# CODE OF PRACTICE FOR GAS METER ASSET MANAGERS

Edition 12

**29 November 2018** 

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# 1 Scope

- 1.1 This Code of Practice for Gas Meter Asset Managers (hereafter referred to as the MAMCoP) applies to Natural Gas only.
- 1.2 The MAMCoP sets out the duties of a Meter Asset Manager (MAM).
- 1.3 The MAMCoP applies to Independent Gas Transporters (IGTs) undertaking meter asset management services, or MAMs who work on behalf of a gas supplier, Gas Transporter (GT) or a gas consumer, to manage primary meter installations connected to the Network as defined by the Gas Safety (Management) Regulations (GS(M)R) in Great Britain.
- 1.4 The MAMCoP utilises the definition of the meter installation which appears in IGEM/G/1.
- 1.5 The MAMCoP specifies the activities involved in the management of the life cycle of the meter installation for which the MAM is responsible. Each activity is dealt with in its own section. Clauses within each section deal with specific requirements.

Note: Individual gas consumers, who undertake legal duties for their own gas meter installation(s) are not obliged to register as a MAM. However, this document refers to the statutory responsibilities and provides guidance to all persons responsible for any gas meter installation.

- 1.6 This document is a Code of Practice detailing the rules that apply to those registered as a SPAA approved MAM, dealing only with the business interfaces between organisations and not the commercial content of the associated agreements that facilitate the interfaces.
- 1.7 Work undertaken by MAM's is split into a number of categories broadly aligned to CoP 1/a, CoP 1/b and CoP 1/c as defined in Table 1 below.

To assist MAM's who wish only to install domestic installations, but will occasionally need to install a meter greater than G4, Category 3A has been established.

Category 4 has also been split with Category 4A encompassing meters supplied at pressures up to 38 bar and Category 4B meter supplied at pressures greater than 38 bar and up to 85 bar.

Work Category	Installation Details	Installation Description
Category 1 & CoP 1/a	$Q_{max} \le 6 \text{ m}^3 \text{ h}^{-1}$ $MOP \le 75 \text{ mbar}$ Standard Installation	Meter Installations supplied at Low Pressure and installed to BS 6400 Pt 1
Category 2 & CoP1/c	$Q_{max} \le 6 \text{ m}^3 \text{ h}^{-1}$ 75 mbar < MOP $\le 2$ bar Standard Installation	Meter Installations supplied at Medium Pressure and installed to BS 6400 Pt 2
Category 3A & CoP1/b	$6 \text{ m}^3 \text{ h}^{-1} < Q_{max} \le 40 \text{ m}^3 \text{ h}^{-1}$ $MOP \le 75 \text{ mbar}$ Standard Installation	Meter Installations up to U40 supplied at Low Pressure and installed to IGEM/GM/6
Category 3B & CoP1/b	$6 \text{ m}^3 \text{ h}^{\text{-1}} < Q_{\text{max}} \le 1076 \text{ m}^3 \text{ h}^{\text{-1}}$ $MOP \le 75 \text{ mbar}$ Standard Installation	Meter Installations supplied at Low Pressure and installed to IGEM/GM/6
Category 4A & CoP1/c	$Q_{max} > 6 \text{ m}^3 \text{ h}^{-1}$ $MOP \le 38 \text{ bar}$ $Non\text{-standard Installation}$	Meter Installations supplied at Pressures up to and including 38 bar and installed to IGE/GM/8
Category 4B & CoP1/c	$Q_{max} > 6 \text{ m}^3 \text{ h}^{-1}$ 38 bar < MOP \le 85 bar Non-standard Installation	Meter Installations supplied at Pressures between 38 bar and 85 bar and installed in accordance with IGE/GM/4 and IGEM/TD/13 as appropriate

# TABLE 1 – Work categories for CoP 1/a, CoP 1/b, CoP 1/c

#### 2 Introduction

- 2.1 The introduction of competition into the gas metering industry created an opportunity for MAM businesses. This Code of Practice provides a framework for which SPAA approved MAMs will be required to operate. In accordance with Schedule 32, SPAA are responsible for the governance of the MAMCoP including investigating alleged matters of non-compliance, but not for arbitration of any subsequent commercial disputes.
- 2.2 This MAMCoP assumes that the gas supplier, GT or consumer will contract the MAM to undertake meter work or asset management activities.
  - This MAMCoP is designed to cover all technical requirements for activities to be undertaken by a MAM.
- 2.3 The effective management of gas meter installations involves an understanding of the application of, and conformance to, a number of varied regulatory requirements and industry standards. This MAMCoP provides new and existing MAMs with a route-map to conformance with those requirements and industry standards. Its aim is to promote the safe and effective management of gas supply meter installations and associated meter and or /meter installation component data throughout the meter installation's lifetime.
- 2.4 Where possible, this document is structured such that MAM activities are dealt with in the order they occur in the life cycle of the meter installation. Each activity is dealt with in its own section. Clauses within each section deal with specific requirements.
  - A table is provided in Annex 1 that shows the Legislation and Technical Standards applicable to each section.
- 2.5 Legal requirements listed are those that relate most specifically to the section; these are not exhaustive.
- 2.6 In the MAMCoP, the terms "should", "shall" and "must" have the following meanings:
  - The term "should" prescribes a requirement that is intended to be complied with 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.
  - The term "must" identifies a legal requirement in Great Britain at the time of publication.
- 2.7 MAMCoP Scheme Management Board's terms of reference confirm that this body adopts the MAMCoP Change process for the management of MAMCoP change requests, decision making processes and communications (for further information go to www.SPAA/MAMCoP).
- 2.8 Any enquiries regarding this document should be addressed to:

SPAA Helpdesk 3<sup>rd</sup> Floor Northumberland House 303-306 High Holborn London WC1V 7JZ

Email:SPAA@electralink.co.uk Tel: 0207-432-3005

# 3 Requirements of a Meter Asset Manager (MAM)

#### 3.1 **SPAA** Approval

A MAM shall gain SPAA approval by demonstrating to a Registration Body that the MAM is able to comply with the requirements of the MAMCoP on an on-going basis (see Website https://www.spaa.co.uk/SitePages/SPAA-documents.aspx). A MAM shall only carry out work in respect of the categories of meter installation for which it has been approved and shall not make any false claim in relation to the extent of its approval.

- 3.2 Responsibilities
- 3.2.1 A MAM shall be responsible for ensuring the design, installation, commissioning, maintenance, removal and disposal of gas supply meter installations is performed by competent, suitably qualified persons or organisations in accordance with industry standards. The MAM must also ensure that they are fit and proper persons within the meaning of the standard condition of the Electricity and Gas Markets Authority Gas Suppliers Licence. Where a MAM sub-contracts work within the scope of the MAMCoP to another party, the MAM shall ensure that the sub-contractor complies with the appropriate requirements of the MAMCoP and that it is competent in the field of work for which it is contracted.
- 3.2.2 A MAM must meet the requirements of relevant legislation and shall comply with relevant standards and codes of practice (CoPs). There are a number of general health and safety requirements which are relevant to all the procedures in this MAMCoP, in particular:
  - The Health & Safety at Work etc Act 1974 (HSWA) requires employers to safeguard so far as is reasonably practicable the health safety and welfare of their employees; employers and the self-employed are also required to ensure so far as is reasonably practicable the health and safety of non employees who may be affected by risks arising from their work activities
  - The Management of Health and Safety at Work Regulations 1999 (MHSWR) require all employers and the self employed to assess the risks to workers and any others who may be affected by their work or business, for the purpose of identifying the measures they need to take to comply with health and safety legislation. Additional duties include making health and safety arrangements, competent advice, communication, training, emergency arrangements and working with others
  - The Gas Safety (Installation & Use) Regulations 1998 (GS(I&U)R).
- 3.2.3 For domestic and commercial premises, the requirements of the GS(I&U)R must be applied in all appropriate circumstances. Additionally, design control and approval procedures, Hazardous Area Study and when required provision of reports with drawings in line with IGEM/SR/25 may be necessary for industrial and commercial meter installations. The requirements of the Regulations shall also be applied, where relevant, in respect of Factories, Mines, Quarries and Agricultural Installations, as if they were not excluded from the scope of those Regulations.
- 3.2.4 A MAM shall take due consideration of the individual needs of all gas consumers. In particular, the MAM needs to ensure that a system is in place so that their staff are made aware of vulnerable consumers, as listed on the gas supplier's priority services register, who may be affected as and when meter work is required.
- 3.2.5 Contact information and method of communication

A MAM must provide a relevant contact email address to SPAA and must state the method of communication it uses to send data required by the RGMA baseline. MAMs must also provide

their role code. MAMs must notify SPAA within 10 working days if this information is amended. This data will be hosted on a secure section of the SPAA website and will be verified as part of the MAMs audits.

#### 3.2.6 Audit

A MAM shall regularly undertake audits of all their activities covered by the scope of this MAMCoP. These include activities performed either directly by the MAM or which the MAM has delegated to others.

A MAM shall have a documented audit procedure and a rationale regarding the levels of audit for particular work activities.

The audit procedure shall:

- check that the works are constructed in compliance with the appropriate industry agreed standards
- ensure that audits are periodically carried out by a technically competent person
- plan audits to ensure, as far as is reasonably possible, that over a documented period the full range of activities performed by each operative (direct labour and sub contract labour) are audited
- ensure that identified deficiencies are closed-out within reasonable time periods
- make available internal technical audit reports, on request, to the Registration Body auditor.

#### 3.2.7 Monitoring of MAMs

Having gained approval, a MAM's quality of work and the adherence to process shall be monitored through routine surveillance visits and reassessment in accordance with the MAMCoP Processes and Procedures referenced in Annex 7.

#### 3.3 Standards

3.3.1 A MAM shall manage its meter installations throughout their lifetime and they should comply with the relevant Technical Standards.

Work Category	Primary Technical Standards
Cat 1	BS 6400 - 1; IGEM/UP/1B
Cat 2	BS 6400 - 2; IGEM/UP/1B
Cat 3A	IGEM/GM/6; IGEM/GM/7A; IGEM/GM/7B; IGE/UP/1;
	IGE/UP/1A; IGEM/UP/1B; IGEM/UP/1C
Cat 3B	IGEM/GM/5; IGEM/GM/6; IGEM/GM/7A; IGEM/GM/7B;
	IGE/UP/1; IGE/UP/1A; IGEM/UP/1B; IGEM/UP/1C
Cat 4 A	IGEM/GM/5; IGE/GM/8; IGEM/GM/7A; IGEM/GM/7B,
	IGE/GL/5, IGEM/SR/25; IGE/UP/1; IGEM/UP/1B;
	IGEM/UP/1C
Cat 4 B	IGE/GM/4; IGEM/TD/13: IGEM/GM/7A; IGEM/GM/7B,
	IGE/GL/5, IGEM/SR/25; IGEM/UP/1C

TABLE 2 – Work category and related primary technical standards

3.3.2	New meter installations shall comply with the standard gas supply arrangements as descri in IGEM/G/1.		

#### 3.4 Code of Conduct

The MAM shall ensure that all employees or persons working on its behalf follow a code of conduct at least equivalent to that described in Annex 2.

# 3.5 Quality System

The MAM shall have in place a quality management system which shall include the following elements:

- competencies, knowledge, and experience of persons employed
- management responsibility
- verification of resources and personnel
- design control
- purchasing
- process control and work management
- inspection and testing
- continuous improvement report and corrective action
- handling, storage, packaging and delivery
- quality records and passing on of information
- internal quality audits
- document development
- training
- maintenance
- technical support.

Although accreditation to BS EN ISO 9001:2008 or ISO 55000 is not a mandatory requirement of the MAMCoP, any MAM accredited to either of these Standards will be deemed to have complied with the requirements of Sub-Section 3.5.

# 3.6 Specific Requirements

The MAM shall also meet the specific requirements of Sections 4 to 22 which cover the life cycle of the meter installation.

#### 3.7 Competency

A MAM shall ensure that all work under its control is undertaken by competent persons, having the appropriate training, assessment and accreditation.

Persons engaged on the design and management of the MAM's activities shall be able to provide evidence of competence, knowledge and understanding of the design/management activity. This may be achieved by an appropriate combination of education, training and practical experience relating to the activity undertaken.

The MAM shall review the competency of its staff and sub-contractors on a periodic basis in accordance with a documented procedure.

The review of competency shall be led by an Engineer or Manager who shall possess the appropriate level of operational experience within the gas industry and hold membership of an appropriate professional institution to at least Engineering Technician (Eng Tech) level. Higher qualifications may be required dependent upon the level of technical expertise needed by the organisation.

Where the Engineer or Manager who leads the competency review does not hold the required professional qualification they shall be supported by another person from within the company or an external consultancy which is appropriately qualified.

- Note 1: The competency of the designated manager will relate specifically to the category of accreditation. The base line competency for categories 1, 2 & 3 to be Eng Tech and category 4 to be Incorporated Engineer (I Eng). Where appropriate there should be evidence that the designated Manager is seeking to progress their competency to the required level.
- Note 2: The supporting person/consultant is to possess the appropriate level of operational experience within the gas industry and hold membership of an appropriate professional institution to at least Eng Tech level or I Eng as appropriate.

