

Automated Meter Reading (AMR) Service Providers

Code of Practice for Gas Meters

ASPCoP

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Document Management

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Changes to this document to be agreed by the ASPCoP Management Committee using the change procedure designated in Appendix VII

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Definitions

Accreditation	An ASP shall gain accreditation by demonstrating that they comply with the ASPCoP
Automated Meter Reading (AMR)	The technology of automatically collecting data from utility meters
AMR Device	The equipment used to facilitate the collection of data from utility meters
AMR Service Providers (ASPs)	are businesses or organisations that offer provision of meter reads collected through an AMR system to consumers or gas suppliers or transporters
Compliance	Shall mean the audit carried out by the ASP CoP administrator or their appointed agent and would be strictly private and confidential and Compliant shall be construed accordingly
Competence	The necessary skills, experience, knowledge and personal qualities necessary for an employee to carry out his or her tasks.
Competent Person	A person having the ability, appropriate training, knowledge and experience to supervise or carry out the "work" being undertaken in a safe and proper manner.
Consumer	A user of gas.
Converter	A device used to convert measured gas volume from metering conditions (of temperature, pressure and compressibility) to the standard conditions used for gas billing
Logger	AMR Device
Meter Owner	The person owning a meter and/or a meter installation.
Meter Point Reference Number (MPRN)	A unique identifier for the point at which a meter is, has been or will be connected to the gas network
Meter Pulse Utilisation Agreement (MPU)	An agreement between a MAM and an ASP to allow the connection of the AMR Equipment to the MAM's Metering Equipment
MAMCOP	The Meter Asset Managers Code of Practice
MAM	A Meter Asset Manager
Supplier	As defined in the Gas Act.

1.0 Scope

This Code of Practice (CoP) is aimed at Automatic Meter Reading (AMR) Service Providers (ASPs), who provide data relating to gas consumption from non-domestic Consumers. The CoP is hereafter referred to as the ASPCoP.

This is a voluntary CoP, in that it is not underpinned by legislation and therefore does not confer any new obligations or rights on any party. Its purpose is to inform stakeholders of best practice and establish minimum standards for ASPs.

The aim of this document is to detail the minimum technical requirements and deliverables relating to the provision of non-domestic sector gas (meter & or converter) consumption and interval data. Compliance with the ASPCoP will be recognised by participants in the energy market.

The ASPCoP is designed to cover all requirements to be undertaken by an ASP but does not cover commercial and business information flows required between the Supplier, MAM or any contractual requirements.

As part of the application process applicants must be able demonstrate, to the satisfaction of the scheme auditor, that both applicants and where relevant their appointed agents are compliant with the ASPCoP"

2.0 Background and Drivers

Although the ASPCoP is voluntary, there is pressure from the market to reduce cost, have a level of interoperability and provide better quality of data to meet the UK Government requirement on Suppliers in the provision of advanced metering in the non-domestic sector.

The Government has modified Supplier's licence conditions to make this requirement, for meters consuming in excess of 732,000 KWh per annum. This obligation came in effect on the 6th April 2009 and requires that any new or replacement Gas Meter installed at the relevant premises must be an advanced meter and by April 2014 all other existing large sites must be upgraded to advanced metering.

Extract from Licence

For the purposes of this condition, an advanced meter is a Gas Meter that, either on its own or with an ancillary Logger, and in compliance with the requirements of any relevant Industry Code, is able:

- (a) to provide measured gas consumption data for multiple time periods, and at least hourly; and
- (b) to provide remote access to such data.

Automatic Meter Reading (AMR) is the technology of automatically collecting data from utility meters. The term AMR can refer to various types of solution and communication means and can support various meter read periods.

When applied to gas meters the normal practice is to attach a device (AMR) to the meter without interruption to the supply of gas to the end consumer so eliminating the need for an AMR installer to have gas meter installation skills.

However, the AMR installer must ensure that any device attached to a gas meter meets all health and safety requirements and that the installation of the device does not compromise the safety of the gas metering installation.

AMR Service Providers (ASPs) are businesses or organisations that offer provision of meter reads collected through an AMR Device to a number of parties including consumers, gas suppliers, transporters, energy brokers and energy management companies.

For the avoidance of doubt this CoP covers all AMR Device installations relating to non-Domestic Gas metering.

3.0 Key Objectives of the CoP

The aim of this Code of Practice is to provide a standard for the operation of an ASP business that provides AMR services. Adherence to the ASPCoP ensures the ASP operates to this standard including conformance with other industry standards, equipment installation and integrity in the processes of meter reading, data collection, data processing, adjustment, collection and data delivery. Consumers and gas Suppliers will be able to engineer systems to receive AMR collected meter reads compliant with a standard data format and to a known quality level. The aim, where possible, is to use open standards and enable competition between market participants.

The ASPCoP does not seek to restrict the commercial practice of ASPs but instead sets a standard that all participating ASPs shall demonstrate to be compliant with.

The aim is:

- To provide confidence to users of ASPs such that when they purchase an AMR service from an accredited ASP they know it will be compliant with and operate to a set of agreed and defined industry standards.
- To enable competition, where possible by use of "open standards"
- To promote interoperability that will result from the definition of a common data format.
- To provide reliable data, safe installation and interoperability.

In the ASPCoP, the terms "should" and "shall" have the following meanings:

- The term "should" prescribes a procedure that is intended to be complied with in the interests of best practice unless, after prior consideration and risk assessment, deviation is considered to be acceptable.
- The term "shall" prescribes a procedure that is intended to be complied with in full and without deviation.

4.0 Parties & Stakeholders

ASPs who are party to this Code of Practice however other gas industry stakeholders will be consulted on views prior to any change to this document.

