# Code of Practice for Meter Asset Managers and Approved Meter Installers

Version: 1.1

Effective Date: 01 September 2021

# Version Control

MCoP Version	Implementation Date	Start Date for Auditing Purposes
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### **Preface**

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. The efficient operation of the gas supply market requires parties to conform to certain operational procedures and to ensure that information is passed in prescribed manners.

The introduction of competition into the gas metering industry created an opportunity for Meter Installer and Meter Asset Manager (MAM) businesses. At the outset, different codes of practice applied in respect of MAMs and Meter Installers, and for different categories of meter installation.

In April 2017, the three Meter Installer Codes of Practice (1a, 1b, 1c) were combined into one document (AMICoP) since much of the material in each of these previous documents was similar and the content had generally been revised in the light of experience gained since their original publication in July 1996. The MAM Code of Practice had undergone continuous review and amendment. The different review processes had resulted in a situation where the MAM and AMI Codes of Practice used differing terminology and potential scope for ambiguity of accountability.

In 2020, the MAM and AMI codes were reviewed and consolidated to form this Code of Practice (MCoP) which provides a framework within which approved MAM's and AMIs will be required to operate. This MCoP provides new and existing MAM's and AMIs 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.

Where possible, this document is structured such that 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 set out the specific requirements. Where requirements differ for meter installations operating at different pressure levels, this is made clear in the text.

The original documents upon which this one is based were prepared with the help of a number of institutions, participants in the gas supply industry, consumer representative bodies, meter manufacturers, data collection companies, the caring agencies and individuals and we would like to acknowledge their assistance.

This document was originally given effect 1 January 2021 [and/will be incorporated in its entirely into the REC with effect 1 September 2021, with references changes as appropriate].

		Respoi	nsibility		Work C	Category	/
	Clause	MAM	AMI	C1	C2	C3	C4
1 Sc	ope						
1.1	Scope of this Metering Code of Practice (MCoP)						
1.1.1	This Metering Code of Practice (MCoP) specifies the requirements that apply to and the duties to be undertaken by anyone (including Independent Gas Transporter) acting as:	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
	<ul> <li>An Approved Meter Asset Manager (MAM), and/or</li> <li>An Approved Meter Installer (AMI),</li> </ul>						
	This MCoP covers primary gas supply meter installations connected to the Network as defined by the Gas Safety (Management) Regulations (GS(M)R) in Great Britain and conveyed to premises by a Gas Transporter (GT) for billing by a Gas Supplier.						
арре	: The MCoP utilises the definition of the meter installation which appears in IGEM/G/1. Where a situation ars to be within the scope of the MCoP, but it is not explicitly covered, reference is to be made to the REC desk for guidance.						
1.1.2	The MCoP specifies the activities involved in the management of the life cycle of the meter installation as defined IGEM/G/1 and sets out the minimum standards that shall be complied with by those registered to perform work within the scope of this document. Each activity is dealt with in its own section.	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>
oblig	: Individual gas consumers, who undertake legal duties for their own gas meter installation(s) are not ed to register as a Meter Asset Manager. However, this document refers to the statutory responsibilities provides guidance to all persons responsible for any gas meter installation.						
1.1.3	Meter Installations are designed to operate with specific characteristics, e.g. pressure and flow-rate, and different technical standards apply depending upon such design characteristics. The different categories of installation and therefore works are specified in Table 1 (of Appendix 1).	<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
1.2	Exclusions						
1.2.1	The temporary disconnection of a meter, and its reconnection, to allow for safe working on gas installation pipework downstream of the meter installation, is not deemed to be meter installation work within the scope of this MCoP. Such work is subject to the requirements of the Gas Safety (Installation and Use) Regulations (GS(I&U)R) See Gas Safe Bulletin TB-127 'Gas Industry guidance on work on meter installations'. This exclusion does not apply to the re-location of a meter installation, as this is to be considered meter installation work.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>