#### 3.8 Connection and Disconnection

Whenever a meter is connected or disconnected as part of the work covered in this document the requirements of Gas Meters (Information on Connection and Disconnection) Regulations GM(C&D)R shall apply (see Annex 5).

3.9 The gas industry, through the Review of Gas Metering Arrangements (RGMA) project, has designed and baselined standard industry-wide processes and data flows to support a competitive gas metering market. Work data flows shall conform to the relevant parts of the RGMA processes. Any MAM seeking SPAA approval shall be compliant with the RGMA baseline and conform with the Industry standard methods of communications.

#### 3.10 Installation and Modification

The meter installation shall only be installed or modified by an Ofgem Approved Meter Installer (OAMI) or the MAM shall make arrangements for the installation to be inspected by an OAMI within 20 working days.

# 4 Planning

#### 4.1 General

- 4.1.1 Planning is the process that ensures an appropriate meter installation is provided, at the relevant meter point in accordance with any contracted work.
- 4.1.2 The planning process shall ensure that account is taken of the management of the life cycle of the meter installation. This shall include all the relevant aspects of the design, specification, installation, testing, commissioning, operation, maintenance, modification (including exchange of a meter or a meter installation component), removal, decommissioning and disposal. In addition, the planning process shall take into account the provision and maintenance of meter/meter installation component records and, following installation or arising from any subsequent work, the provision of relevant information to all appropriate parties.
- 4.1.3 The exchange and validation of information between the relevant parties is essential to the success of the planning process. There is a duty on all GTs to provide information, where requested to do so by a person proposing to carry out work in relation to a gas fitting, about operating pressures of the gas at the outlet of the service pipe. GTs must have systems in place for providing such information. The planning process shall ensure that all the relevant information regarding the provision and subsequent operation of the meter installation is obtained at the planning stage.

# 4.2 Specific

This sub-section is applicable to the planning process and validation of a contract request preceding the design and selection of meter installation components.

- 4.2.1 The site and location of the intended meter installation shall be identified by address and the relevant GT's Meter Point Reference Number (MPRN) or, if the MPRN is not known, the connection reference number.
- 4.2.2 Reliable information relating to the nature and size of the load shall be obtained from the gas supplier or consumer or the load shall be assessed using applicable load assessment procedures.
- 4.2.3 The metering pressure shall be specified or determined with reference to the requirements of the consumer's installation and appliance(s). This will normally be 21 mbar unless it has been agreed between the consumer, gas supplier and GT to meter at an elevated pressure.
- 4.2.4 The range of pressures expected at the emergency control valve (ECV) and required by the consumer shall be established. The information obtained from the upstream and downstream organisations shall be used to ensure the meter design complies with the relevant Standard.
- 4.2.5 The MAM shall give consideration to the suitability of the service for the proposed meter installation, for example size, capacity and configuration. Where the suitability of the service is in doubt, advice should be sought from the GT.
- 4.2.6 The responsibility for the provision of any meter box, meter housing or meter compound shall be determined.
- 4.2.7 The planning process shall determine the requirements for any meter box, meter housing or meter compound, particularly with respect to size, access, location, ventilation, provision of explosion relief and gas vent terminations.

- 4.2.8 The location and design of the housing shall be agreed with all interested parties and shall take account of any hazardous areas, sources of ignition and any other requirements that the GT has for approving the housing.
- 4.2.9 Any restrictions imposed by the consumer in the interests of safety shall be determined (for example the extent of any hazardous area that the consumer has identified on the premises that may influence the choice of location of the meter installation, the type of meter installation components used, any restrictions on the venting of gas, etc.).
- 4.2.10 The requirements for accessibility for meter reading, maintenance, operation of the ECV and any ancillary equipment shall be determined. Any requirement for automatic meter reading (AMR) equipment, volume conversion systems, data logging or telemetry shall be established and included within the design.
- 4.2.11 The requirement for, and the responsibility for, the provision of additional services shall be determined, including but not restricted to:
  - electrical supplies
  - lighting
  - drainage
  - environmental protection and control plant or systems
  - site security
  - civil engineering
  - instrumentation
  - telemetry
  - maintenance.
- 4.2.12 The person or organisation having site occupier duties shall be determined.
- 4.2.13 Any requirements that the site occupier has for "safe working" (for example permits to work, risk assessments, method statements, authorisations, personal protective equipment etc.) shall be established.
- 4.2.14 Any requirement that the GT has for authorisations or approvals (for example the setting and sealing of the regulator, by-passes and housings) shall be established and complied with.
- 4.2.15 Any requirement that the GT or other upstream gas conveyor has for safe working shall be established and complied with.
- 4.2.16 Any requirement for continuity of supply shall be established by the MAM in consultation with the GT, gas supplier or gas user.
- 4.2.17 For certain installations where deviation is required from recognised standards of measurement uncertainty, they shall be agreed between the consumer, gas supplier and GT.
- 4.2.18 The accuracy of registration of the quantity of gas conveyed through the meter installation must be determined from statutory requirements or, when enhanced accuracy is required, in accordance with the contractual requirements.
- 4.2.19 Under GS(M)R, the GT has responsibility for establishing procedures to restore safely the gas supply to consumers following an interruption. However, any special requirement for the

operation and maintenance of the meter installation under such circumstances shall be established.

# 5 Design and specification of the Meter Installation

#### 5.1 General

Design and specification of the meter installation and any meter installation components is the process that ensures an appropriate meter installation is provided and that all gas fittings will be suitable for the intended use.

- 5.1.1 The MAM shall ensure that its design and selection process takes into account the requirements for:
  - the appropriate registration of the quantity of gas conveyed through the meter installation
  - the provision of suitable pressure for the safe operation of appliances
  - the integrity of the meter installation itself
  - the pressure control and protection system provided to the existing or planned downstream installation
  - the future maintenance of the meter installation.
- 5.1.2 The hazards and risks that the design and any meter installation components present to persons who install, operate, maintain or otherwise use, or require access to, the meter installation shall be considered. The specific requirements of relevant legislation and standards must be satisfied. The risk to persons should be removed or be as low as reasonably practicable.

#### 5.2 **Specific**

- 5.2.1 The meter installation shall be designed in accordance with the appropriate Standards (see Sub-Section 3.3).
- 5.2.2 The design and specification of the meter installation and any meter installation components must be suitable for the intended use. The meter installation shall be designed in accordance with, or traceable to, appropriate normative standards. Where no appropriate standard is available then the basis of the design shall be validated by a competent person.

The following types of documentation shall be used as appropriate to demonstrate that any meter installation components and ancillary equipment are suitable for the intended use:

- letters of conformance
- a purchase specification
- material certificates
- test certificates
- hazardous area certification (i.e. demonstrating conformance to ATEX requirements and CE marked as appropriate for the hazardous area)
- suppliers' or manufacturers' literature.
- 5.2.3 The location of the meter installation and the location and identification of the ECV shall be determined and agreed with all interested parties, (i.e. the GT, meter installer, developer, site occupier). The location must ensure that the ECV is readily accessible for use by the consumer and the meter installation must not affect the means of escape in the event of a fire.
- 5.2.4 Explosions hazards arising from the design, selection of meter installation components and the operation of the meter installation at the consumer's premises shall be assessed.

For non-domestic premises, information as to the explosion hazard and the appropriate precautions that need to be taken by persons shall be provided to the consumer.

# 6 Approval, Appraisal, and Authorisation by Third Parties

#### 6.1 General

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. Further guidance is given in the appropriate Standards (see Section 3.3).

# 6.2 Specific

The requirements of this section are applicable to approval, appraisal and authorisation procedures by third parties.

- 6.2.1 Any information arising under statutory planning applications must be provided.
- 6.2.2 The approval (or waiver) of the relevant GT must be obtained where the MAM intends to provide or install a meter box or meter housing.
- 6.2.3 The approval of the relevant gas supplier and GT must be obtained where the MAM intends to provide or install a meter by-pass (see Annex 6).
- 6.2.4 An authorisation must be obtained from the relevant GT (prior to breaking any seal) for the setting, sealing and any subsequent re-setting and sealing of the meter regulator and any associated safety device<sup>1</sup>.

Where the GT has in place processes or procedures as a pre-requirement to an authorisation, the MAM shall co-operate with any reasonable GT requests for relevant information.

An unregulated meter installation (for example where the equipment downstream of the meter is a combined heat and power (CHP) plant with an inlet compressor) must only be installed after the MAM has obtained exemption under the requirements of GS(I&U)R from the Health and Safety Executive (HSE). Such exemptions are meter installation specific and not blanket cover for all meter installations, unless agreed with HSE. When considering an unregulated meter installation, compliance shall be made with the GT's requests for information and any requirements that the GT may impose on the design of the meter installation.

- 6.2.5 Where the GT has a requirement to approve the design of a meter installation, the MAM shall co-operate with any GT request for relevant information. This information may be required to ensure the GT maintains safe operating pressure at the appliance.
- 6.2.6 Where the site occupier or developer has a requirement to approve the design and location of a meter installation (for example) under Dangerous Substances and Explosive Atmosphere Regulations (DSEAR) or for planning applications), the MAM shall co-operate with any reasonable requests for information from the site occupier.

#### 6.3 **GS(M)R Safety Case**

6.3.1 The Regulations are applicable to the safe and secure supply of gas through a network of pipes and place duties on a 'conveyor' of gas on the network (see Table in Annex 1).

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<sup>&</sup>lt;sup>1</sup> As defined in GT2

Generally, meter installations are installed downstream of the network and the MAM would not normally be required to produce a safety case.

6.3.2 Where the meter installation forms part of the Network, the MAM should contact the gas conveyor, who shall remain responsible for the meter installation.

If the MAM or other party takes ownership, consideration shall be given to re-engineer the meter installation so that the meter is downstream of the Network and does not attract GS(M)R and safety case duties. If the meter installation remains on the Network the MAM shall ensure compliance with GS(M)R and their Safety Case duties.

#### 7 Installation

#### 7.1 General

Installation is the process that ensures:

- any required formal notifications are made prior to commencing work
- meter installation components are appropriately handled and stored
- safe control of work is assured
- pre-installation checks are undertaken
- the meter installation and any ancillary equipment is installed in accordance with the appropriate Standard(s)
- the meter installation and any ancillary equipment is inspected and tested
- statutory and advisory labels are fitted.

#### 7.2 Specific

The requirements of this section are applicable to the installation of the meter installation and any ancillary equipment and precede commissioning (see Table in Annex 1).

- 7.2.1 Relevant formal notice of the intention to commence connection of a meter installation to, or disconnection from, the relevant GT's network, or connection of meter installation component(s) to, or disconnection from, an existing meter installation, must be made to the relevant gas supplier. Annex 5 details information requirements.
- 7.2.2 Other relevant information notifications shall, as appropriate, be made to, but not be limited to, the following parties:
  - HSE
  - local authority
  - relevant gas supplier
  - relevant GT
  - the site occupier
  - consumer
  - other utilities.
- 7.2.3 Procedures for the safe, secure and appropriate handling and storage of all meter installation components, (including pipework), gas fittings, any gas meter and any tools and equipment, shall be available and used.
- 7.2.4 Procedures for the safe control of work shall be available and used.

A suitably qualified person shall be nominated who shall be responsible for determining the methods of work and the co-ordination of work activities, including means of emergency contact, with as appropriate:

- site occupier
- consumer
- relevant GT
- relevant electricity distributors

- other utilities.
- 7.2.5 All meter installation components and ancillary equipment shall be validated as being suitable for the intended use.

#### 7.3 Pre-installation Procedures

Pre-installation procedures shall be available and used in accordance with the relevant Standards (see Table 2 and Annex 1).

7.3.1 The meter installation shall only be installed at the appropriate MPRN that has a valid supply contract in place with a registered gas supplier. MAMs directly installing the meter installation using its own or third party installers shall only instruct commissioning if a supply contract is in place. If the organisation installing the meter installation has not directly been instructed by the MAM to do so, they shall confirm with the appointed MAM for that meter point that a gas supply contract is in place before commissioning.

#### 7.4 Installation

- 7.4.1 The installation shall be completed in accordance with relevant normative Standards, manufacturers' information and appropriate installer's work instructions (see Table 2 and Annex 1).
- 7.4.2 Tests shall be undertaken that assure the integrity of meter installation components (including all fittings, associated pipework), any ancillary equipment and electrical and instrumentation systems.
- 7.4.3 Notices and labels must be fitted in accordance with the relevant legislation and shall be in accordance with the relevant Standards and any conditions arising from the approval or authorisation by third parties. Appropriate technical information shall be made available to persons undertaking subsequent work activities.

#### **8** Modifications

#### 8.1 General

The MAM may be required to modify meter installations for which it is responsible. This may arise as a result of requests, through recognised contractual arrangements, from the GT, gas supplier or consumer. The need may also arise from the MAM's own arrangements for keeping meter installations in proper order.

#### 8.2 Specific

The requirements of this section are applicable to modifications of a meter installation.

#### 8.3 **Meter Housing**

The suitability of the housing, irrespective of final ownership, shall be verified as part of the assessment of work required. The appropriate party should be notified of any changes or modifications required to the meter housing.