Membership of ESTA is not a prerequisite to becoming a signatory to the Code of Practice.

Parties/Stakeholders	Description
Consumer	the party using the energy
Supplier	the party supplying the energy
Customer	the party paying for the equipment and service (this may for example be the Consumer or Energy Supplier)
AMR Manufacturer	the party manufacturing the AMR equipment
AMR Service Provider	the party providing the AMR service
MAM	the party regulated by Ofgem who manages the Meter asset
Shipper	the party contracting with the relevant Transporter for the delivery of gas to the consumers site
Transporter	the party transporting gas to the consumer's site
Auditor	the party that verifies compliance with the Code of Practice
Ofgem	the industry regulator
ESTA	the author and maintainer of the document
DECC	The Department of Energy and Climate Change
SPAA	Supply Point Administration Agreement

5.0 Management Committee, Governance & Change Control

This Code of Practice may be changed at any time following due consultation with relevant stakeholders, in accordance with the Change Control Process set out in Appendix 6, and reviewed by the Management Committee comprising members of ESTA and other industry representatives.

The Management Committee will use a simple majority will be used to decide if changes are accepted or rejected.

The Chairman will only vote in the event of a tie.

5.1 Management Committee

The Management Committee was established with effect from 16th April 2009.

5.2 Composition

The Management Committee shall be composed of:

- (a) the Group Chairman, being an ESTA Representative;
- (b) five (5) Signatories to the CoP;
- (c) one (1) Gas Supplier Representative;
- (d) one (1) SPAA Representative
- (e) one (1) Ofgem Representative (non-voting)
- (f) one (1) MAM Representative and
- (g) two (2) Consumer Representatives.

5.3 Secretary

The Group Chairman shall, from time to time, appoint an individual as the Secretary (and may remove and replace any individual so appointed). The Secretary or, as the case may be, deputy Secretary (if any), will attend meetings of the Management Committee, and any deputy Secretary may attend any meeting of the Management Committee at which the Secretary is also in attendance. For the avoidance of doubt the Secretary or, as the case may be, deputy Secretary will not act be entitled to act as a Representative or an alternate.

5.4 Notice of appointments

The Chairman will notify all Customer Representatives of the identity of the Secretary and any deputy Secretary appointed from time to time.

5.5 Representatives

5.5.1 Appointment

A Representative shall be appointed (including as a replacement of a Representative who is de-appointed or who has resigned) by way of designation notice in writing to The Chairman and the Chairman shall notify all Representatives of each such appointment.

Representatives shall be appointed on an Annual Basis and in the event of more nominations being received than places available the Signatories shall vote for the relevant Representatives and those with the highest number of votes will be appointed

5.5.2 De-appointment

A Representative may be de-appointed from time to time by writing to the Chairman and the Chairman shall notify all Representatives of each such de-appointment [and an appointment shall be sought to make up the numbers].

5.5.3 Resignation of Representatives

If any individual being a Representative shall for whatever reason notify the Chairman that he wishes to resign as a Representative, he shall cease to be a Representative in accordance with the notice of resignation, and the Chairman shall send a copy of such notice to all the Representatives.

5.6 Alternates

Each Representative may, from time to time, by notice to the Chairman appoint (or revoke the appointment of) an individual to be such Representative's alternate. The appointment (and revocation of the appointment) of any individual as an alternate shall be conditional upon and shall only be effective upon receipt of notice by the Chairman.

In addition to notices sent to Representatives, each alternate for the time being shall be entitled to be sent notices.

An alternate may attend any meeting of the Management Committee which is not also attended by the Representative (in his capacity as Representative) who appointed him and generally at any such meeting shall have and shall be able to exercise and discharge any and all of the functions, powers and duties of the Representative who shall have appointed that alternate.

If a Representative ceases, for whatever reason, to be a Representative the appointment of any alternate of the Representative shall cease.

5.7 Meeting of the Management Committee

5.7.1 Purpose

Meetings of the Management Committee will provide a forum in which Change Proposals can be discussed before going to consultation pursuant to and in accordance with the Change Procedures. The Management Committee will vote on Change Proposals in accordance with the procedures set out in Appendix Vii. Those functions of the Management Committee expressly provided in these Provisions relating to Change Procedures will be discharged in accordance with these Provisions.

5.7.2 Timing of meetings

Meetings of the Management Committee will ordinarily be held not less frequently than once every thirteen (13) weeks, in accordance with the Annual Meeting Timetable, save that:-

- (a) on not less than fifteen (15) Working Days notice the Chairman may convene a meeting on an earlier or later date or, if required may convene any additional meeting;
- (b) no meeting will be held if there is no agenda item to discuss; and

5.7.3 Notice of meetings

Meetings of the Management Committee will be convened by the Chairman on not less than fifteen (15) Working Days prior notice to each Representative, each such notice to specify the place, day and time of the meeting and to enclose an Agenda and any supporting materials.

The Agenda shall be accompanied by a copy of all and any Change Proposals to be considered at the meeting received by the Chairman

All notices convening meetings, together with Agendas and all supporting materials, shall be submitted by the Chairman by electronic mail.

5.7.4 Quorum

Six Voting Representatives (one only of whom shall be The Chairman Representative and of which at least two must be non signatories) present at a meeting of the Management Committee shall be a quorum.

If a quorum is not present at the time for the holding of a meeting (specified in the notice convening the meeting) or at any time during the hour following that time, and the meeting was to have considered a Change Proposal in respect of which the Proposer is the sole or one of the Representatives present, then by notice in writing to the Chairman in accordance with Clause [6.4] the Proposer may notify the Chairman that it wishes the Change Proposal to progress to the Consultation Phase.