		Respor	nsibility		Work C	ategor	/
	Clause	MAM	AMI	C1	C2	С3	C4
1.3	Responsibilities						
1.3.1	As set out in Schedule [xx] of the REC, Changes to this MCoP will be made in In accordance with the REC Change Management procedures, generally overseen by the Metering Group. Additionally, the REC Performance Assurance Board will be responsible for the operational governance of the MCoP, including investigating alleged matters of non-compliance, but not for arbitration of any subsequent commercial disputes.	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>
1.3.2	The 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 and shall ensure that all such works are undertaken in accordance with this MCoP.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
1.3.3	The AMI shall be responsible for ensuring that they understand and comply with the scope of work required in relation to installation, replacement, maintenance and or removal of meters and/or meter installation components and shall ensure that all such works are undertaken in accordance with this MCOP.		<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>
1.3.4	The AMI and MAM shall be responsible for;	✓	✓	✓	✓	✓	✓
	<ul> <li>the secure and safe handling of any metering equipment in their control and,</li> <li>for the passing of relevant information (including any meter losses or the illegal use of meters) to</li> <li>the meter owner,</li> <li>the MAM,</li> <li>Gas Supplier, or GT.</li> </ul>						
1.3.5	Information: The Office for Product Safety and Standards (OPSS), a directorate within the Department for Business, Energy and Industrial Strategy (BEIS), has the statutory responsibility for the metrological performance of gas meters (this was transferred from Ofgem on 1st April 2009). OPSS are responsible within Great Britain for ensuring that the regulations covering pattern, construction, manner of marking and stamping of meters, are enforced, as required by the Gas Act and the Measuring Instruments Directive, enacted in the UK as the Measuring Instruments Regulations 2016 and for the subsequent testing of such meters where accuracy is disputed.	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

# 2 Definitions

		Respo	nsibility		Work C	Categor	у
	Clause	MAM	AMI	C1	C2	C3	C4
additional emergency control valve (AECV)	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.	<b>√</b>	<b>√</b>	✓	✓	✓	✓
ancillary equipment	Any equipment connected to the metering equipment but not forming part of the metering installation e.g. data logger	<b>✓</b>	<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>
Approved meter installer (AMI)	An organisation approved by and registered with REC that is contracted to carry out gas meter work for the MAM, Supplier, GT or a gas user (or group of gas users).	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
automatic meter reading equipment (AMR)	Equipment that enables gas meters to be read automatically (i.e. remotely).	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
badged meter	A gas meter which has been stamped and/or approved by BEIS or other metrological authority acceptable to BEIS, as legal metrology and which operates within prescribed statutory limits.	<b>√</b>	<b>√</b>	✓	<b>√</b>	✓	<b>√</b>
business process	A process in place between the person placing the contract and MAM, by which work related information is exchanged. This may include RGMA processes.	<b>√</b>	<b>√</b>	✓	✓	✓	✓
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.	<b>√</b>	<b>√</b>	✓	✓	✓	✓
commercial arrangements	The processes, practices and contracts that an organisation or person has in place to manage their undertaking.	<b>√</b>	<b>√</b>	✓	✓	✓	✓
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.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
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.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓
consumer	An end-user of gas.	✓	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

		Respo	nsibility		Work (	Categor	У
	Clause	MAM	AMI	C1	C2	СЗ	C4
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.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓	<b>√</b>
design minimum pressure (DMP)	Minimum pressure that may occur at a point (for example at the end of a service) at the time of system design flow rate under extreme gas supply and maintenance conditions	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
design pressure (DP)	The pressure on which design calculations are based.	✓	✓	✓	✓	✓	✓
Department for Business, Energy and Industrial Strategy (BEIS)	The organisation responsible for the metrological performance of gas meters (this was transferred from Ofgem on 1 April 2009).	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
diaphragm meter	A positive displacement meter in which the measuring chambers have deformable walls.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
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.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
electronic meter	A meter that infers the volume of gas passing through it, for example by means of the behaviour of an ultrasonic beam.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
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.	✓ ·	<b>√</b>	✓	✓	✓	✓
	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 who responds to an escape of gas.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Gas Act Owner (GAO)	The organisation or person responsible that has the legal responsibility for providing the installed meter for the correct measurement of gas consumption, and for maintaining the meter installation in proper order, as required by the Gas Act. This may be Consumer, Supplier or Transporter. This will be determined at connection by agreements	✓	<b>√</b>	✓	✓	✓	<b>√</b>