#### 8.4 **Notification**

In the event that any modification to the meter installation, covered in Sub-Sections 8.5 to 8.9, that requires the meter installation to be disconnected, relevant formal notification should be given in accordance with Sub-Sections 7.2.1 and 7.2.2.

#### 8.5 Policy Meter or Component Exchange

- 8.5.1 A meter or meter installation component may need to be exchanged for a number of reasons, (for example fault, end of life, or change of circumstances of the gas consumer).
- 8.5.2 Where a type of meter or meter installation component is recalled by the MAM for safety or other reasons, an initial risk assessment shall be undertaken to establish the type of exchange policy to be adopted.
- 8.5.3 Where a MAM implements an exchange policy for safety or other reasons, the MAM shall inform the component manufacturer that an exchange policy has been implemented and the reasons for doing so.
- 8.5.4 For all meter installations, the load details can be obtained from the gas supplier. Alternatively, a load assessment shall be performed prior to undertaking any exchange work to determine the appropriateness of the meter and the meter installation components.

#### 8.6 Credit or Pre-payment Meter Exchange

- 8.6.1 Where an exchange of credit for pre-payment meter is required, it shall be established that the location is suitable for a pre-payment meter (it is readily accessible by the consumer for appending credit to the meter).
- 8.6.2 A pre-payment meter must not be fitted as a primary meter if there is a secondary meter used to render a charge to a consumer on its downstream side.

#### 8.7 Unsuitable Installations

- 8.7.1 A MAM should establish procedures on the actions to be taken by the MAM where it encounters an unsuitable meter installation. The following list, which is not exhaustive, provides specific examples of situations which can result in an unsuitable meter installation:
  - safety or integrity of the meter installation
  - access to the ECV
  - accessibility to read the meter
  - accessibility to maintain the meter installation
  - accessibility to exchange the meter or meter installation components
  - proximity and suitability of electrical equipment
  - property alterations
  - inappropriate or unsuitable by-pass arrangements
  - inadequate ventilation
  - suitability for the load
  - installation of, or alteration to, third party equipment
  - unapproved equipment connected to the meter installation.
- 8.7.2 Where safety issues are identified, the Gas Industry Unsafe Situations Procedure (GIUSP) shall be followed.

#### 8.8 **Repositioning**

For safety reasons arising from unsuitable meter installations outlined in Section 8.7, repositioning of meter installation components may be required. In such circumstances, all work undertaken shall be in accordance with current Standards (see Table 2 and Annex 1).

#### 8.9 Upgrading to Current Standards

Where a meter installation component is to be exchanged and the meter installation, although safe, does not conform to current Standards, consideration shall be given to updating the whole meter installation (see Table 2 and Annex 1).

# 8.10 Ancillary Replacement (for example, AMR, etc...)

- 8.10.1 MAMs shall be aware of the requirements for, and the effect of, any other equipment which is to interface with the meter installation (for example automatic meter reading equipment (AMR)).
- 8.10.2 The MAM shall maintain records of all ancillary equipment that the MAM has connected to, or has given specific authority to be connected to, any meter installation to which it is appointed. A record shall also be maintained of any authority to connect that the MAM has issued for the meter installations to which it is appointed.
- 8.10.3 Where a MAM is appointed to a meter and 3rd parties have not provided details of their connected ancillary equipment the appointed MAM should not be obliged to obtain those records.
- 8.10.4 When replacing or installing ancillary equipment, the MAM shall ensure:
  - ancillary equipment connected to the meter is installed to appropriate Standards

- ancillary equipment connected to the meter installation is undertaken by appropriately trained and competent operatives
- that following the fitting of ancillary equipment to the meter installation, all relevant information is communicated to interested parties in the supply chain.

- 8.10.4 In the event that a third party requests permission to connect ancillary equipment to a meter installation, the MAM shall:
  - specify the appropriate Standards to which the ancillary equipment is to be installed
  - require that appropriately trained and qualified operatives undertake the work
  - respond to the request in writing either granting permission or explaining why permission is withheld.

# 9 **Commissioning**

#### 9.1 General

Commissioning ensures that a meter installation operates as intended and within defined parameters. In order to ensure no unauthorised use of the gas installation, it shall be labelled and locked or disabled and not commissioned, until the MAM receives assurances that a relevant gas supply contract is in place.

### 9.2 **Specific**

The requirements of this section cover the commissioning of the metering installation. It is specialised and is specific to site, product and procedure. However, in the case of small low pressure installations it may be possible to utilise a more generic approach.

- 9.2.1 Where a MAM has a responsibility to restore a gas supply following work on the meter installation, any re-commissioning of the downstream system shall be undertaken in accordance with the appropriate industry Standards.
- 9.2.2 Commissioning procedures shall be developed and shall take into account as appropriate, the requirements of:
  - legislation
  - International, European, British and Industry Standards
  - site owner requirement
  - manufacturer's information.
- 9.2.3 The proposed work schedule and timescales shall be agreed with the consumer or responsible person.

#### 9.3 **Pre-commissioning Checks**

- 9.3.1 Any pre-initialisation procedures, which may be required in accordance with the manufacturer's instructions, shall be carried out.
- 9.3.2 It shall be ensured that the correct meter installation is being commissioned, by confirming the presence of a valid supply contract.
- 9.3.3 It shall be ensured that any relevant test certificates as required by industry standards are available.

# 9.4 Physical Pre-commissioning Checks on the Installation

The meter installation shall be subject to physical pre-commissioning checks.

#### 9.5 Commissioning Procedures

9.5.1 Generic commissioning procedures may be acceptable for standard domestic and low pressure industrial and commercial meter installations in accordance with BS 6400 or IGEM/GM/6 as appropriate. For non-standard meter installations, site-specific commissioning procedures shall be produced and agreed with interested parties in accordance with IGE/GM/8 or IGE/GM/4 and IGEM/TD/13 as appropriate.

- 9.5.2 The requirements of GM(C & D)R shall be met (see Annex 5).
- 9.5.3 Test equipment shall be selected and used as appropriate.

### 10 **Provision of Information**

#### 10.1 General

Information relevant to the safe and efficient operation of the meter installation and to the administration and operational processes that support the supply of gas to a consumer shall be made available to the appropriate persons.

#### 10.2 Specific

The requirements of this section cover disclosure, communication and flows of information (see also RGMA Processes & Data for industry standards) related to a meter installation.

#### 10.3 Availability of Capacity and Pressure Information

Information regarding the capacity and operational pressure limits that may occur at the outlet of the meter installation shall be made available at the meter installation, for use by the consumer or other persons who may undertake work on the downstream system.

#### 10.4 **Description of Installation**

The MAM shall provide, for use by the consumer and emergency service provider, a description of the meter installation that shall include an explanation as to how the meter installation is isolated, made safe and labelled in accordance with Regulations 15 and 17 of the GS(I&U)R. The description shall be updated as necessary.

Where known by the MAM, the MAM should ensure the consumer is made aware of any parts of the meter installation and housing which the consumer owns and advise that they shall ensure that it remains accessible and properly maintained.

# 10.5 Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) and Control of Substances Hazardous to Health Regulations (COSHH)

For non-domestic meter installations, where within the meter installation substances and materials have been used which require notification in accordance with DSEAR and COSHH, the MAM should cooperate with the consumer to provide any appropriate information to enable the consumer to comply with these Regulations.

#### 10.6 Gas (Calculation of Thermal Energy) Regulations

For meter installations using above 732 MWh, the MAM shall calculate the volume conversion factor for the meter installation in accordance with the requirements of the Gas (Calculation of Thermal Energy) Regulations (GTER), as amended, and provide this information to the gas supplier.

#### 10.7 Other Commercial Data Flow

Where a meter installation belonging to one party is replaced, all appropriate information consistent with the RGMA baseline shall be communicated by the MAM carrying out the replacement and conform with the Industry standard methods of communications.

# 10.8 Gas Meters (Information on Connection and Disconnection) Regulations

At the time of connection or disconnection, the data on the meter installation shall be communicated in the requisite timescales to the parties named in the GM(C&D)R.

# 11 Operation

#### 11.1 General

Appropriate operation of a meter installation ensures that all equipment functions as intended when in normal use.

# 11.2 Specific

The requirements of this section cover operational procedures related to a meter installation.

- 11.2.1 The operation of the meter installation must be conducted in accordance with relevant legislation listed in Annex 3. Operation of the meter installation shall be conducted in accordance with agreed procedures that conform to the requirements of:
  - procedures for reporting and dealing with gas escapes
  - Network Codes
  - recognised industry Standards
  - the GT's safe control of operations procedures
  - any safe control of operations procedures operated by the consumer or site owner
  - any warrants issued between the respective parties.

Information resulting from such activities shall be sent to interested market participants.

11.2.2 Additionally, in operating the meter installation, the responsibilities of each interested party shall be defined or identified. Areas of responsibilities such as boundary fencing, meter housing, instrumentation and maintenance would typically need to be established. Once established, the MAM shall communicate them to the relevant interested parties.

#### 11.3 Normal and Planned Operational Activities

The MAM shall develop procedures to manage the operation of a meter installation arising from planned work undertaken by the MAM. The procedures shall include, but not be limited to:

- commissioning of the meter installation
- the control and operation of any meter by-pass (see Annex 6)
- maintenance activities
- safety or statutory inspections
- the temporary disconnection and connection of the meter installation
- isolation of the meter installation.

# 11.4 Unplanned Operational Activities

Procedures shall be developed to manage unplanned events that may affect the operation of the meter installation. The procedures shall include but not be limited to:

- general enquiries by the consumer or persons acting on their behalf (for example capacity inquiries or pressure problems)
- meter accuracy or meter reading disputes including any requests for a Official Meter Accuracy Test (OFMAT) accuracy test
- other disputes (for example pressure related disputes)

- theft of gas incidents
- operation of the bypass
- meter installation operational faults (for example, inadvertent operation of safety devices)
- gas supply incidents associated with the operation of the gas network (for example water ingress, network overpressure or loss of gas supply), including operation of the flow limiter
- cooperation in the investigation of carbon monoxide (CO) emission and other incidents.

#### 12 Maintenance

#### 12.1 General

Maintenance is the process that should ensure that the meter installation is kept in proper working order, that safety is not compromised and that the meter installation continues to correctly record the quantity of gas conveyed. Maintenance activities generally fall into one of three categories:

- planned preventative maintenance
- fault maintenance or repair
- planned replacement of meter installation components.

A maintenance review should be undertaken every three years or upon a major change of circumstance, if sooner.

#### 12.2 Maintenance Procedures

- 12.2.1 Procedures shall be developed to ensure that appropriate maintenance is undertaken to ensure that the whole meter installation is kept safe, accurate and in proper working order. The procedures shall include, but not be limited to, ensuring that:
  - (a) maintenance procedures are applicable to the specific meter installation and that the correct meter installation is being maintained
  - (b) arrangements have been made for safe access, egress and adequate working space
  - (c) risk assessments are available for the work intended
  - (d) any requirements of the relevant GT, gas supplier, consumer and/or site occupier are included in the work place instructions and/or safe control of operations procedures
  - (e) the risk from electricity is assessed and that correct earthing and equipotential bonding is maintained at all times within the consumer's premises (for example through the use of a temporary continuity bond)
  - (f) if any meter installation component needs to be replaced, the replacement meter installation component should be compliant with current Standards (see Table 2 and Annex 1).
- 12.2.2 Maintenance records shall be kept for the life of any meter installation component. Records shall include:
  - (a) the type of the maintenance (for example planned, fault or planned replacement)
  - (b) a description of the work carried out
  - (c) the meter serial numbers and (where appropriate) readings at the start and end of the maintenance activity
  - (d) the name of the person(s) who undertook the work
  - (e) the date(s) the maintenance work was carried out
  - (f) a description of any other work identified as being necessary and the date by which it should be completed
  - (g) any by-pass operation details and times, in accordance with Network Code
  - (h) the settings of pressure protection devices.
- 12.2.3 Where a metering installation and any ancillary equipment is installed in a hazardous area, maintenance shall be undertaken so as not to jeopardise the integrity of the protection classification of the meter installations components and any ancillary equipment. If any meter installation component, ancillary equipment or meter housing needs to be replaced, a risk

assessment shall be undertaken to determine whether to replace with an identical meter installation component or to upgrade to current Standards. In addition, the work carried out within the hazardous area shall be the subject of a risk assessment and be under the control of a Permit to Work.

#### 12.3 Specific Maintenance Requirements

The specific and appropriate maintenance requirements shall be described for the meter installation. The requirements shall take into account but not be limited to:

- (a) equipment or meter installation component manufacturer's instructions
- (b) the operational or maintenance history of the meter installation
- (c) an inspection for damage, leakage, corrosion and tampering
- (d) functional checks of the pressure control and protection devices
- (e) functional checks on the meter (not necessarily a calibration)
- (f) functional checks on any volume conversion equipment
- (g) oil changes and lubrication
- (h) battery changes
- (i) replacement of meter installation components with a specified operating life
- (j) replacement of meter installation components with known defects or failure modes
- (k) any specific requirements for the maintenance of electrical or instrumentation equipment or systems certified for use in hazardous areas
- (l) verification that suitable ventilation and working space is available in the meter housing
- (m) regulator outlet pressure setting should be checked and verified when the regulator seal has been found to be broken.