Any meeting of the Management Committee at which a quorum is present shall be competent to discharge any and all of the functions within the competence of the Management Committee.

5.8 Form of meetings

Meetings of the Management Committee may take place by means of telephone, conference telephone, video link or any other audio, audio-visual or interactive communication notwithstanding that the Representatives treated as being present by any such means of communication may not all be meeting in the same place, provided that each Representative shall be able to communicate to each of the other Representatives and be heard by each of the other Representatives simultaneously. For the avoidance of doubt, Representatives participating in this manner shall count towards a quorum.

5.9 Invitees

The Chairman or a signatory may, from time to time, invite any individual or individuals to attend and speak at all or part of a meeting of the Management Committee, and the Chairman shall notify all Representatives of each such invitee (where reasonably practicable prior to the relevant meeting) including the name of each individual invited, the organisation that the individual represents, the date of the relevant meeting(s) and the reason(s) for the invitation. Unless a member objects or the Chairman determines (acting reasonably) that such a request is inappropriate.

Any invitee to a meeting of the Management Committee shall be entitled to receive copies of the notice convening the relevant meeting, together with the Agenda for the meeting.

5.10 Minutes

The Chairman shall ensure that the proceedings of meetings of the Management Committee are minuted.

The Chairman shall, where reasonably practicable, ensure that all Representatives are sent, within ten (10) Working Days immediately following the date of the relevant meeting, a copy of any minute of that meeting made

The Chairman will, in respect of each meeting of the Management Committee, invite the Representatives and alternates who attend that meeting to record their attendance.

5.11 Appeals

In the event that a party disputes the decision of the Management Committee they may appeal to the Management Committee who will consider the appeal and whose decision shall be final.

6.0 Audit

The Audit will be carried out in accordance with the procedure set out in Appendix VI. For the avoidance of doubt all information provided to the Auditor will be treated as private and strictly confidential.

6.1 Application Process

As part of the application process applicants will be audited to ensure they are compliant with the ASPCoP. As far as practicable the audit will be on the basis of a desktop exercise, however, the Auditor may choose to carry out site Audits if necessary to properly assess the applicant's compliance with the CoP.

6.2 Ongoing Basis

Signatories to the CoP will be audited on an ongoing basis. It is proposed that these audits will be undertaken on a 3 yearly basis.

6.3 Audit Appeal Process

In the event that a party disputes the decision of the Auditor they may appeal to the Management Committee who will consider the appeal and whose decision shall be final.

7.0 Code of Practice Requirements

7.1 Safety and Installation

Members of the ASP Code of Practice for Gas Meters shall be able to demonstrate that works on any AMR installations are completed in compliance with industry safety and technical standards and equipment meets the requirements of the environment in which it is installed e.g. hazardous area's and zoning. A participating ASP shall ensure that all work under its control is undertaken by Competent Persons as determined by an independently accredited training programme, having the appropriate training, assessment and certification.

All equipment shall be installed in accordance with appropriate standards by Competent Persons. A list of standards and procedures can be found in the Appendices.

7.2 Public Liability

All members of the ASP Code of Practice for Gas Meters shall demonstrate that they have a minimum level of Public Liability Insurance of £3 million pounds.

7.3 Accuracy, Assurance and Commissioning

Members of the "ASP Code of Practice for Gas Meters" shall be able to guarantee accuracy of delivered data and demonstrate that they have adequate measures implemented to assure the accuracy of the data they provide. This will allow them to accurately reflect the meter register values to the Customer automatically. This shall include end to end data integrity within their systems including the AMR Device capability, data transfer, processing, storage and delivery.

Following the installation and commissioning of new AMR Devices it is required that members of the "ASP Code of Practice for Gas Meters" ensure that a subsequent physical read or suitable alternative method is used for the purposes of proving the automated read.

7.4 Automatic Reading of Data

All members of the ASP Code of Practice for Gas Meters shall demonstrate that they or their agents can:

- Automatically communicate with AMR Devices at sites and acquire and store data from the AMR Devices;
- Provide accurate data.

7.5 AMR Devices Minimum Capability

For the purposes of meeting gas suppliers' license condition, the equipment when forming part of an advanced Gas Meter installation shall:

- provide measured gas consumption data for multiple time periods, and be able to provide such data for at least hourly time-periods; and
- provide remote access to such data.

The following types of documentation shall be used as appropriate to demonstrate Compliance that the AMR Device and ancillary equipment are suitable for the intended use:

- letters of conformance;
- a purchase specification;
- test certificates;
- Equipment suppliers' or manufacturers' literature.

Note: A mandatory requirement is the hazardous area certification (i.e. demonstrating conformance to Explosive Atmospheres Directive (ATEX) requirements and CE marking as appropriate for the hazardous area).

7.6 Data Integrity

Proof of data integrity is a key requirement therefore the following shall be required:

7.6.1 Data File Format

- The ASP shall be capable of delivering Metering Data in an industry standard format(s).

For the avoidance of doubt nothing in this Code of Practice inhibits parties entering into separate commercial bi lateral arrangements

7.6.2 Record keeping

- details of each installation are correct and fully recorded (as defined in IGEM GM7 see appendix 1), including location of the meter and AMR Device the type of equipment and configuration;
- details are managed in an accessible and Compliant manner;
- valid data is being collected (i.e. from the correct metering installation; with the correct parameters and settings);
- data shall be collected, processed and delivered to all relevant parties with the quality and timeliness required that meets the performance criteria specified by contracting parties
- apply and comply with appropriate Quality Systems (see Quality System section) in providing the services;
- data is backed-up and held in a secure environment, including maintaining an off-site copy of archived Data.

