limits for accuracy (currently +2.5% and -3.5%). It includes meter provision and meter operation

Meter Provider of Last Resort

GDNs who are obliged to provide gas meters at the request of a supplier to customers.

Microgeneration

Microgeneration is the on-site generation of lower-carbon heat and power by individuals, small businesses and communities at a small-scale.

N

National Service Provider (NSP)

Provide top up service for pre-payment meters and include payzone and paypoint

Network operator

The companies that are licensed by Ofgem to maintain and manage the electricity and gas networks in GB.

Non-domestic sector

For the purposes of this document, we define smaller non-domestic electricity and gas sites as those sites in electricity profile classes 3 and 4 and those non-domestic gas sites with consumption of less than 732 MWh per annum.

O

Ofcom

The independent regulator and competition authority for the UK communications industries.

Ofgem

The Office of the Gas and Electricity Markets (Ofgem) is responsible for protecting gas and electricity consumers in Great Britain. We do this by promoting competition, wherever appropriate, and regulating the monopoly companies that run the gas and electricity networks.

Ofgem E-Serve

Ofgem E-Serve is responsible for Ofgem's support and delivery functions. It focuses on administering environmental programmes and the delivery of sustainability projects such as the Smart Metering Implementation Programme.

Open standards

The European Union definition of an open standard (taken from "European Interoperability Framework for pan-European eGovernment Services") is:

- The standard is adopted and will be maintained by a not-for-profit organisation, and its ongoing development occurs on the basis of an open decision-making procedure available to all interested parties (consensus or majority decision etc.).
- The standard has been published and the standard specification document is available either freely or at a nominal charge. It must be permissible to all to copy, distribute and use it for no fee or at a nominal fee.
- The intellectual property - i.e. patents possibly present - of (parts of) the standard is made irrevocably available on a royalty-free basis.
- There are no constraints on the re-use of the standard.

P

Prepayment meter (PPM)

These are meters that require payment for energy to be made in advance of use or else they will prevent the supply of gas or electricity. A PPM customer pays for energy by inserting electronic tokens, keys or cards into the meter.

Prepayment mode

Smart meters will be capable of switching between prepayment and credit mode. When operating in prepayment mode customers have to pay for their energy before using it.

Price control

Ofgem sets the price controls for all energy transportation businesses. A price control sets the maximum amount of revenue which the parties subject to the control can recover from the users of their networks/services. This aims to balance the need to

allow the companies appropriate resources with the need to protect customers' interests.

Privacy by design

A system that has been designed with privacy in mind from the outset.

Privacy & Security Group (PSAG)

The Privacy and Security Advisory Group (PSAG) will provide advice and guidance in this key area to ensure that the programme achieves a fair balance in its approach. PSAG currently comprises representatives from other areas of government where expertise and experience exists with data privacy and security, including representatives from the ICO and the CPNI.

PIA

Privacy Impact Assessment

PSR

Priority Service Register

R

Reconciliation by Difference

The charge of energy which is invoiced or credited once meter reads have been done. Applies only to the market area of sites with an Annualised Quantity <73,201KWh

Remote meter functionality

Functions of the meter which can be updated/switched between remotely without the need for direct interaction with the meter.

S

SCOGES

Single Centralised Online Gas Enquiry Service

Security by design

Security by design is defined as ensuring that the security of a system is designed from the ground up to be secure. It is an established concept where security risks and issues are identified early in the system's development lifecycle.

Senior Responsible Owner (SRO)

The individual responsible for ensuring that a project or programme of change meets its objectives and delivers the projected benefits.

Small and Medium Users" Group (SMUG)

A forum established by Ofgem for engaging with business customer representatives. SMUG is open to small and medium sized users of energy, for example consumer groups such as the Federation of Small Businesses or the British Chambers of Commerce.

Smart appliances

An appliance that can alter the way in which it uses energy (consumption level or time of use) in response to changes in the balance between supply and demand, usually in response to a price signal.

Smart Energy Code

The proposed new industry Code that will cover both gas and electricity and will contain the detailed regulatory, commercial and technical arrangements applicable to Smart metering during rollout and on an enduring basis.