Where evidence of tampering or theft of gas is discovered the gas supplier shall be notified (see Sub-Section 11.4).

# 13 Inspections Arising Under Statutory Requirements or Licence Conditions

#### 13.1 General

Inspection is the process that ensures that the meter installation is suitable for further operation within the design or performance limits specified by the designer or competent person.

### 13.2 Specific

The requirements of this section cover the inspections of a meter installation. The inspection process is distinct from the maintenance process and is usually undertaken following any maintenance work. It may be scheduled to occur at the same site visit, and the inspection indicated in the resulting job notification flows as part of the job as a whole, or an independent visit (see RGMA Processes and Data). Inspection activities shall take into account the requirements of legislation, licence conditions and the MAM's own asset management policies.

#### 13.3 Pressure Systems Safety Regulations (PSSR)

13.3.1 The PSSR are applicable to pipelines and pressure systems comprising one or more pressure vessels and associated pipework where the pressure system has an operating pressure of greater than 0.5 barg. There are certain exceptions to the regulations. For example, a pipeline in which the pressure does not exceed 2 barg (or 2.7 barg maximum incidental pressure (MIP) if the normal pressure does not exceed 2 barg and the over pressure is caused solely by the operation of a protective device) are excluded from the Regulations and pressure systems incorporating pressure vessels with an operating pressure above 0.5 barg where the product of the pressure and internal volume is less than 250 bar litres are not required to comply with Regulations 5(4), 8 to 10 and 14.

The meter installation is generally installed downstream of the ECV that terminates the pipeline, however, in the case of existing meter installations (i.e. Legacy Gas Supply Arrangements), exceptions may arise.

13.3.2 It shall be determined whether a meter installation is within the scope of the PSSR and, if so, safe operating limits shall be specified and written schemes of examinations must be available prior to commissioning.

#### 13.4 Electricity at Work Regulations (EWR)

- 13.4.1 The EWR place duties on employers, the self employed and employees. The Regulations require precautions to be taken against the risk of death or personal injury from electricity in work activities (see Table in Annex 1). The duties extend to those persons who design, construct, operate or maintain electrical installations and equipment. For a meter installation this could include, but not be limited to earthing, equipotential bonding and the connection of electrical equipment (AMR, converters etc.) to the meter installation.
- 13.4.2 Procedures must be put in place to manage the risks from electricity in work activities. In particular, EWR Regulation 4 (Systems) requires that all systems must be maintained so as to prevent danger so far as is reasonably practicable.
- 13.4.3 Under EWR Regulation 4, the MAM must have procedures in place for the testing and inspection of electrical systems if danger would otherwise result. Such procedures should include but not be limited to:

- earthing cross bonding (BS EN 60079 Part 17)
- cables
- apparatus
- portable tools and equipment
- distribution systems.
- 13.4.4 The interval between safety inspection, maintenance and testing of systems and equipment associated with or in hazardous areas should be no greater than two years. BS EN 60079 Part 17 allows for an extension of the maintenance and testing interval to three years, provided that a regular review of the results of the safety inspections, maintenance and tests can be produced that show that the condition of the electrical systems and equipment on site are to an acceptable standard.
- 13.4.5 The interval between safety inspection, maintenance and testing of systems and equipment not associated with hazardous areas should be no greater than three years.
- 13.4.6 Comprehensive records of safety inspection, maintenance and test visits shall be kept.
- 13.4.7 Information from safety inspection, maintenance and tests shall be continually reviewed to determine appropriate future actions (for example replacement or increased inspection frequencies). An appropriate inspection and testing regime should be applied to portable equipment and tools.

# 13.5 Gas Suppliers Safety Inspections

- 13.5.1 Where safety inspections are undertaken by a MAM on behalf of the gas supplier to meet the gas suppliers duty under Condition 12 of the gas supply licence, the inspections must include:
  - reading the meter
  - inspecting the meter and associated meter installation for evidence of tampering
  - inspecting the meter installation for any evidence that the meter has not continuously been in position for the purpose of registering the quantity of gas supplied
  - arranging for information in respect of any gas leakage identified in the vicinity of the meter to be passed on in accordance with the GS(M)R, in particular suspected gas escapes and gas safety related issues should be reported immediately to 0800 111 999 and the owner/consumer given appropriate gas safety advice
  - inspecting the meter for any evidence of deterioration which might affect its due functioning or safety
  - where necessary and subject to the consent of the owner of the meter, changing any batteries in the meter.

# 14 Duty of Care beyond Meter Installation

- 14.1 It shall be ensured that the MAM's meter installations do not cause a safety hazard to the public during the life cycle of the meter installation.
- 14.2 A MAM shall determine if the works that they carry out, including tightness testing and purging, will mean that the checks contained in Regulation 26 (9) of the GS(I&U)R need to be carried out. Where it is determined that these checks are not necessary there is still a duty of care on the MAM to verify that any connected appliances are working correctly when they are re-lit following purging operations by that MAM.
- 14.3 A MAM must have procedures in place for reporting any dangerous occurrences as required by the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR). There are requirements on Gas Safe Registered gas installers to report to HSE when they become aware of a gas fitting which is dangerous because of its design, construction, manner of installation, modification or servicing.
- 14.4 A MAM must have procedures in place for complying with the industry guidance on 'unsafe situations' procedures, as issued by Gas Safe Register.

# 15 Duty of Co-operation

- 15.1 The MAM shall ensure that procedures are in place to provide information and, as appropriate, services to other parties involved with the safe and secure supply of gas to premises. These shall include but not be limited to:
  - providing information on how to isolate the MAM's meter installations is left at the meter installation
  - changes to meter installations which impact the method of isolation of the meter installation shall be notified by providing updated information left at the meter installation
  - sharing safety-related information with the appropriate parties (for example safety-related defects with meters, meter and or meter installation components)
  - sharing information on faults or meter performance with the appropriate parties (for example Ofgem, BEIS, Citizens Advice)
  - sharing information on identified methods of theft of gas with other MAMs and the relevant parties
  - informing appropriate parties of any procedure or equipment required to reinstate a gas supply following interruption
  - liaising with the GT or emergency service provider (ESP) on instances of over or under pressurisation, gas escapes, water ingress, loss of supply etc.
  - co-operating with the meter reading agencies.

# 16 Meter Readings Required to be Performed by MAMs

- 16.1 Where the MAM undertakes meter reading it shall comply with the Ofgem Code of Practice for meter reading.
- 16.2 Meter readings shall be provided to the appropriate parties as required by the GM(C&D)R (see Annex 5 and also Table in Annex 1).
  - Readings may be sent to the relevant market participants in the standard flows as part of the job notification.
- Whenever a meter by-pass is put into operation, the appropriate parties shall be informed in accordance with Network Code requirements. On closure the by-pass shall be sealed by the MAM in accordance with Sub-Section 8 of Annex 6.

# 17 Installation Performance and Functionality Monitoring

### 17.1 General

Performance and functionality monitoring is the process of verifying that a meter installation is operating as intended.

## 17.2 Specific

The requirements of this section cover the policies, procedures and processes for monitoring meter installation performance and functionality.

- 17.2.1 A policy for monitoring the performance and functionality of meters and meter installation components shall be established. The information obtained from the monitoring should be used to determine the replacement policy.
- 17.2.2 Where a type of meter installation component is recalled, the type of exchange policy to be adopted shall be established and communicated to the gas supplier.
- 17.2.3 Where a type of meter installation component is recalled for reasons of safety, a risk assessment shall be undertaken to establish the type exchange policy to be adopted.

# 17.3 **General Disputes**

17.3.1 In the event that a consumer disputes the accuracy of the meter installation, or some other aspect of its functionality, it shall be determined whether the meter installation is functioning correctly, and it shall be demonstrated to the consumer accordingly.

Note: This may entail demonstrating that the problem lies either with the gas consumer's own plant or the supply network.

- 17.3.2 If the meter installation is found to be not functioning correctly, the fault or faults shall be rectified where they lie within the meter installation.
- 17.3.3 In the event that the meter installation functionality is being adversely affected by the consumer's own plant, advice shall be given to the consumer on the appropriate flow and pressure characteristics that are acceptable at the meter outlet.
- 17.3.4 In the event that an amicable agreement cannot be reached concerning an accuracy dispute on a stamped meter, the consumer has the right to insist on a disputed meter test that should be arranged via the Supplier.

### 17.4 **Disputed Meter Testing**

On receiving a request for a disputed meter test, the MAM shall follow the Ofgem procedure for the removal of meters. The meter shall be removed in accordance with Section 19.

### 17.5 Verification of Meter Accuracy

17.5.1 As required by the Gas Act meters shall be maintained in proper working order for registering the quantity of gas supplied. In the case of maintainable Industrial & Commercial meters such as RPD or Turbine meters this can be achieved by an appropriate maintenance regime as described in Section 12 of this procedure.

For domestic meters and larger diaphragm meters the verification of the accuracy of a meter population can be achieved by following the procedure in Sub-Section 17.5.2

Note: In addition to the requirements of the MAMCOP, there may be additional contractual requirements.

# 17.5.2 Procedure for Sample Testing:

- If Sampling of meters is employed, it shall be undertaken periodically by manufacturer, meter designation, badged capacity and year. For domestic sized meters sample sizes shall be statistically robust with respect to determining the in-service accuracy requirements determined by legislation or the appropriate Standard. For larger sizes of meters, the sample to be tested shall be sufficient to identify any potential problems, where problems are suspected the sample size shall be increased to provide statistically robust data.
- Appropriate testing of meters shall be carried out using test equipment calibrated to
  nationally traceable standards and recommended test procedures. Records of results of the
  sampling exercise shall be maintained such that the requirements to maintain meters in
  proper working order for registering the quantity of gas supplied can be evidenced to
  interested parties (for example Ofgem, BEIS, meter manufacturers).

Note: To assist in selecting and managing sampling techniques reference can be made to BS 6002-1 Sampling procedures for inspection by variables.

# 18 Cessation of Gas Supply

### 18.1 General

The supply of gas at a meter installation may cease under the terms of the Network Code or under Schedule 2B of the Gas Act 1986 as amended 1995. The terms under which a supply of gas or gas may cease are:

- Discontinuance An act by a gas supplier as a means of stopping the flow of gas at a gas supply meter point
- Disconnection An act by a GT to ensure that gas cannot be off-taken through a supply meter point.

# 18.2 **Specific**

- 18.2.1 Where a MAM undertakes the discontinuance of a gas supply on behalf of a gas supplier, procedures shall be put in place to undertake the discontinuance in a safe and secure manner and shall take into account any requirement for the purging of the meter installation and the downstream installation pipework. Where purging of the downstream pipework is required, the meter shall not be removed until purging has been carried out or is in progress.
- 18.2.2 Where a meter is removed as part of a discontinuance the gas service shall be labelled with a warning notice to indicate the presence of gas, the serial number of the meter that has been removed, the date of removal and the final meter reading.
- 18.2.3 The gas supplier shall be notified once the discontinuance has been carried out.
- 18.2.4 Where a MAM is notified that a disconnection has been carried out, the MAM shall make arrangements for the future actions covering the redundant meter installation, such as removal from site.

# 19 Removal and Return of Meters and Meter Installation Components

### 19.1 General

Meter removal is the process by which a meter and/or a meter installation component is removed (including where a complete meter installation is removed) in a safe manner and which leaves the remaining parts of the meter installation (or any other pipework) in a safe condition.

### 19.2 Specific

### **Prior to Removal**

- 19.2.1 Where a MAM proposes to remove a meter and/or a meter installation component, prior to any removal work being carried out, it shall verify that the meter and/or meter installation component to be removed is the correct one. This includes the MAM ensuring that the meter records for the meter point match the details of the meter on site.
- 19.2.2 Electrical continuity shall be maintained during and after the removal of the meter as detailed in BS 6400, IGEM/GM/6 or IGEM/GM/8 as appropriate.
- 19.2.3 Prior to removing any meter and/or meter installation component, the MAM shall ensure that the meter is decommissioned in accordance with the appropriate and prevailing standards (BS 6400, IGEM/GM/6 or IGEM/GM/8 as appropriate).

### Removal

19.2.4 When removing a meter and/or a meter installation component, the MAM shall take care to ensure that the meter and/or meter installation component that is removed is not damaged so that it can be tested in the event of a dispute and, where appropriate, be recycled or refurbished. For meters which are the subject of an accuracy dispute, reference should be made to Section 19.3 below.