7.6.3 Data Security

All members of the ASP Code of Practice for Gas Meters shall have an adequate data protection policy. Such policy shall comply with the Data Protection Act. 1998

This should include:

- Having a documented data protection policy available to all Customers;
- Ability to demonstrate Compliance that they operate in accordance with such policy;
- Appointment of an Information Protection Officer at a senior level with specific responsibility for data protection.

The ASP should ensure that no third party (other than the ASP and their agents) has access to data collected and/or duly provided as part of the AMR service and that the Customer and their agents or the End User has access to their explicit data. An example Data Protection Policy is included in the Appendix.

7.6.4 Disaster Recovery Procedure

AMR requires the extensive use of computer systems. This makes business operations vulnerable to major problems, ranging from the accidental loss of data to deliberate sabotage. Storage systems can be at risk of theft, virus attack or physical damage through electrical overload, component failure, fire or flood.

Therefore, the ASPCoP requires members shall have a disaster recovery procedure such that in the event of catastrophe the service will be retained and data protected.

The plan shall consider events that have a significant impact on an enterprise's ability to conduct normal business and define the policies and procedures for dealing with various types of disasters that can affect an organisation, especially the organisation's IT (Information Technology) infrastructure. This plan shall include the processes and procedures needed to resume an organisation's operation after a disaster event and will include the following:

- Protection of data by backups and cloning;
- Mirror systems;
- A formal risk assessment in order to determine the requirements for the disaster recovery plan;
- Restoration of all essential and critical business activities;
- Scheduled review to ensure the plan is to be kept up to date to take into account changing circumstances.

7.6.5 Data Access Rights

Subject to contractual terms and any mandatory Supplier license conditions, this CoP recommends that End Users should not be unreasonably restricted from access to data.

All ASP Code of Practice for Gas Meters members will ensure customers and end users have access to information subject to their rights to the data.

7.6.6 Quality System

The ASP shall have in place a formal management system to ensure quality of service and data provision. This shall include the following elements:

- competencies, knowledge, and experience of persons employed;
- management responsibility;
- verification of resources and personnel;
- purchasing policy;
- process control and work management;
- continuous improvement report and corrective action;
- quality records and passing on of information;
- internal quality audits;
- document development;
- training;
- maintenance;
- technical support for customers and installers.

7.6.7 Interoperability Data Standards

Interoperability will be at the level of a “common” data format. Adoption of the standard data format will make it easier to deploy and manage differing hardware solutions, no matter which products or vendors the organisation chooses.

The industry standard data format shall provide both delivery of consumption and interval data.

Through this interoperability, enterprises will be able to use of the common data format for the purpose of billing, verification, energy management and M & T.

7.6.8 Compliance with Industry Data Flows

ASP Code of Practice for Gas Meters members will comply with industry standard processes for data flows.

MAM Meter Pulse Utilisation (MPU) Agreements

ASPCoP members will enter into agreement with the relevant Meter Asset Manager

8.0 Approval, Appraisal, and Authorisation by Third Parties

The requirements of any relevant third party relating to approval, appraisal or authorisation of the work shall be established and the third party’s work management procedures shall be taken into account prior to installation.

9.0 Installation

The requirements of this section are applicable to the installation of loggers and any ancillary equipment. The processes are defined by the current edition of IGE/GM/7 and additional requirements are defined in the appendix of this document. Below are the key points and requirements.

Installation shall be performed by appropriately accredited and Competent Persons in accordance with best practice, relevant normative standards, manufacturers' information and appropriate installer's field procedures.

9.1 Pre-installation procedures shall include, but not be limited to, ensuring:

- whether there is an existing logger attached or available use of the meter pulse output;
- the installation is to be installed at the appropriate MPRN;
- the logger and any ancillary equipment are suitable for the intended purpose;
- the local environment in the vicinity of the meter installation does not have or introduce any hazard that will compromise the safe and effective operation and use of the installation or logger.

9.2 Installation process shall ensure that:

- pre-installation checks are undertaken; including Risk Assessment's and Method Statements where applicable or required approval from the relevant MAM has been obtained. any required formal notifications are made prior to commencing work;
- safe control of work is assured;
- the installation and any ancillary equipment are installed in accordance with best practice and all relevant standards;
- the installation and any ancillary equipment is inspected and tested;
- the installation does not have a detrimental effect on other legacy devices;
- statutory and advisory labels are fitted.

Installers shall be aware of the requirements for, and the effect of, any other equipment which is to interface with the meter installation (for example converters, other loggers and BMS systems).

Where known by the Installer, the Installer should ensure the consumer is aware of any parts of the installation which the consumer owns and may be affected and where they are the owner of other equipment in the pulse chain they are expected to ensure it remains accessible and properly maintained.

10.0 Records

Installation records shall be maintained throughout the operational life of the complete installation.

Where a logger is connected, removed or exchanged, there is a requirement to record and communicate the information to the MAM and where possible other parties in the pulse chain.

Further details are available in IGE/GM/7.

11.0 Duty of Care beyond Asset

It shall be ensured that the installations do not cause a safety hazard to the public during the life cycle of the installation.

The Installers acting on behalf of the ASP shall have procedures in place for reporting any dangerous occurrences as required by the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR).

Any person carrying out installation work who becomes aware of an unsafe or dangerous installation or gas leak during the course of that work, has a duty to inform a responsible person. However, this duty only extends to those issues which are within the competence of the person engaged in work and which it is reasonable to expect the person to notice through visual inspection or olfactory sense by that person.

12.0 Equipment Removal and Disposal

At the end of the operational life of an AMR Device or of any ancillary equipment, appropriate disposal is necessary to complete the cycle of whole life management.

Parties should be notified of the removal.