		Respo	nsibility		Work (	Categor	У
	Clause	MAM	AMI	C1	C2	СЗ	C4
	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.  Note: There may be bilateral agreements to transfer the Gas Act						
gas conveyor	Ownership of a meter after installation.  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.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>
gas fittings	For the purpose of this MCoP, 'gas fittings' has the same meaning as in IGEM/G/1	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
gas meter	For the purpose of this MCoP, 'gas meter' has the same meaning as in IGEM/G/1	<b>√</b>	<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>
Gas industry unsafe situations procedure (IGEM/G/11)	The Procedure used by Gas Safe registered businesses/engineers when dealing with unsafe situations in domestic and non-domestic premises supplied with natural gas or liquefied petroleum gas (LPG)	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
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.	<b>√</b>	<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>
gas transporter (GT)	A company, licensed by Ofgem, which transports gas through its network on behalf of a gas shipper.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓
independent gas transporter (IGT)	An independent company, licensed by Ofgem, which transports gas through its network on behalf of a gas shipper.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓
Institution of Gas Engineers and Managers (IGEM)	A Professional gas engineering institution, licensed by the Engineering Council, which publishes gas engineering standards	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
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.	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	✓	<b>✓</b>
lowest operating pressure (LOP)	The minimum pressure which a system is designed to experience under normal operating conditions.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓
maximum incidental pressure (MIP)	The maximum pressure which a system is permitted to experience under fault conditions, limited by safety pressure devices.	✓	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

		Respo	nsibility		Work (	Categor	У
	Clause	MAM	AMI	C1	C2	C3	C4
maximum operating pressure (MOP)	The maximum pressure at which a system can be operated continuously under normal operating conditions.	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
meter asset manager (MAM)	The organisation who manages a portfolio of meter installations on behalf of their client. The MAM is responsible and is 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.	✓	✓	✓	<b>✓</b>	<b>√</b>	<b>✓</b>
	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.	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
	Note: 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.						
Metering Group	A body established in accordance with Terms of Reference agreed by the REC Change Panel as having delegated authority to propose and manage changes to this MCoP, and to provide a forum for discussion of matters pertinent to the safe and efficient operation of MAMs and AMIs.	✓	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
meter inlet valve (MIV)	A valve fitted upstream of, and adjacent to, a gas meter to shut off the supply of gas to the meter.	✓	<b>√</b>	<b>√</b>	✓	<b>√</b>	<b>√</b>
Meter installation	For the purpose of this MCoP, meter installation shall have the meaning as in IGEM/G/1	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

		Respo	nsibility		Work (	Categor	у
	Clause	MAM	AMI	C1	C2	СЗ	C4
Meter installation component	Any component of the meter installation other than a meter (as defined in the IGEM/G1	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓
meter installation inlet valve (MIIV)	A valve fitted upstream of all the other meter installation components to shut off the supply of gas.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
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.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
meter outlet adaptor	A fitting which facilitates the connection of a gas consumer's installation pipework to the outlet of the meter.	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
meter outlet valve (MOV)	A valve fitted downstream of, and adjacent to, a gas meter, to shut off the supply of gas from the meter.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
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.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
meter regulator	As defined in IGEM/G/1.	✓	✓	<b>√</b>	<b>√</b>	<b>√</b>	✓
metering pressure	The pressure of the gas passing through the metering element and measured at the pressure reference point.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Natural Gas	For the purposes of this MCoP natural gas is a gas meeting the purposes of GS(M)R.	<b>√</b>	<b>√</b>	<b>√</b>	✓	<b>√</b>	✓
network	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	✓	✓	✓	<b>√</b>	<b>√</b>	<b>√</b>
Network Code	The legal and contractual framework to supply and transport gas.	✓	✓	✓	✓	✓	✓
(or Uniform Network Code (UNC))							
normative standard	Industry Standard with which this MCoP may require compliance	✓	✓	✓	✓	✓	✓
Ofgas	The Office of Gas Supply. Formerly the regulator for Britain's gas industry, but now superseded by Ofgem.	✓	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Ofgem	The Office of Gas and Electricity Markets. Ofgem is the regulator for Britain's gas and electricity industries.	✓	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