### **Following Removal**

- 19.2.5 Where required in order to implement IGE/UP/1, IGE/UP/1A, IGEM/UP/1B or IGEM/UP/1C, or other IGEM Standards or recommendations, the MAM shall purge the removed meter and/or meter installation component and then cap or seal the inlet and outlet connections, to prevent the ingress of air, dirt or moisture.
- 19.2.6 The MAM shall ensure that any liquid present in any removed meters and/or meter installation components shall be drained and disposed of in accordance with applicable legislation. For the avoidance of doubt, the disposal of oil or other liquids present in such meters and/or meter installation components is the responsibility of the MAM that removed them.
- 19.2.7 Any removed meter, with the exception of ultrasonics and thermal mass, shall be stored and transported in the same relative orientation as it was when installed and used. Where any meter is subject to dispute, it shall be stored and transported in the same relative orientation as it was when installed and used.
- 19.2.8 Where required in order to implement IGE/UP/1, IGE/UP/1A, IGEM/UP/1B or IGEM/UP/1C or other IGEM Standards or recommendations, outlet pipework shall be purged.

19.2.9 Any open ends of pipework (including the ECV) left by the removal of a meter shall be sealed with an appropriate fitting, taking into account the GT's requirements in respect of sealing the ECV. The gas supplier must be informed if the meter is not immediately replaced; in turn the supplier must notify the GT so that they can close any service valve controlling the supply of gas to that meter if that valve does not supply other meters.

### **Position on Change of MAM**

- 19.2.10When a new MAM is exchanging a meter installation, the incoming MAM must remove and replace all of the components of the existing meter installation unless and to the extent that prior direct or indirect (i.e. via a third party) commercial arrangements between the incoming MAM and the owner of the meter and/or meter installation component provide for an alternative arrangement. Where the arrangement is indirect (i.e. via a 3rd party) the incoming MAM must have positive confirmation from the existing meter/meter installation component owner that there is actually an arrangement place.
- 19.2.11Where prior commercial arrangements have been made in relation to the continued use of meters and/or meter installation components, the incoming MAM shall ensure that it is able to manage the retained meters and/or components of the meter installation in accordance with this code of practice and any requirements set out in legislation. Where meters and/or meter installation components are retained, the incoming MAM shall accept full responsibility for such retained meters and/or meter installation components and their ongoing maintenance.
- 19.2.12Where it has removed a meter and/or meter installation component, the incoming MAM shall ensure that it is removed from the site, subject to any commercial arrangements with the owner.
- 19.2.13Within 30 days after removing a meter and/or meter installation component, the incoming MAM shall (save where Section 19.2.14 applies) provide to the owner details of the meter and/or meter installation component which has been removed. At the same time, the MAM shall notify the owner of the address at which the meter and/or meter installation component is held and provide contact details to facilitate its collection.
- 19.2.14Where the owner of a meter and/or meter installation component which has been removed is not known and cannot readily be ascertained, the incoming MAM shall use reasonable endeavours to identify the owner. This shall include the incoming MAM requesting the identity of the owner from the relevant gas supplier.
- 19.2.15Where the gas supplier cannot supply the identity of the owner and the MAM has not been able to obtain it through other reasonable means, the incoming MAM shall send an e-mail to all MAMs providing details of the meter and/or meter installation component and requesting confirmation of the identity of the owner. The MAM shall prepare and keep an auditable record of the steps it has taken to identify the owner.
- 19.2.16The incoming MAM shall hold any removed meter and/or meter installation component in secure, weatherproof storage (pending instructions from the owner) for at least 30 days from the date it notified the owner of the removal (or, where the incoming MAM has sent an e-mail to all MAMs to identify the owner in accordance with Section 19.2.15, for at least 30 days from the date the e-mail was sent).
- 19.2.17If any meter and/or meter installation component has not been collected within the 30-day period set out in Section 19.2.16, and alternative commercial arrangements have not been agreed between the incoming MAM and the owner, the incoming MAM may dispose of the meter and/or meter installation component in accordance with Section 22.
- 19.2.18Following disposal of the meter and/or meter installation component, the incoming MAM shall notify the owner of the disposal (unless, having taken the steps set out in Section 19.2.15, the MAM has not identified the owner).

19.2.19Where the MAM agrees with the owner that the MAM will return a meter and/or meter installation component to the owner, the MAM shall package the removed meter and/or meter installation component in a reasonable manner. An itemised list shall be provided to the owner detailing each meter and/or meter installation component which is being returned. For meters with a domestic market sector code with a capacity not exceeding 16m3/hr, as a minimum the requirement shall be for the meter serial number and the serial number of any barcoded installation components to be recorded. If no barcode exists on the meter installation components, then a count of meter installation components returned will suffice.

# 19.3 Meter accuracy disputes

- 19.3.1 For a meter that is the subject of an accuracy dispute any liquid, such as water, present in the measuring chamber shall not be drained, and the meter connections securely capped. Where appropriate, any oil present in the meter for lubrication purposes shall be drained and should accompany the meter. The MAM shall make arrangements for any necessary special equipment for transporting such meters.
- 19.3.2 For a meter that is the subject of an accuracy dispute, the meter shall be handled with extreme care in order that it arrives at the test station in the same condition as when it was disconnected, complete with any batteries fitted.

### 20 Asset Meter Installation Records

### 20.1 General

Meter installation records shall be maintained throughout the operational life of the meter installation.

# 20.2 Specific

The requirements of this section cover records related to the meter installation.

- 20.2.1 Where a meter is connected, removed or exchanged, there is a mandatory requirement to record and communicate the information detailed in Sub-Section 20.3.
- 20.2.2 Appropriate details of other meter installation components that contribute to safety and accuracy of the meter installation should also be recorded. Examples of the type of information that should be recorded are contained in Sub-Sections 20.3 and 20.4.

# 20.3 Mandatory Records

The details of removed, connected or exchanged meters must be notified to the gas supplier, where known, or the relevant GT. Relevant notification must be given 48 hours in advance of the work being carried out. Regardless of advance notice having been given, notification must also be given within 48 hours of completion of the work, in accordance with the GM(C&D)R. A copy of each meter installation notification record must be retained for 6 years. Annex 5 details the record of information to be retained.

### 20.4 Other Records

There are other details that the MAM should record. The following list highlights the main records that should be held where appropriate:

- regulator settings and details
- protection system settings and details
- hazardous area classification
- pressure system certificates relating to Pressure Equipment Regulations (PER) and PSSR.

Further details are available in BS 6400, IGEM/GM/6, IGE/GM/8, IGEM/GM/5 and IGEM/GM/7A.

# 21 Transfer of Meter Installations, Meters or Meter Installation Components

To be read in conjunction with Section 19.

### 21.1 General

Where a new MAM is appointed to an existing meter installation, the incoming MAM should consider whether the existing meter installation is "fit for purpose". Where some or all of the existing meter installation is considered to be fit for purpose, prior to undertaking any works, the incoming MAM should investigate whether suitable arrangements can be made with the owner of the equipment for the installation or part of the installation to remain in service. Where there is no written agreement with the owner(s) of the meter installation for the incoming MAM to retain all or part of the meter installation in-service, then the entire installation shall be replaced and returned to the outgoing MAM (see section 19.2.10).

Flow of accurate and relevant information will facilitate this transfer process.

### 21.2 Specific

The requirements of this section cover the disclosure of relevant information on transfer of a meter installation or meter installation component(s) between owner(s). Where agreement has been reached on the transfer of meter installations or meter installation components, the following details of the transferred item shall be provided by the outgoing MAM to the incoming MAM, as appropriate. (Note - consider also how this is communicated to the MAP)

The level of information to be transferred will vary depending on the complexity of the meter installation and availability of the information to the outgoing MAM.

# 21.2.1 The following information shall be transferred by data flow or agreed alternative method:

- Site Details MPRN
- meter installation address

### **Details of the Meter and/or Meter Installation Component**

- pressure tier at which the meter and/or meter installation component is connected
- meter type (for example, diaphragm)
- manufacturer
- year of manufacture meter model (for example G4)
- meter serial number or meter module number
- maximum stamped (badged) capacity (Qmax)
- number of dials or drums for billing purposes
- index scaling (for example x1, x10, x100)
- registration units (for example m<sup>3</sup>)
- payment type (for example credit or pre-payment)
- whether a by-pass is fitted

- whether any by-pass which is fitted is open or closed
- whether a security collar is fitted
- converter details (including pressure transducer, temperature probe and cabling)

# **Billing Information**

- contracted metering pressure
- meter height above sea level
- conversion factor as defined under GTER

### **Location Information**

- meter location in the premises
- location code

### 21.3 Supplementary Information

The following supplementary information shall be provided (to the extent relevant to the assets in question) by data flow (or any alternative means of communication agreed between the MAMs in question). This list is not exhaustive and MAMs can agree additional information to be provided. Where some or all of this information is not available to the outgoing MAM, this lack of availability should be taken into account in deciding whether to agree a transfer, and where so agreed the outgoing MAM need not provide the relevant information.

### **Site Details**

- co-ordinates (using X (Eastings), Y (Northings))
- contact details of the person responsible for the site
- any specific access details (for example location of keys to housing)

### **Design Specification Information**

- design and quotation technical project records, drawings, initial request for customer information, customer pressure and flow information, and manufacturer's design parameters
- GT/1 information (for example inlet pressure tier, etc).
- Ancillary pressure agreement

### Details of the Meter and/or Meter Installation Component

- Meter module serial number
- details of meter module diagnostic flags
- maximum capacity of meter module
- whether the installation is a single or multiple streamed installation
- type of any multi stream installation (for capacity/for continuity)
- regulator and protection system details
- converter details
- flow computer details
- data logger/AMR details
- Meter Pulse Utilisation (MPU) agreement
- component details (make, model, serial number of all significant components)
- most recent available photographs of items being transferred
- set points, regulators, safety devices and creep reliefs
- cathodic protection (CP) installed

- non-return valve (NRV) installed (details)
- warranty details

# **Approvals and Authorisations**

- DSEAR certification record
- pressure test certificates
- GT/2 authorisation application form<sup>2</sup>
- GT/2 consumer warrant

### **Housing Details**

- meter housing details (type, size etc)
- hazardous area classification and drawing
- records of any outstanding issues with housing/consumer equipment.
- declaration to the GT concerning suitability of the housing
- record of any consumer complaints (excluding personal data)
- description of any technical complaint only
- details of status of the ownership of the housing and responsibility for maintenance
- agreements relating to housing.

### **Maintenance Records**

- record of all maintenance visits (date, type of visit, outcome).
- record of rectification work undertaken.
- maintenance results sheets.
- record of results of functional checks.
- site husbandry form(s).
- details of any planned rectification works which are outstanding or confirmation that no rectification works are outstanding.

# Pressure Systems Safety Regulations (PSSR) Records

- written schemes of examination.
- PSSR Drawing.
- record of any PSSR visits (date, type of visit, outcome).
- PSSR inspection sheets
- record of all PSSR failings, and status.
- all Information held by PSSR competent body.
- VS02 inspection reports.

### **Modifications and Repairs**

• records of all modifications and repairs, including all GL/5 paperwork.

<sup>&</sup>lt;sup>2</sup> Note - the GT/2 documents are being transferred to facilitate the incoming MAM applying for their own authorisation.

### 21.4 Declarations

In relation to any meter installation, meter or meter installation component which is transferred, the outgoing MAM hereby confirms the following to the incoming MAM:

- that the item being transferred is owned by the outgoing MAM at the time of transfer; and
- that the item being transferred is, at the time of transfer, in safe operating condition and compliant with the relevant Technical Standards and all applicable legal obligations.

# 22 Permanent Disposal

### 22.1 General

At the end of the operational life of a meter installation or any meter installation component appropriate disposal is necessary to complete the cycle of whole life management.

# 22.2 Specific

This section covers guidance on the measures to be taken when permanently disposing of (scrapping) meters and meter installation components. In addition to the requirements of this MAMCoP there are RGMA data requirements which relate to removing metering and metering installation components. These include notifying the Gas Act Owner and/or MAM of the removal and collection details.

### 22.3 Specific Requirements

Care should be taken to consider environmental impact when disposing of meters or meter installation components. In particular, the following factors apply:

- where possible, all components of the meter and any meter installation components should be reused or recycled, provided this does not involve excessive cost
- where appropriate the meter/meter installation shall be purged prior to scrapping
- all meter batteries must be removed and disposed of in accordance with current environmental and waste disposal legislation
- any oil should be drained from the meter and must be disposed of in accordance with current environmental and waste disposal legislation
- meter components containing or likely to contain mercury or other hazardous chemicals must be removed from the meter prior to the disposal and then disposed of in accordance with current environmental and waste disposal legislation. Alternatively, the meter as a whole must be sent to a suitably equipped and competent facility capable of disposing of the meter in accordance with current environmental and waste disposal legislation
- when scrapping a meter, official seals shall be permanently defaced, and the meter shall be rendered inoperable, (for example diaphragm meters can be spiked, the index on RPD and turbine meters can be destroyed, and/or the measuring element irreparably damaged)
- a record of all meters permanently disposed of shall be maintained for a minimum period of 3 years.