Care should be taken to consider environmental impact when disposing of AMR Devices and equipment. In particular the following factors apply:

- where possible, all components should be reused or recycled, provided this does not involve excessive cost;
- all batteries must be removed and disposed of in accordance with current environmental and waste disposal legislation;
- components likely to contain mercury or other hazardous chemicals must be removed from the equipment prior to disposal and then disposed of in accordance with current environmental and waste disposal legislation. Alternatively the AMR Device or equipment as a whole must be sent to a suitably equipped and competent facility capable of disposing in accordance with current environmental and waste disposal legislation i.e. Waste Electrical and Electronic Equipment (WEEE) Regulations

13.0 Data flows and Unique Reference of ASP

An industry data hub will contain details of all equipment attached to meter and converters on site. Inclusive in the data set will be reference to the ASPCoP accredited ASP providing service. Each ASP will be recognised by a unique 3 letter identity tag.

SPAA will, upon application, allocate and maintain a catalogue of these unique ASP MDD identifiers.

Appendix I: Technical Publications

Publication Reference	Title
IGE/GM/5	Selection, installation and use of electronic gas meter volume conversion systems.
IGEM-GM-7A	Electrical connections Draft for Approval
IGEM-GM-7B	Hazardous areas Draft for Publication
BS 7671	IEE Wiring Regulations.
BSEN 60079-17	Electrical Apparatus for explosive gas atmospheres. Inspection and maintenance of electrical installations in hazardous areas (other than Mines).
The publication reference refers to the latest version of the relevant publication.	

Appendix II: Example of a Data Protection Policy

This is a statement of the data protection policy adopted by the ASP Service Provider ('the ASP'). Responsibility for the updating and dissemination of the policy rests with the ASP's Information Protection Officer. The policy is subject to regular review to reflect, for example, changes to legislation or to the structure or policies of the ASP. All staff are expected to apply the policy and to seek advice when required.

The AMR Service Provider needs to collect and use certain types of information about people, addresses and metering assets with which it deals in order to operate. These may include current, past and prospective people, addresses and metering assets, the ASP's own employees, suppliers (such as AMR Manufacturers) and others with whom the ASP conducts business. In addition, the ASP may occasionally be required by law to collect and use certain types of information to comply with the requirements of government departments. This personal information must be dealt with properly however it is collected, recorded and used – whether on paper, electronically, or other means - and there are safeguards to ensure this in the Data Protection Act 1998.

We regard the lawful and correct treatment of personal information by the AMR Service Provider as important to the achievement of our objectives and to the success of our operations, and to maintaining confidence between those with whom we deal and ourselves. We therefore need to ensure that our organisation treats personal information lawfully and correctly.

To this end, we fully endorse and adhere to the Principles of data protection, as set out in the Data Protection Act 1998.

The eight Principles require that information:

- 1) shall be processed fairly and lawfully and, in particular, shall not be processed unless specific conditions are met;
- 2) shall be obtained only for one or more specified and lawful purposes, and shall not be further processed in any manner incompatible with that purpose or those purposes;
- 3) shall be adequate, relevant and not excessive in relation to the purpose or purposes for which they are processed;
- 4) shall be accurate and, where necessary, kept up to date;
- 5) shall not be kept for longer than is necessary for the specified purpose(s);
- 6) shall be processed in accordance with the rights of data subjects under the Act;
- 7) should be subject to appropriate technical and organisational measures to prevent the unauthorised or unlawful processing of personal data, or the accidental loss, destruction, or damage to personal data;
- 8) shall not be transferred to a country or territory outside the European Economic Area unless that country or territory ensures an adequate level of protection for the rights and freedoms of data subjects in relation to the processing of personal data.

Therefore, the AMR Service Provider will, through appropriate management and strict application of criteria and controls:

- observe fully conditions regarding the fair collection and use of information;
- meet its legal obligations to specify the purposes for which information is used;
- collect and process appropriate information only to the extent that it is needed to fulfil our operational needs or to comply with any legal requirements;
- ensure the quality of information used;
- ensure that the information is held for no longer than is necessary;
- ensure that the rights of people or organisations about whom information is held can be fully exercised under the Act (i.e. the right to be informed that processing is being undertaken, to access one's information; to prevent processing in certain circumstances, and to correct, rectify, block or erase information that is regarded as wrong information);
- take appropriate technical and organisational security measures to safeguard information;
- ensure that personal information is not transferred abroad without suitable safeguards.

To assist in achieving compliance with the principles, the AMR Service Provider:

- has appointed an Information Protection Officer at a senior level with specific responsibility for data protection within the ASP;
- has documented data protection procedures.

Appendix III: Legislative References

Acronym	Full Name
ATEX 137	Explosive Atmospheres Directive (99/92/EC)
ATEX 95	Explosive Atmospheres Directive (94/9/EC)
CAD	Chemical Agents Directive (98/24/EC)
CDMR	Construction (Design and Management) Regulations 1994
COSHH	Control of Substances Hazardous to Health Regulations 2002
CPD	Construction Products Directive - Construction (Design and Management) Regulations 1997
DSEAR	Dangerous Substances and Explosive Atmospheres Regulations 2002
EPS	Equipment and Protective Systems for Use in Potentially Explosive Atmospheres Regulations 1996 (As Amended)
EWR	Electricity at Work Regulations 1989
GA	Gas Act 1986, and where relevant as amended by Gas Act 1995
GMR	Gas Meter Regulations (and Amendments) 1983
GS(I&U)R	Gas Safety (Installation and Use) Regulations 1998
GS(M)R	Gas Safety (Management) Regulations 1996
HSWA	Health & Safety at Work Act 1974
LOLER	Lifting Operations and Lifting Equipment Regulations 1998
MHOR	Manual Handling Operations Regulations 1992
MHSWR	Management Health & Safety at Work Regulations 1999
NWR	The Noise at Work Regulations 1989
RIDDOR	Reporting of Injuries Diseases and Dangerous Occurrences Regulations 1995
WEEE Regulations	UK Waste Electrical and Electronic Equipment Regulations