		Respo	nsibility		Work (	Categor	У
	Clause	MAM	AMI	C1	C2	C3	C4
operating pressure (OP)	The pressure at which the gas system operates under normal conditions.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
operator (of a pipeline)	The person who is to have or (once fluid is conveyed) has, control over the conveyance of fluid in the pipeline.	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
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 "non-domestic 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).	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>
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 Business, Innovation and Skills (BEIS) criteria.	✓	√	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
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.	<b>√</b>	<b>√</b>	✓	✓	✓	<b>~</b>

		Respo	nsibility		Work (	Categor	У
	Clause	MAM	AMI	C1	C2	C3	C4
REC	The Retail Energy Code, established under the licence to provide governance for energy retail arrangements, including retail metering.	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
recommended gas supply arrangements	Gas supply arrangements that are recognised by IGEM/G/1, its drafting Panel, and gas industry representatives on IGEM's Technical Committees, and other endorsing bodies, as being preferred arrangements.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Registration Body	Shall mean the REC Code Manager or any successor body appointed by RECCo to manage the registration scheme for the approval of MAMs, who demonstrate that they operate within the requirements of MCoP.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
regulator/PRI inlet valve (PRIIV)	A valve fitted upstream of, and adjacent to, a regulator/PRI to shut off the supply of gas.	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
regulator/PRI outlet valve (PRIOV)	A valve fitted downstream of, and adjacent to, a regulator/PRI to shut off the supply of gas.	<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
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.	✓	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
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 granted by OFGEM authorising that person to arrange with any GT 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.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
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.	<b>√</b>	<b>√</b>	<b>√</b>	✓	<b>√</b>	✓
Supplier	As defined in the Gas Act.	✓	✓	✓	✓	✓	✓
work instruction	Formal written document used to control work.	✓	✓	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>√</b>

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
3 Intr	roduction						
3.1	Introduction to this MCoP						
3.1.1	This MCoP sets out the framework with specific requirements and duties of a REC approved Meter Asset Manager (MAM) and an Approved Meter Installer (AMI) as referred to in standard condition 12 of the Gas Supplier Licences.	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
	This MCoP details the rules dealing only with the business interfaces between organisations and not the ercial content of the associated agreements that facilitate the interfaces.						
3.1.2	With effect 1 September 2021, REC administers the MAM and AMI schemes. Where a provision of the REC Schedule applies as if it were included within this MCoP, that provision shall have the meaning which is given to it in the REC Schedule as amended from time to time	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
3.1.3	The Metering Group provides a forum to manage this MCoP including the management of a formal change process, decision making and communications (for further information go to <a href="https://www.retailenergycode.co.uk">www.retailenergycode.co.uk</a> ).	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
3.1.4	Any enquiries regarding this document should be addressed to: [info@retailenergycode.co.uk]	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
3.1.5	This MCoP assumes that the Gas Supplier, GT or consumer has arrangements with MAMs/AMIs to undertake meter work and/or asset management activities.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
3.1.6	This MCoP is designed to cover all technical requirements for activities to be undertaken by the MAM or AMI. Where possible, this document is structured such that metering activities are dealt with in the order they occur in the life cycle of the meter installation.	✓	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
3.1.7	<ul> <li>In this MCoP, the terms "should", "shall" and "must" have the following meanings:</li> <li>the term "must" identifies a requirement by law in Great Britain (GB) at the time of publication</li> <li>the term "shall" prescribes a requirement which, it is intended, will be complied with in full and without deviation</li> <li>the term "should" prescribes a requirement which, it is intended, will be complied with unless, after prior consideration, deviation is considered to be acceptable.</li> </ul>	<b>√</b>	<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>V</b>