**Annex 1: Table of Legislation and the applicable Technical Standards** 

DOCUMENT		ORK TEGO	RY					AMC SISE	OP S	ECT	ΓΙΟΝ	IN	WHI	СНІ	LEGI	SLA	TIO	N, A	COP	ANI	) ST	AND	ARD	S		
LEGISLATION	1	2	3 A	3B	4A	4B	3	4	5	6	7	8	9	1 0	1	1 2	1 3	1 4	1 5	1 6	1 7	1 8	1 9	2 0	2	2 2
GT LICENCE 17	✓	✓	✓	✓	✓	✓		✓																		
GAS ACT SCH 2B	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓			✓		<b>✓</b>				<b>✓</b>	✓		✓		
GS(I&U)R	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<b>\</b>	✓	✓		✓	✓					✓	✓	✓		
GS(M)R	✓	✓	✓	✓	✓	✓		✓		✓						✓	✓		✓							
GTER	✓	✓	✓	✓	✓	✓		✓						✓												
DSEAR* (ATEX)	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓									✓	~
HSWA	✓	✓	✓		✓	✓	✓	✓			✓	✓				✓	✓									>
MHSWA	✓	✓	✓		✓	✓	✓	✓			✓	✓				✓										
PER	✓	✓	✓	✓	✓	✓			<b>√</b>															✓		
PSSR						<b>√</b>			<b>✓</b>		<b>√</b>						<b>✓</b>							V		
GMCDR	<b>√</b>	<b>√</b>	✓		✓	<b>√</b>	✓				<b>√</b>	✓	✓	✓						✓		<b>✓</b>		✓		
CDMR	<b>√</b>	<b>√</b>	<b>√</b>		<b>√</b>	<b>√</b>			<b>✓</b>		<b>✓</b>	✓														
NRSWA	<b>√</b>	✓	<b>✓</b>		<b>√</b>	<b>√</b>					<b>√</b>	✓														
MHOR	<b>√</b>	✓	<b>✓</b>		<b>√</b>	<b>√</b>					<b>√</b>															
LOLER	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>					<b>√</b>															
BUILDING REGS	<b>✓</b>	<b>√</b>	<b>√</b>		<b>√</b>	<b>✓</b>					✓	./			<b>✓</b>			<b>√</b>								
RIDDOR	<b>✓</b>	<b>✓</b>	<b>✓</b>		<b>✓</b>	<b>✓</b>						<b>✓</b>			Ľ	<b>√</b>	<b>√</b>	Ľ								
EWR	v	<b>∨</b>	<b>∨</b>		<b>∨</b>	<b>∨</b>						•	<b>√</b>			·	•									
PUWER	<b>√</b>	<b>∨</b>	<b>.</b>	<b>∨</b>	<b>∨</b>	<b>∨</b>							· ·	<b>√</b>		<b>√</b>										<b>~</b>
COSHH	\ \ \	<b>∨</b>	<b>✓</b>		<b>∨</b>	<b>∨</b>								·		·	<b>√</b>						<b>✓</b>			v
GSSLC GMR	Ť	<b>∨</b>	<b>∨</b>		<b>∨</b>	<b>∨</b>											Ľ				<b>✓</b>		Ľ			
PSR	<b>✓</b>	<b>∨</b>	<b>▼</b>		<b>V</b>	<b>V</b>															Ľ	<b>√</b>				
PPEWR	\ \ \	<b>V</b>	<b>V</b>		<b>V</b>	<b>V</b>	<b>√</b>	<b>✓</b>	<b>1</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	1	<b>√</b>	<b>√</b>	<b>✓</b>				<b>V</b> ✓	<b>√</b>			<b>✓</b>
CWR	· /	<b>∀</b>	<b>▼</b>		<b>▼</b>	<b>▼</b>	<b>▼</b>	<b>▼</b>	Ť		<b>✓</b>	<b>▼</b>	Ť	Ľ	Ť	· ·	Ť	<b>∨</b>			<b>√</b>	<b>V</b>	<b>▼</b>			·
EPA	· /	<b>√</b>	<b>▼</b>		<b>▼</b>	<b>▼</b>	· /	· /			· /	<b>▼</b>				\ \ \		\ \ \			<b>✓</b>	· /	· /			·
WR	· /	<b>∀</b>	<b>▼</b>		<b>▼</b>	<b>▼</b>	<b>▼</b>	<b>▼</b>			· /	<b>▼</b>				<b>∀</b>		\ \ \			· /	· /	<b>▼</b>			·
LWR	· /	<b>√</b>	· /		<b>→</b>	<b>→</b>	<i>'</i>	<b>V</b>			·	<b>→</b>				· /		<b>-</b>			· /	<i>'</i>	<i>'</i>			·
EPR	· /	<b>√</b>	· /		<b>→</b>	<b>→</b>	<i>'</i>	<b>V</b>			·	·				· /		· /			·	<i>'</i>	<i>'</i>			·
HWR	·	·	· /		·	·	· ✓	✓			·	· ✓				·		·			1	·	·			·
CPA	·	·	· /		<b>√</b>	· ✓	· ✓	✓			·	<b>√</b>				<i>\</i>		<i>\</i>			·	√	·			·
CWR— duplicated	<del>/</del>	· -	· -		<del>-</del>	<del>-</del>	<del>-</del>	<del>-</del>			<del>/</del>	<del>-</del>				<del>-</del>		<del>/</del>			<del>/</del>	<del>-</del>	<del>-</del>			-
LTR	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>			<b>√</b>	<b>√</b>				<b>✓</b>		<b>/</b>			<b>√</b>	<b>√</b>	<b>✓</b>			<b>~</b>
LR	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>			<b>✓</b>	<b>√</b>				<b>√</b>		<b>√</b>			<b>√</b>	<b>√</b>	<b>√</b>			<b>~</b>
WEEER	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>			<b>✓</b>	<b>√</b>				<b>✓</b>		<b>✓</b>			<b>√</b>	<b>√</b>	<b>√</b>			<b>✓</b>
WBAR	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>			<b>✓</b>	<b>√</b>				<b>✓</b>		<b>✓</b>			<b>√</b>	<b>√</b>	<b>√</b>			<b>✓</b>
COPs	1	2	3 A		4A	4B	3	4	5	6	7	8	9	1 0	1 1	1 2	1 3	1 4	1 5	1 6	1 7	1 8	1 9	2 0	2	
OFGAS COP 1/a	✓							✓			✓	✓	✓	✓	✓	✓										
OFGAS COP 1/b			<b>√</b>	✓				✓		✓	✓	✓	✓	✓	✓	✓										
OFGAS COP 1/c		✓			✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓					<b>✓</b>	✓	✓	✓		
GIUSP	✓	✓	✓	✓	✓	✓						✓														
PRIMARY STANDARDS	1	2	3 A	_	4A	4B	3	4	5	6	7	8	9	1 0	1 1	1 2	1 3	1 4	1 5	1 6	1 7	1 8	1 9	2 0	2	
BS6400-1	✓							✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						✓	✓		
BS6400-2		✓						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓		
IGEM/GM/6			✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓		
IGEM/GM/8					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						✓	✓		
IGEM/GM/4 + TD/13						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						✓			
SUPPLEMENTARY STANDARDS	1	2	3 A		4A	4B	3	4	5	6	7	8	9	1 0	1 1	1 2	1 3	1 4	1 5	1 6	1 7	1 8	1 9	2 0	2	2 0
BS 6891	✓	✓	✓					✓									✓									
IGEM/UP/2			<b>✓</b>	✓	✓	✓		✓					<b>√</b>													
IGE/TD/4	✓	✓	✓		✓	✓		✓																		
IGEM/G/1	✓	✓	<b>✓</b>	✓	✓	✓	✓		✓	✓																
IGEM/G/5	✓	✓	<b>✓</b>														✓							✓		
IGEM/GM/5			✓		✓	✓					✓	✓	✓			✓	✓							✓		
IGEM/GM/7A	✓	✓	✓		✓	✓		✓	✓		✓	✓	✓			✓	✓									
IGEM/GM/7B	<b>✓</b>	✓	✓	✓	<b>✓</b>	✓		<b>✓</b>	✓			✓		✓												

IGEM/SR/25					✓	✓		✓	✓		✓		✓								
BS EN 60079-10-1,	✓	✓	<b>✓</b>	✓	✓	✓				<b>✓</b>	✓										
14																					
BS EN 13463-1	<b>✓</b>	<b>√</b>	<b>~</b>	✓	✓	✓				<b>✓</b>											
IGE/UP/1			<b>~</b>	✓	✓	✓				<b>✓</b>		<b>✓</b>							<b>✓</b>	>	
IGE/UP/1A			✓	✓						<b>✓</b>		<b>✓</b>							<b>✓</b>	<b>✓</b>	
IGEM/UP/1B	✓	✓	✓	✓	✓					<b>✓</b>		<b>✓</b>							<b>✓</b>	✓	
IGEM/UP/1C			✓	✓	✓					<b>✓</b>		<b>✓</b>							✓	✓	
BS 7671	✓	✓	✓	✓	✓	✓							✓	✓	✓	✓					
BS EN 60079-17	✓	✓	✓	✓	✓	✓										✓					
BS 6002-1																		>			
BS EN ISO	<	<b>√</b>	_	<b>√</b>	<b>√</b>	<b>✓</b>	1														
9001:2015																					
PAS 55-1	<b>✓</b>	<b>√</b>	<b>~</b>	✓	✓	✓	✓														

# **Annex 2:** Example of a Code of Conduct

The following is an example of General Rules of Conduct for all employees of the MAM employed on meter work:

# 1. Safety and Security

### You shall:

- (a) observe all gas and other safety regulations, statutes and authorised Codes of Practice
- (b) not act in a manner likely to endanger yourself or any other person (including members of the public) or property
- (c) not smoke in any area designated as a 'No Smoking' zone, where safety or a special health hazard might exist, for example 'Live Gas Working'
- (d) co-operate with security and safety measures prescribed to protect life and property, using safety equipment where appropriate.

### 2. General Conduct and Performance at Work

#### You shall:

- (a) ensure when on duty that drink or drugs do not affect your performance
- (b) not smoke whilst on a consumer's premises
- (c) not act in an abusive, violent or irresponsible manner towards persons or property
- (d) not discriminate against consumers on any grounds for example sex, colour, race, creed, nationality or ethnic origin
- (e) obey reasonable instructions and follow laid down working procedures
- (f) act in a manner, which will maintain satisfactory relations with consumers and members of the public, avoiding unwelcome physical advances, suggestive remarks, language or transmit comments likely to cause distress or offence
- (g) carry out work in a careful, attentive and competent manner, to the required standards
- (h) avoid bringing the gas industry into disrepute or in any way hindering the efficiency of its operation.

### 3. Theft, Fraud, Personal Gain and Disclosure of Confidential Information

### You shall not:

- (a) misappropriate property
- (b) divert business to a competitor
- (c) or reveal confidential information to an unauthorised party.

### 4. **Miscellaneous**

### You shall:

- (a) wear such uniform or protective clothing as is provided
- (b) produce an identity card when required, and wear it in such a manner that it can be seen at all times
- (c) dress in a presentable manner suited to your job and the circumstances in which it is performed.

# 5. If in Doubt

This Code has been prepared to give guidance. If you are ever in doubt about any matter concerning conduct or any other issue regarding your work, you should seek advice from your manager.

# **Annex 3: Legislative References and Technical Publications**

Please note that the latest version of the legislation and technical publications apply.

# 1 Legislative References

Acronym	Full Name
ATEX 137	Explosive Atmospheres Directive (99/92/EC)
ATEX 95	Explosive Atmospheres Directive (94/9/EC)
BUILDING REGS	Building Regulations 2010
CAD	Chemical Agents Directive (98/24/EC)
CDMR	Construction (Design and Management) Regulations 2015
COSHH	Control of Substances Hazardous to Health (Amendment) Regulations 2004
CNWR	Control of Noise at Work Regulations 2005
СРА	Control of Pollution Act 1989
CPD	Construction Products Directive – Construction (Design and Management) Regulations 1997
CW(EW)R	Controlled Waste (England and Wales) Regulations 2012
CWR	Controlled Waste (Amendment) Regulations 1993
DSEAR	Dangerous Substances and Explosive Atmospheres Regulations 2002
EPA	Environmental Protection Act 1990, Part II
EPR	Environmental Permitting (England & Wales) Regulations 2016
EPS	Equipment and Protective Systems for Use in Potentially Explosive Atmospheres Regulations 2016
EWR	Electricity at Work Regulations 1989
GA	Gas Act 1986, and where relevant as amended by Gas Act 1995
GM(C&D)R	Gas Meters (Information on Connection and Disconnection) Regulations 1996
GMR	Gas Meter (Amendment) Regulations 1995
GS(I&U)R	Gas Safety (Installation and Use) Regulations 1998
GS(M)R	Gas Safety (Management) Regulations 1996
GT SLC	Gas Transporters' Standard Licence Condition 2001
GS SLC	Gas Suppliers' Standard Licence Condition 2001
GTER	Gas (Calculation of Thermal Energy) (Amendment) Regulations 2015