Appendix IV: Syllabus for Installers

Scope:

"The installation and maintenance of battery operated "plug and play" AMR Devices connected to Industrial and commercial gas meters - not involving changes to the gas connections". Objective of ensuring that installers are trained and competent able to exercise the correct professional judgement to enable them to carry installations to the required standards of quality and safety

Syllabus

Regulatory requirements

An appreciation of the requirements of the following regulations and standards as they apply to the scope of activity:

- HSAW Act/PPE at Work regulations - Personal Protective Equipment at Work Regulations 1992
- Understanding of GM/7 – Connection of electrical equipment to gas meters and converters
- BS 7671 – Wiring regulations and how they apply
- PUWER - Provision and Use of Work Equipment Regulations 1998
- Gas Safety (Installation & Use) Regulations
- Electricity at Work Act
- DSEAR and ATEX regulations relating to intrinsic safety of the equipment, the installation processes and meaning of Zones

Identification and management of hazardous situations

- Understanding of ATEX principles
- Understanding hazardous areas and meaning of zones
- Implications of installing across Zone barriers
- Identification of suitable devices and equipments
- Understanding the suitability of equipment
- Safe systems of work
- LEL/UEL (Lower and upper explosive limits) and GIA - (gas in air)
- LP Gas installations what types of equipment may be present
- Identification of unsafe installations and equipment
- Identification of meter tamper and what to do
- What to do if there is a gas leak
- What to do if a battery is damaged – spills and dangers of lithium cells
- Safe testing of existing wires (potential hazardous voltages and sparks)
- Recognising unsafe equipment and connections

Installation processes

- Identification of installed equipment – other AMR Devices, loggers, converters, isolation relays, chatter boxes, connection boxes and Building Energy Management Systems BEMS systems
- Understanding the pulse chain and potential issues of connecting to and from other equipment.
- What MPU work is, types of MPU and when it is required
- Identification of meter types dials and pulse outputs.
- Identification of the MAM for the meter to which the AMR Device is to be attached
- Correct interpretation of data plate information
- How to read meter dials and converters
- Understanding how meters provide a pulse – integral pulse, added pulse transmitter and use of optical devices
- Understanding what a tamper circuit is
- Correct selection of equipment and cables with relation to planned position
- Understanding meaning of The IP Code (or Ingress and water proofing Protection Rating)
- Understanding basics of signal coverage (GPRS, 3G, GSM and radio), positioning and use of external aerials
- Correct selection of cables and connectors to match meters and converters
- Use and sealing of ducts and conduits
- Basic PC skills and use of software
- Correct behaviour on site – how to deal with people on site and customers
- Commissioning equipment

Installation and diagnostic techniques

- Basic understanding of electrical circuits, what is polarity, wiring and how meters pulse
- Parallel and series connections and use of pulse splitters
- Correct selection & usage of test equipment
- Polarity testing between devices
- Looking for a pulse
- Continuity testing
- Understanding cable and connector specs
- Using and positioning to achieve best signal, use and positioning of external aerials
- On site handling and changing SIM cards and batteries
- Cable protection and siting and potential interaction with other services
- Practical skills – extension and joining of wires, making good connections and protection against the environment

- Cable colour and numbering protocols- current & legacy
- Siting of loggers and cable runs
- Basic earthing (i.e. do not remove add or change)
- Marking up, labelling and recording assets
- Pulse chain and responsibilities and best practice
- Managing and reinstating existing equipment
- Recording of removed assets
- Understanding issues of batteries, safe use, storage, disposal and handling

Environmental processes

- Managing of new and removed batteries – awareness of safety and handling issues
- Disposal processes – Equipment and batteries
- Consequences of incorrect disposal
- Cleaning and removal of waste material

Appendix VI: Audit Procedure

Introduction

The following document provides an overview of the Audit/QA procedure used by the Scheme Auditor. The Scheme Auditor will undertake a Desktop Audit were possible to assess the parties capabilities in line with the CoP including but not limited to: -

- Company Details
- Staff Qualifications
- Safety and Installation
- Public Liability Insurance
- Accuracy, Assurance and Commissioning
- Automatic Reading of Data
- AMR Device Minimum Capability
 - letters of conformance;
 - a purchase specification;
 - test certificates;
 - Equipment suppliers' or manufacturers' literature.
 - A mandatory requirement is the hazardous area certification (i.e. demonstrating conformance to ATEX requirements and CE marking as appropriate for the hazardous area).
- Data Integrity
- Data File Format
 - Ability to support industry standard format(s)
- Record keeping
- Data Security & Protection
- Disaster Recovery Procedure
- Data Access Rights
- Quality System
- Interoperability data standards
- Compliance with Registration Processes (MPU and SPAA)
- Approval, Appraisal, and Authorisation by Third Parties
- Duty of Care beyond Asset
- Equipment Removal and Disposal
- Data flows and Unique Reference of ASP

Site Visit Procedure

If as part of the Application process the Auditor deems it necessary and as part of the Ongoing Audit of Accredited Parties any Site Visit will be conducted within the following framework: -

- The Auditor will select 4 AMR Installations (existing or new) to carry out Desk Top Audits and if required 2 sites for Site Audits.
- All installations must be checked to see that they comply with IGE GM7 A "Electrical Connections for Gas Metering Equipment" and GM7 B "Hazardous Area Classification for Gas Metering Equipment".
- Complete all the sections of Audit Report Form (see below) including any other comments relative to the installation. A free text box is provided for the auditor to include any observations, readings etc which are undertaken during the site visit. A digital picture of the Installation will be attached to the Audit Report Form.