Smart grids

Smart grids, as part of an electricity power system, can intelligently integrate the actions of all users connected to it - generators, consumers and those that do both - in order to efficiently deliver sustainable, economic and secure electricity supplies.

Smart meter

In addition to traditional metering functionality (measuring and registering the amount of energy which passes through it), Smart meters are capable of two-way communication allowing them to transmit meter reads and receive data remotely.

Smart Metering Design Group (SMDG)

One of the Expert Groups created by the SMIP to utilise the experience of industry participants and other relevant stakeholders. The SMDG will cover broader Smart metering requirements, such as the equipment needed in customer premises.

Smart Metering Implementation Programme

The national Programme with the responsibility of delivering Smart Metering Capability to the UK

Smart metering regulatory regime

The regime which will provide the arrangements for the introduction and ongoing operation of Smart metering. These regulatory arrangements will be introduced using powers under the Energy Act 2008 to amend existing licences and codes, and to create a new licensable activity and a new licence.

Small & Medium Enterprises (SME)

See Non-Domestic

Supplier Requirements for Smart Metering (SRSM)

The SRSM project at the ERA has been at the heart of Smart metering developments within Great Britain. Working alongside the ERA members and industry experts, the project team has delivered a series of core products, many of which have been subject to consultation and comment.

Supply Point Administration (SPA)

The management of the information relating to all gas supply points in Britain, domestic, industrial and commercial. This is carried out by Xoserve, and the information is used to facilitate the transfer processes which enable gas supply competition to operate effectively in the UK.

Supply Point Administration Agreement (SPAA)

This provides governance around the standard gas industry procedures that exist between non-contracting parties, for example between gas suppliers in facilitation of a customer transfer. The SPAA was created in order to provide governance around those supplier-to-supplier procedures that were not ordinarily covered by existing contracts or agreements, but which were nonetheless considered important to the effective and efficient transfer of consumers between suppliers.

T

T-Map

A visual representation of aspirational objectives shown against the key strategic elements of the Target Operating Model (TOM).

Tamper alarm

A tamper alarm senses and reports any tampering with the metering system such as removal of the metering case or reversal of current.

Technical interoperability

The capability of systems or devices to provide and receive services and information between each other, and to use these services and information exchange to operate effectively together in predictable ways without significant user intervention. Within the context of the Smart metering system, this means the seamless, end-to-end connectivity of hardware and software from customer premises equipment through to DCC, suppliers, network operators and other authorised parties.

Technical specifications

The technical specifications for the Smart metering system will be an explicit set of solutions and guidelines as to how the Smart metering system will fulfil the functional requirements

Time-of-use tariff

Under a time-of-use tariff, a supplier varies its charges based on when energy is used (e.g. day/night; peak/off-peak; or by season). Such tariffs can be dynamic (changes in real time) or static (changes at predictable times).

Trickle disconnection

Restriction of the flow of energy to a home, allowing the consumer to use limited levels of electricity to cover basic needs such as lighting and the fridge/freezer. It could be used by suppliers as an alternative to full disconnection in cases of non payment by electricity or gas customers.

U

Uniform Network Code (UNC)

The Uniform Network Code is the hub around which the competitive gas industry revolves, comprising a legal and contractual framework to supply and transport gas. It has a common set of rules for all industry players, which ensure that competition can

be facilitated on level terms. It governs processes, such as the balancing of the gas system, network planning, and the allocation of network capacity. See also codes.

V

Volume charges

A proposed charge levied by the DCC in relation to the volume of data transferred, which may be differentiated by time of day and, depending on the technology, a charge for the number of data transfers (e.g. the frequency of meter data access).

Value-added services

Services beyond the ‘core services’ necessary for the functioning of the Smart metering system, which will be enabled by the Smart metering infrastructure.

W

Wide area network (WAN)

The Smart metering WAN will be used for two-way communication between Smart meters and DCC (via the WAN communications module in the customer’s premises).

WAN Module

See Communications Hub

Winter fuel payment

The winter fuel payment is an annual tax-free payment made by the government to eligible people aged 60 or over to help towards their winter heating costs.

X

Xoserve

Xoserve delivers transportation transactional services on behalf of all the major gas network transportation companies, and provides a consistent service point for the gas Shipper companies.