Acronym	Full Name
HSWA	Health & Safety at Work Act 1974
HWR	Hazardous Waste (England & Wales) (Amendment) Regulations 2016
LOLER	Lifting Operations and Lifting Equipment Regulations 1998
LR	Landfill (England and Wales) Regulations 2005; Landfill (Scotland) Regulations 2003 as amended
LTR	Landfill Tax (Amendment) Regulations 2016
LWR	List of Wastes Regulations 2005 as amended
MID	European Measuring Instruments Directive (2004/22/EC)
MI(GM)R	Measuring Instruments (Gas Meters) Regulation 2006
MHOR	Manual Handling Operations Regulations 1992
MHSWR	Management Health & Safety at Work (Amendment) Regulations 2006
NRSWA	New Roads and Street Works Act 1991
NWR	The Noise at Work Regulations 1989
PED	Pressure Equipment Directive 2014
PER	Pressure Equipment Regulations 1999 as amended
PPEWR	Personal Protective Equipment at Work Regulations 1992
PSR	Pipeline Safety (Amendment) Regulations 2003
PSSR	Pressure Systems Safety Regulations 2000
PUWER	Provision and Use of Work Equipment Regulations 1998
RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013
WBAR	Waste Batteries and Accumulators (Amendment) Regulations 2015
WEEER	Waste Electrical and Electronic Equipment (Amendment) Regulations 2015
WR	Waste (England & Wales) (Amendment) Regulations 2014

# 2 Technical Publications

Publication Reference	Title
IGE/TD/4 Edition 4	Gas services
IGEM/TD/13 Edition 2	Pressure regulating installations for transmission and distribution systems
IGE/GM/4 Edition 2	Flow metering practice for pressure between 38 and 250 bar

Publication Reference	Title
IGEM/GM/5 Edition 3	Selection, installation and use of electronic gas meter volume conversion systems
IGEM/GM/6 Edition 2	Non-domestic meter installations. Standard designs
IGEM/GM/7A	Electrical connections for gas metering equipment
IGEM/GM/7B	Hazardous area classification for gas metering equipment
IGE/GM/8 Parts 1 to 5	Non-domestic meter installations. Flow rate exceeding 6 m <sup>3</sup> h <sup>-1</sup> and inlet pressure not exceeding 38 bar
IGE/UP/1 Edition 2	Strength and tightness testing and direct purging of industrial and commercial gas installations
IGE/UP/1A Edition 2	Strength and tightness testing and direct purging of small low pressure industrial and commercial Natural Gas installations
IGEM/UP/1B Edition 3	Tightness testing and purging of domestic sized Natural Gas installations
IGEM/UP/1C	Strength testing, tightness testing and direct purging of Natural Gas and LPG meter installations
IGEM/UP/2 Edition 3	Installation pipework, on industrial and commercial premises
IGEM/UP/6 Edition 2	Application of compressors to Natural Gas fuel systems
IGE/UP/9 Edition 2	Application of Natural Gas and fuel oil systems to gas turbines and supplementary and auxiliary fired burners
IGEM/UP/16	Design for Natural Gas installations on industrial and commercial premises with respect to hazardous area classification and preparation of risk assessments
IGEM/SR/15 Edition 5	Integrity of Safety – related Systems in the Gas Industry
IGEM/SR/25 Edition 2	Hazardous area classification of Natural Gas installations
IGEM/G/1 Edition 2	Defining the end of the Network, a meter installation and installation pipework
IGEM/G/4 Edition 2	Definitions for the gas industry
IGEM/G/5 Edition 2	Gas in multi-occupancy buildings
IGEM/G/6	Gas supplies to mobile dwellings
IGEM/G/7	Risk assessment techniques
IGEM/G/10	Non return valves
IGEM/GL/6 Edition 2	Permitry for the safe flow of gas
IGEM/GL/8 Edition 3	Reporting and investigating gas related incidents
BS EN 1359	Gas meters – diaphragm gas meters

Publication Reference	Title
BS ISO 3951-1	Sampling procedures for inspection by variables
BS 6400-1	Specification for the installation, exchange, relocation, maintenance and removal of domestic sized gas meters (2 <sup>nd</sup> and 3 <sup>rd</sup> family gases) with a maximum capacity not exceeding 6m <sup>3</sup> /h. Low pressure (2 <sup>nd</sup> family gases)  Part 1. Low pressure 2 <sup>nd</sup> family gases
	Fatt 1. Low pressure 2 Taniny gases
BS 6400-2	Specification for the installation, exchange, relocation and removal of domestic sized gas meters with a maximum capacity not exceeding 6m <sup>3</sup> /h. (2 <sup>nd</sup> -and-3 <sup>rd</sup> -family gases). Medium pressure (2 <sup>nd</sup> -family gases)
	Part 2. Medium pressure 2 <sup>nd</sup> family gases
BS 7671	IEE IET Wiring Regulations – Requirements for electrical installations
BS 7834 (ISO 9951)	Specification for turbine meters used for the measurement of gas flow in closed conduits
BS 8499	Specification for domestic gas meter boxes and meter bracket
BS EN 12480	Gas meters – Rotary displacement gas meters
BS EN 60079-10-1	Explosive atmospheres. Classification of areas. Explosive gas atmospheres
BS EN 60079-17	Electrical Apparatus for Explosive gas atmospheres. Inspection and maintenance of Electrical installations in hazardous areas (other than Mines)—inspection and maintenance
BS EN 60079-14	Explosive atmospheres. Electrical installation design, selection and erection
GDN/PM/GT/1	Management Procedure for requesting gas, service pipe pressure and capacity information from Gas Transporters
GDN/PM/GT/2	Management Procedure for requesting a Gas Transporter to: Authorise the setting and sealing of regulators and associated safety devices, authorise the installation of a meter by-pass, Approve a meter housing design
BAU1	Business as Usual Issues Document

# 3 Other publications

Publication Reference	Title
BS EN ISO 9001: 2015	Quality management system. Requirements
BS ISO 55001	Asset management. Specification for the optimized management of physical assets

#### **Glossary of Terms** Annex 4:

	J =======							
additional emergency control valve (AECV)	An AECV is a valve, not being the ECV (see below for the definition of ECV), for shutting off the supply of gas in an emergency, intended for use by a consumer of gas. An AECV may be located within either the meter installation or installation pipework and, as such, may not isolate all of the consumer's pipework or meter installation.							
	Note 1: An AECV does not denote the end of the Network and is always fitted downstream of the ECV. The existence of an AECV does not affect the existence of an ECV (which is always required).							
	Note 2: Advice on labelling ECVs and AECVs is given in IGE/GM/8.							
ancillary equipment	Any equipment connected to the metering equipment but not forming part of the metering installation e.g. data logger							
automatic meter reading equipment (AMR)	Equipment that enables gas meters to be read automatically (i.e. remotely).							
badged meter	A gas meter which has been stamped and/or approved by Ofgem or othe metrological authority acceptable to Ofgem, as legal metrology and which operates within prescribed statutory limits.							
business process	A process in place between the person placing the contract and the MAM, by which work related information is exchanged. This may include RGMA processes.							
combined heat and power plant (CHP)	Equipment which provides both heat and electricity: heat for a process or application and electricity, which can be used to offset its own requirements or exported to drive another process or application.							
commercial arrangements	The processes, practices and contracts that an organisation or person has in place to manage their undertaking.							
competence	The necessary skills, experience, knowledge and personal qualities necessary for an employee to carry out his or her tasks consistently to the require standards.							
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	An end-user of gas.							
design maximum incidental pressure (DMIP)	The maximum pressure which a system is permitted to experience under fault conditions, limited by safety, when the system is operated at the design pressure.							
design minimum pressure (DMP)	The minimum pressure that may occur at the end of any service pipe at the time of system design flow rate extreme gas supply and maintenance							

Business, Energy and Industrial **Strategy** 

for

design pressure (DP)

**Department** 

(BEIS)

conditions.

BEIS are responsible for the metrological performance of gas meters (this was transferred from Ofgem on 1 April 2009).

The pressure on which design calculations are based.

diaphragm meter

A positive displacement meter in which the measuring chambers have deformable walls.

distribution main

Any pipeline through which a GT is for the time being distributing gas and which is not being used only for conveying gas in bulk.

electronic meter

A meter that infers the volume of gas passing through it, for example by means of the behaviour of an ultrasonic beam.

emergency control valve (ECV)

The ECV is a valve, not being an "additional emergency control valve" (AECV) (see above) for shutting off the supply of gas in an emergency, intended for use by a consumer of gas and being installed at the end of a service or distribution main. The outlet of the ECV terminates, and thus defines the end of, the Network.

Note:

The gas conveyor (which is, normally, a GT) has to agree the designation of the ECV which defines the end of the Network. For all "recommended gas supply arrangements", the ECV will be upstream of all components of the meter installation.

emergency service provider (ESP)

Person who is appointed and acts on behalf of a person conveying gas to prevent an escape of gas.

Gas Act Owner (GAO)

The Organisation or person responsible for providing installed metering for the measurement of gas consumption, and for maintaining the meter in proper order, as required by the Gas Act. The Gas Act Owner only relates to a meter.

This may be Consumer, Supplier or Transporter. This will be determined at connection by agreements between these parties. The consumer may retain this via the Shipper responsibility or may delegate it to the Supplier, who in turn may delegate it to the Transporter. If requested by the Shipper, the Transporter must accept such responsibility for domestic premises.

There may be bilateral agreements to transfer the Gas Act Ownership of a meter after installation.

gas conveyor

A person who conveys gas through pipes and having duties under GS(M)R and PSR and who may also hold a Gas Transportation Licence.

gas fittings

For the purpose of MAMCoP, 'Gas Fittings' shall have the same meaning as in IGEM/G/1 Edition  $2^3$ 

gas meter

For the purpose of MAMCoP, 'Gas Meter' is that which shall have the same meaning as in IGEM/G/1 Edition  $2^4$ .

Gas Industry Unsafe Situations Procedure (GIUSP) This procedure is managed by a regulatory body, currently Gas Safe Register.

gas system

The gas supply system comprising the distribution main or service (pipe), ECV, meter installation and installation pipework and any AECV to supply a consumer's appliance.

gas transporter (GT)

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

Health and Safety Executive for GB

<sup>&</sup>lt;sup>3</sup> http://www.igem.org.uk/media/80392/igem-g-1%20edition%202.pdf

<sup>&</sup>lt;sup>4</sup> The term 'meter' in the document refers to 'gas meter'

Health and Safety Executive (HSE)

independent gas transporter (IGT) A company, licensed by Ofgem, which transports gas through its network on behalf of a gas shipper.

inlet isolation valve (IIV)

A valve, normally not being an emergency control valve ECV, and never installed downstream of an ECV, within a building (usually a multi-occupancy building), upstream of an emergency control valve, for to enable isolation of the gas supply to all parts of the a building, by an authorised party, which (usually) for example a gas transporter, emergency service provider, etc. is not the gas consumer.

Note: In some circumstances, it may be permissible for the IIV to be the designated

Institution of Gas Engineers and Managers (IGEM) Institution of Gas Engineers and Managers.

legacy gas supply arrangements

Gas supply arrangements (usually that have been installed prior to the publication of IGE/G/1) and that are not consistent with the installations defined as being recommended gas supply arrangements.

lowest operating pressure (LOP)

The minimum pressure which a system is designed to experience under normal operating conditions.

maximum incidental pressure (MIP)

The maximum pressure which a system is permitted to experience under fault conditions, limited by safety pressure devices.

maximum operating pressure (MOP)

The maximum pressure at which a system can be operated continuously under normal operating conditions.

meter asset manager (MAM)

The role that could be taken on by a number of parties who manage a portfolio of meters on behalf of their client. They could control the meter replacement program, arrange meter work or arrange purchase of new meters. The MAM will act as the point of contact for a meter point and can supply all known information regarding that meter point.

There will only be one MAM per meter point. If there is not one clearly identifiable agent capable of providing all required information for a meter point then the controlling authority will be regarded as the MAM.

The MAM in the context of the RGMA flows (as opposed to contracts or Organisational names) is the role who holds all metering information.

meter asset provider (MAP)

The party responsible for the ongoing provision of the meter installation at that meter point. This could be the Meter Title Owner of the Meter, or a third party with whom the MAM contracts for the provision of a meter. Where the Title Owner is not directly involved in the Gas Act Ownership of the Meter, the Meter Asset Provider needs to be identified so that the incoming MAM can make appropriate contractual arrangements for the ongoing provision of the metering equipment in situ at the Meter Point.

meter inlet valve (MIV)

A valve fitted upstream of, and adjacent to, a gas meter to shut off the supply of gas.

Meter installation

For the purpose of MAMCoP, Meter Installation shall have the meaning as in IGEM/G/1 Edition 2.

Meter installation component

Any component of the meter installation other than a meter (as defined in the IGEM/G1.

meter installation inlet valve (MIIV)

A valve fitted upstream of all the other meter installation components to shut off the supply of gas.

meter installation outlet valve (MIOV)

A valve fitted downstream of all the other meter installation components to shut off the supply of gas through the meter installations.

meter outlet adaptor

A fitting which facilitates the connection of a gas consumer's installation pipework to the outlet of the meter.

meter outlet valve (MOV)

A valve fitted downstream of, and adjacent to, a gas meter, to shut off the supply of gas.

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 regulator

A device located in close proximity to a primary meter which is solely to control the pressure of the gas within the measuring instrument and/or installation pipework and is not separated from the measurement device by buried pipework, except short lengths specifically included in the installation design for access purposes.

Note 1: A "low pressure" regulator is a device with MOP upstream not exceeding 75 mbar that maintains a controlled outlet pressure within pre-determined limits of accuracy under flow conditions and ensures that the downstream pressure is kept within acceptable limits under no-flow conditions.