Appendix VII: Change Process

1.0 Relevant persons

Any Stakeholder may from time to time, raise a Change Proposal.

2.0 Form of Change Proposals

Each Change Proposal shall:

- (a) be submitted by electronic mail;
- (b) set out in reasonable, but not excessive, detail the nature and purpose of the Change Proposal;
- (c) detail the sections and conditions of the Code of Practice which are to be amended or otherwise affected by the Change Proposal;
- (d) set out in reasonable, but not excessive, detail an assessment of the impact of the Change Proposal
- (e) set out a proposed timetable for implementation of the Change Proposal;
- (f) state the name of the Proposer and the Proposer's Representative, together with contact details; and
- (g) indicate whether the Proposer requests the Chairman to invite an individual or individuals to attend and speak at that part of the meeting at which the Change Proposal is to be discussed, and if so specify the name and contact details of the individual(s) and brief reasons as to the purpose of the invitation.

Each Change Proposal shall be submitted to the Chairman not less than ten (10) Working Days prior to the Management Committee meeting at which the Proposer wishes the Change Proposal to be discussed, and any Change Proposal received by the Secretary after this date shall be included in the Agenda for discussion at the next following meeting of the Management Committee.

Upon receipt of a Change Proposal, the Chairman shall ensure that the Change Proposal contains the information set out above before accepting such Change Proposal, giving that Change Proposal a unique reference number and submitting that Change Proposal to each Representative with the Agenda for the relevant meeting of the Management Committee.

Where a Change Proposal does not comply the Chairman shall reject such Change Proposal by notice to the relevant Representative stating the reason(s) for the rejection, and may recommend to such Representative any amendment to, and/or additional information to accompany, that Change Proposal to render it compliant.

3.0 Initial discussion at Management Committee

Each Proposer shall ensure the attendance of its Representative (or its alternate) at the meeting of the Management Committee at which the Change Proposal is to be discussed initially, and at such meeting the Proposer's Representative (or its alternate) will be invited by the Group Chairman to give a presentation in respect of the Change Proposal and endeavour to answer any questions which the Management Committee may have with respect to the Change Proposal or the presentation.

The timelines set out in the process may be altered for a Change Proposal with the agreement of the Management Committee

If the Representative of the Proposer (or its alternate) does not (for whatever reason) attend the meeting of the Management Committee at which the relevant Change Proposal is to be discussed initially, then the Chairman shall include the Change Proposal in the Agenda for discussion at the next following meeting of the Management Committee.

4.0 Progression to Consultation Phase

At the meeting or no later than five (5) Working Days after the meeting of the Management Committee at which a Change Proposal is discussed initially (or would have been discussed but for the absence of a quorum. The Proposer may notify the Chairman in writing that it wishes the Change Proposal to progress to the Consultation Phase.

5.0 Amendments to Change Proposals

Having regard to discussions at the meeting of the Management Committee, the Proposer may amend a Change Proposal and re-submit it in amended form to the Chairman and it shall continue through the process, provided that the Change Proposal as so amended:-

- (a) is not materially different in nature or purpose to the original Change Proposal discussed initially;
- (b) sets out in reasonable, but not excessive, detail the rationale for the amendment(s) to the original Change Proposal; and
- (c) specifies the reference number of the original Change Proposal.

6.0 Withdrawal of Change Proposals

At any time the Proposer may by notice to the Chairman withdraw that Change Proposal. Any Change Proposal so withdrawn shall immediately lapse.

In respect of any Change Proposal, a failure by the Proposer to either notify the Chairman that it wishes to progress the Change Proposal to the Consultation Phase or amend and re-submit that Change Proposal shall be deemed to be a withdrawal by that Proposer of the relevant Change Proposal. Any Change Proposal so deemed to have been withdrawn shall immediately lapse.

The Chairman will, within a reasonable period of time following any withdrawal or deemed withdrawal notify each Representative of each such withdrawal or deemed withdrawal.

7.0 Consultation Phase

7.1 Circulation of Change Proposals

The Chairman shall send to each Signatory and Stakeholder, not less than eight (8) Working Days after the relevant meeting of the Management Committee, a copy of the relevant Change Proposal.

Copies of all Change Proposals and accompanying papers shall be submitted by the Chairman by electronic mail.

7.2 Representations on Change Proposals

No later than ten (10) Working Days after the Submission Date, Representatives may make representations to the Chairman in respect of the relevant Change Proposal.

Representations shall:

- (a) be submitted by electronic mail;
- (b) set out in reasonable, but not excessive, detail the comments which the Representative wishes to make in respect of such Change Proposal (which may include without limitation comments in respect of the rationale and purpose of the Change Proposal);
- (c) where the Change Proposal has been amended state if the Representative wishes to object to the Change Proposal and if so set out in reasonable, but not excessive, detail the reason(s) for such objection;

Where a Change Proposal has been amended and re-submitted a Signatory or Stakeholder may object to that amended Change Proposal and request that it be referred back to the Management Committee for further discussion if it considers that the Change Proposal as so amended is materially different in nature or purpose to the original Change Proposal discussed initially at the relevant meeting of the Management Committee.

The Chairman shall have due regard to any objections raised by any Representative and may (but shall not be obliged to):-

- (d) refer the Change Proposal back to the Management Committee for further discussion but The Chairman's determination in respect thereof shall be final and binding.