Note 2: A "medium pressure" regulator is a device with MOP upstream exceeding 75 mbar but not exceeding 2 bar that maintains a controlled outlet pressure within pre-determined limits of accuracy under flow conditions and ensures that the downstream pressure is kept within acceptable limits under no-flow conditions. This may include integral safety devices, for example slam-shut valves.

metering pressure

The pressure of the gas passing through the metering element and measured at the pressure reference point (Pr).

**Natural Gas** 

For the purposes of the MAMCoP natural gas is a gas meeting the purposes of the GS(M)R.

network

As defined in the Gas Safety (Management) Regulations 1996, Great Britain's Gas Transportation Infrastructure. The Network comprises interconnecting pipes which are downstream of a gas reception terminal, processing facility, storage facility or importing interconnector, and used for the conveyance of gas to consumers as defined in GS(M)R.

*Note:* A "network" is part of the "Network".

**Network Code** 

The Network Code (NC) is the hub around which the competitive gas industry revolves, comprising a legal and contractual framework to supply and transport gas.

normative standard

Industry Standard approved by the UK, European or International Standards agency.

Ofgas

The Office of Gas Supply. Formerly the regulator for Britain's gas industry, but now superseded by Ofgem.

**Ofgem** 

The Office of Gas and Electricity Markets. Ofgem is the regulator for Britain's gas and electricity industries.

# Ofgem approved meter installer (OAMI)

Ofgem registered gas meter installers with a specific meter installation qualification.

# operating pressure (OP) operator (of a pipeline)

The pressure to which a pipe or component is subjected in normal operation.

The person who is to have or (once fluid is conveyed) has, control over the conveyance of fluid in the pipeline.

# premises (HASAWA 1974)

"Premises" includes any place, and in particular, includes:

- (a) any vehicle, vessel, aircraft or hovercraft,
- (b) A piece of land together with any buildings thereon. Formally, any installation on land (including the foreshore and other land intermittently covered by water) any offshore installation, and any other installation (whether floating or resting on the seabed or subsoil thereof, or resting on other land covered with water or the subsoil thereof) and
- (c) any temporary tent or movable installation.

Note:

"Domestic premises" means premises occupied as a private dwelling (including any garden, yard, garage, outhouse or other appurtenance of such premises which is not used in common by the occupants of more than one such dwelling), and "nondomestic premises" are construed accordingly.

# pressure regulating installation (PRI)

An assembly of equipment designed to regulate, or reduce, the pressure of gas. A PRI comprises all pressure-containing and associated equipment between the upstream face of the PRI inlet valve (IV) and the downstream face of the PRI outlet valve (OV).

### priority consumer

A consumer type, such as hospitals, for whom the potential consequences of a loss of gas supply are such as to warrant priority status under Department for Trade and Industry criteria.

### primary meter

A gas meter, the index reading of which constitutes the basis of charge for all gas supplied through that meter.

Note: This definition is a variation of the legal definition taken from GS(I&U)R..

# recommended gas supply arrangements

Gas supply arrangements that are recognised by IGE/G/1, its drafting Panel, and gas industry representatives on IGEM's Technical Committees, and other endorsing bodies, as being preferred arrangements.

### **Registration Body**

A body appointed by SPAA to manage the registration scheme for the approval of MAMs, who demonstrate that they operate within the requirements of MAMCoP.

# regulator/PRI inlet valve (PRIIV)

A valve fitted upstream of, and adjacent to, a regulator/PRI to shut off the supply of gas.

# regulator/PRI outlet valve (PRIOV)

A valve fitted downstream of, and adjacent to, a regulator/PRI to shut off the supply of gas.

### relief valve

A valve which automatically opens at a pre-determined pressure to vent gas so as to relieve the pressure in a gas system.

### service (pipe)

A pipe for conveying gas to premises from a distribution main, being any pipe between a distribution main and the outlet of the ECV.

*Note:* The service (pipe) is, normally owned or is the responsibility of a GT.

shipper Holder of a licence authorising that person to arrange with any gas

transporter for gas to be introduced into, conveyed by means of, or taken out of a pipeline system operated by that transporter, as defined in the Gas Act.

**slam-shut valve** A valve that is designed to close quickly in the event of an abnormal (usually

excess) pressure being detected downstream and which requires manual

intervention to reset.

SPAA The Supply Point Administration Agreement established under the gas

supply licences (as such agreement is amended from time to time).

**supplier** As defined in the Gas Act.

**work instruction** Formal written document used to control work.

# Annex 5: Connection and Disconnection Notification – Information Requirements

RGMA Processes and Data provides standards for information to be passed to relevant market participants to meet the GM(C&D)R. The Regulations require the following information:

# 1 Relevant Gas Supplier (or Gas Transporter)

Contact and Address.

# 2 Description of Work

- connect a meter
- disconnect a meter
- disconnect a meter and then connect a meter with and/or from a service pipe through which gas is conveyed to premises.

# **3** Further Information Relating to the Connection and/or Disconnection

Details of proposed connection and/or disconnection:

(a)	<i>time</i> a	m/pm/	(day)/	(month)/	(year); and
(b)	place	(no. (if a	any) and stree	t)(town)	)(postcode)

Any meter-point reference number or code which the person making the connection or disconnection reasonably believes to have been assigned by a public gas transporter for identifying the point at which the meter measures the gas conveyed by the GT.

#### **Contractor Details**

The name of the person undertaking the connection and/or disconnection.

In the case of a connection, whether the person making the connection is an approved person within the meaning of Condition 22(6) of the Standard Conditions of Gas Suppliers' Licences.

### 5 Meter Information

Connection and Disconnection:

The register(s) of the meter(s) at the time of the connection and or disconnection.

In the case of a connection, where known, the following details should be recorded:

- (a) type and model of the meter
- (b) whether the meter is a pre-payment meter
- (c) manufacturer of the meter
- (d) year of manufacture of the meter
- (e) serial number of the meter
- (f) measuring capacity of the meter
- (g) units in which the register of the meter is expressed, including any multiplication factor for the number of units
- (h) the name and address of the owner of the meter.

In the case of a disconnection, where known, the serial number of the meter should be recorded.

# 6 Other Devices ("Converter")

### Connection:

- (a) model of the converter
- (b) manufacturer of the converter
- (c) year of manufacture of the converter
- (d) serial number of the converter
- (e) the converted and (if appropriate) any unconverted reading of the register of the converter at the time of connection
- (f) which one or more of the following the converter operates in respect of: temperature, pressure, compressibility, density.

### Disconnection:

- (a) serial number of the converter
- (b) the converted and (if appropriate) any unconverted reading of the register of the converter at the time of disconnection.

# 7 **By-passes**

Whether a meter by-pass is fitted or proposed to be fitted at the time of the connection or disconnection.

### **8** Meter Collars

Whether a meter collar is fitted, or proposed to be fitted, at the time of the connection or disconnection.

### 9 **Signature**

Of, or of a person on behalf of, the person giving the notice, and in the latter case a statement of the capacity of the signatory.

### 10 **Date of Notice**

The date of the notice of the connection/disconnection shall be recorded.

# **Annex 6: Meter By-Pass Provision and Use**

# 1 Requirements

- 1.1 This annex specifies the requirements for the:
  - provision of a by-pass
  - actions to be taken when a by-pass is operated
  - sealing of a by-pass valve
  - basis for estimating the quantity of gas when a by-pass is used by the MAM.

# 2 **Definition of a Meter By-Pass**

- 2.1 A meter by-pass comprises gas fittings through which the flow of gas can be diverted, so as not to pass through the meter, and thereby secure the continued offtake of gas in the event of any failure or maintenance of the meter or which would otherwise impede the flow of gas.
- 2.2 The meter by-pass must not by-pass the meter regulator or any other pressure control or pressure protection device which comprises the meter installation.

### **Purpose of a Meter By-Pass**

- 3.1 A meter by-pass may be used to:
  - provide a ready method of maintaining a supply of gas should the meter fail and insufficient gas is available to satisfy the agreed maximum flow rate at the meter point; and/or
  - allow a meter to be replaced, recalibrated, checked or maintained without interruption to the gas supply.

## 4 Provision of a Meter By-pass

- 4.1 A meter by-pass would normally be considered where the provision of a meter by-pass would, in the gas supplier's opinion, be prudent in order to avoid the risk of personal injury or death or damage to property (including prejudice to animal welfare) arising from a fault on the meter or metering installation component and where gas is supplied to the following types of premises:
  - (a) hospitals
  - (b) institutionalised accommodation (for example homes for the elderly, schools, and prisons)
  - (c) premises utilising large or complex plant supporting continuous bulk manufacturing (for example agricultural, baking or other commercial processes) and in analogous circumstances
  - (d) and at meter installations connected to:
    - exceptionally extensive and complex pipework and gas consuming plant
    - multi-occupied premises or a number of discrete consumers (for example a single meter installation serving a block of flats).

# 5 Gas Supplier's Approval

- 5.1 In extraordinary cases where the MAM considers it appropriate for a by-pass to be provided then the MAM shall:
  - (a) submit a written request to the gas supplier including justification for the by-pass
  - (b) receive the gas supplier's written consent before agreeing to install the by-pass in accordance with the relevant Ofgem Code of Practice (COP 1/b or COP 1/c)
  - (c) provide confirmation to the gas supplier of completion of the by-pass installation.

# 6 Gas Transporter's Approval

As required by the network code, the MAM shall gain approval from the GT for the provision and use of a by-pass.

# 7 Existent Meter By-Passes and Removal of Meter By-Passes

- 7.1 The MAM shall determine whether any existent meter installation by-pass, under their commercial arrangements, is approved by the gas supplier.
- 7.2 Meter by-passes incorporated at meter installations remain in place unless the approval under Section 5 is revoked, in which case the by-pass shall be removed.

# 8 Sealing of By-Pass Valves and Equipment

A by-pass shall be sealed on first installation by the MAM and resealed after use using a seal displaying the organisation or Gas Safe registration number.

# 9 **Operation of a By-Pass**

- 9.1 In the event that the by-pass has to be opened by the MAM the following should be carried out:
  - (a) all relevant information shall be recorded in accordance with Network Code
  - (b) providing a safe situation exists, the meter by-pass valve seal should be broken and the valve slowly opened
  - (c) the meter inlet valve should be turned off slowly and continuity of supply confirmed downstream of the by-pass
  - (d) the meter outlet valve should be turned off slowly and continuity of supply confirmed
  - (e) the MAM shall advise the gas supplier when the by-pass has been opened and provide relevant information in accordance with Network Code.

# 10 Actions to be Taken Should the Meter By-Pass Seal be Found Broken

- 10.1 If the MAM identifies that the by-pass seal is broken a responsible person on site should be contacted and a written record of all the details and actions shall be made.
- 10.2 Action should be taken according to Sub-Section 11 below if theft of gas is suspected.
- 10.3 The gas supplier shall be advised of broken seals.
- 10.4 Arrangements shall be made for the by-pass valve to be resealed.

- Actions to be Taken Should the By-Pass be Found in the Open Position and no Notification has Been Made to the Gas Supplier
- 11.1 The responsible person on site must be advised that the by-pass has been found open. Both the date and time of the notification and the time at which the by-pass was found to be open must be recorded. If there is no apparent reason to why the by-pass is open, then arrangements must be made with the gas supplier and consumer for the by-pass to be closed safely and the by-pass valve resealed. If the by-pass is left open the purpose should be identified as to why the by-pass is left open. In either circumstance the relevant gas supplier shall be notified.
- Where the MAM suspects that there has been theft of gas then the relevant gas supplier shall be notified.

# **Annex 7: MAMCoP Processes and Procedures**

### 1 Assessment

# 1.1 Approval

Section 4 (*Approval of Meter Asset Managers*) of Schedule 32 to the SPAA shall apply as if it were included within this MAMCoP.

### 2.1 **Audit Arrangements**

Section 5 (*Audit of Meter Asset Managers*) of Schedule 32 to the SPAA shall apply as if it were included within this MAMCoP.

### 2 **Enforcement**

### 2.1 Referral to the Breach Committee

Section 6 (*Referral to the Breach Committee*) of Schedule 32 to the SPAA shall apply as if it were included within this MAMCoP.

### 2.2 MAMCoP Investigation Process

Section 7 (*MAMCoP Investigation Process*) of Schedule 32 to the SPAA shall apply as if it were included within this MAMCoP.

### 2.3 Suspension/Withdrawal of approval

Section 8 (Suspension and or Withdrawal of Approval) of Schedule 32 to the SPAA shall apply as if it were included within this MAMCoP.

## **3** Change Process

3.1 Section 10 (*MAMCoP Change Process*) of Schedule 32 to the SPAA shall apply as if it were included within this MAMCoP.

### 4 Interpretation of SPAA provisions

- 4.1 Where a provision of the SPAA applies as if it were included within this MAMCoP, that provision shall have the meaning which is given to it in the SPAA.
- 4.2 Where a provision of the SPAA applies as if it were included within this MAMCoP, the provision which shall apply shall be the provision as amended from time to time.

---END---