No later than three (3) Working Days after the deadline for receipt of representations from Customers the Chairman shall forward to all Representatives all and any representations received, and at the same time the Chairman shall notify Representatives of any determination by The Chairman pursuant to Clause 7.2.4 (including an explanation of such determination in reasonable, but not excessive, detail).

8.0 Voting Phase

8.1 Progression to Voting Phase

Unless the Secretary shall have notified Representatives of The Chairman's determination to refer a Change Proposal back to the Management Committee each Change Proposal shall automatically progress to the Voting Phase.

8.2 Registration of Votes

No later than eighteen (18) Working Days after the Submission Date, Members of the Management Committee shall register their vote on the Change Proposal by electronic mail; and stating whether they wish to register their Vote for or against the Change Proposal.

For the avoidance of doubt only votes received will be counted.

9.0 Report Phase

9.1 Submission of the Chairman's report

No later than twenty-three (23) Working Days after the Submission date, The Chairman shall report to Representatives in the manner provided in Clause 9.2 on the outcome of the Voting Phase and the implementation date.

9.2 Content of the Chairman's report

The Chairman's report shall:

- (a) be submitted by electronic mail;
- (b) State:-
 - (i) whether or not the Management Committee Consensus is in support of the Change Proposal; and
 - (ii) the name of each Management Committee Member who registered a Vote and whether or not those Votes were registered in support of the Change Proposal;

10.0 Date of implementation

Where in respect of a Change Proposal the vote is in support of the Change Proposal, then the Change Proposal shall be implemented with effect from the later of:-

- (a) the implementation date specified in the Change Proposal, and
- (b) such date as The Chairman (acting reasonably) shall determine to be the earliest practicable date by which the Change Proposal can be brought into effect taking into account, without limitation, any system or operational changes required in consequence of the Change.

Where in respect of a Change Proposal the vote is not in support of the Change Proposal then the Change Proposal shall not be implemented and shall immediately lapse

11.0 Implementation of Changes

As soon as reasonably practicable after the date of implementation of a Change, The Chairman shall publish on the Website a revised version of the Code of Practice as modified by the Change, and in addition shall provide to each Representative by electronic mail a copy.

12.0 GENERAL

12.1 Notices

Unless otherwise expressly provided, any document, notice or other communication to be given to or made by any person pursuant to or in accordance with these Provisions shall be in writing.

Any document (including, but without limitation, any representation, objection or report), notice or other communication may be delivered to the relevant person or sent by first class pre-paid letter, facsimile transmission or electronic mail to the address, facsimile transmission number or electronic mail address of that person specified by that person for the time being as being that person's address or facsimile transmission number and shall be effectual notwithstanding any change of address or facsimile transmission number which is not notified by that person.

Each such document, notice or other communication shall be treated as having been given or made and delivered, if by letter two (2) Working Days immediately following posting, if by delivery when left at the relevant address, and if by facsimile transmission or electronic mail, upon receipt by the addressee of the complete text of the document, notice or other communication in a legible form.

12.2 Non-receipt

No accidental omission in sending any document or notice or other communication to, or non-receipt of any document or notice or other communication by, any person pursuant shall be capable of invalidating any act or thing done pursuant thereto.

12.3 Consequences of these Provisions and confidentiality

These Provisions shall not give rise to or impose any duty, obligation or right (whether in contract, tort, trust or otherwise) and consequently shall not give rise to any action or claim or liability pursuant to, in relation to, in respect of or in connection with these Provisions.

No Representative (or its alternate) shall be liable (in whatever capacity) and no employer of any such person shall be vicariously liable for any act or thing done or omitted to be done pursuant to, in relation to, in respect of or in connection with these Provisions.

No act of thing done or omitted to be done by The Chairman or any Customer (or any employee, director or agent of The Chairman or any Customer) pursuant to, in relation to, in respect of or in connection with these Provisions shall give rise to any action or claim or liability by any Customer against The Chairman (or any such employee, director or agent of The Chairman) or by any other Customer or The Chairman against such Customer (or any such employee, director or agent of such Customer).

Nothing in or arising as a consequence of these Provisions is intended in any way to limit or negate the ability for the time being of any Customer or The Chairman to seek to discuss any issue or matter with the Authority or to give rise to any consequence in respect of any contractual relationship (other than pursuant to a Change) which may, from time to time, exist between any Customer and The Chairman.

Nothing in these Provisions shall oblige or impose any duty (whether expressly or impliedly) on The Chairman or on any Customer to provide or make available any information.

Any person who provides any information for the purposes of or pursuant to these Provisions may require that such information may only be made available subject to such confidentiality undertakings as such person may require.

Summarised Change Proposal Steps		
TimeLine Working Days (WDs)	Step	Notes
	Change Proposal (CP) Raised & Submitted to Chairman	CP must be provided to Chairman at least 10 WDs before next management Committee (MC) or else it is carried forward to next meeting
	If compliant it is added to Agenda of next meeting and CPs are circulated with the Agenda	
D	At Management Committee Proposer gives presentation on CP	If proposer is not present it is carried forward to next meeting
No later than D+5 WDs after the MC	Proposer notifies Chairman of requirement for CP to proceed to Consultation Phase	
No later than D+8 WDs after MC	Chairman to issue CP fro Consultation to all signatories and representatives.	
No later than 10 WDs from issue of CP for consultation	Comments to be submitted to Chairman	
No later than 13 WDs from issue of CP for consultation	Chairman to circulate all comments received to all signatories and representatives	
No later than 18 WDs from issue of CP fro consultation	Votes to be submitted	No assumption will be made if a vote is not submitted
No later than 23 WDs from issue of CP for consultation	Chairman to issue Report setting out Result of the Vote and timetable for implementation.	

D = Start of formal process. The table is for guidance only and does not include extensions and appeals