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
3.1.8	A table is provided in Appendix 1 that shows the Legislation and Technical Standards applicable to each category of work. Legal requirements listed are those that relate most specifically to that category; these are not exhaustive. Wherever references are made to legislation as Acts or Regulations, such reference shall be to the latest version of the Act or Regulation. The obligations within Legislation together with any associated licences, take precedence over this CoP where a conflict is identified.	<b>✓</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>
3.2	Obligations						
3.2.1	Gas Suppliers are obliged by the standard conditions of the Gas Supplier Licences to fulfil certain duties some of which, relate to the metering arrangements. A Gas Supplier cannot delegate its licence obligations to an agent and is always responsible for ensuring obligations are met.  Nevertheless, this MCoP requires the MAM and AMI (where acting on behalf of a Gas Supplier) to act in accordance with these licence obligations (to the extent relevant to the activities being undertaken). It is recommended that all MAMs/AMIs gain an understanding of what is expected of Gas Suppliers. Copies of the standard conditions of Gas Supplier Licences can be obtained from Ofgem.	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>
3.2.2	The Gas Act places obligations on several parties besides GTs, Gas Shippers and Gas Suppliers. These include meter owners and gas consumers. It is recommended that MAMs and AMIs understand these Gas Act obligations. Most of the meter related obligations are to be found in Schedule 2B of the Gas Act. Copies of the Gas Act can be obtained from Her Majesty's Stationary Office.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
3.2.3	Where the MAM and AMI contracts work within the scope of this MCoP to another party, it is the responsibility of that MAM and AMI to ensure that the sub-contractor complies with the relevant requirements of this MCoP and that it is competent in the field of work for which it is contracted.	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

		Respor	nsibility		Work C	Category	/
	Clause	MAM	AMI	C1	C2	C3	C4
4 App	provals						
4.1	Approval to Operate						
4.1.1	The MAM shall manage its meter installations throughout their complete lifecycle.	✓		✓	✓	✓	✓
4.1.2	The MAM and AMI shall ensure that its actions and procedures are in accordance with the relevant requirements of this MCoP.	<b>√</b>	<b>√</b>	✓	✓	✓	✓
4.1.3	The MAM and AMI may gain REC approval by demonstrating to the appointed Registration Body that it is able to comply with the relevant requirements of this MCoP on an ongoing basis. This will be done via an initial audit followed by an on-going audit regime (see REC Portal: [insert address]). The MAM and AMI will be assessed against the relevant requirements of this MCoP.	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>
4.1.4	Work undertaken by MAMs and AMIs is authorised according to the categories defined in Table $1-$ Appendix $1$	<b>√</b>	<b>√</b>	✓	✓	✓	<b>√</b>
4.1.5	The MAM and AMI 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.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
4.2	Audit by Registration Body						
4.2.1	Having gained approval, the MAM's and AMI's quality of work and adherence to this MCoP will be monitored through routine surveillance audits and reassessment in accordance with [Schedule XX of the REC]. The MAM and AMI shall permit and co-operate with audits and respond to any requests for information which the Registration Body Auditor makes for the purpose of carrying out such audit.	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
4.3	Contact information and method of communication						
4.3.1	The MAM and AMI shall provide a relevant contact email address to REC and shall notify REC within 10 working days if this information is amended.	<b>√</b>	<b>√</b>	✓	✓	✓	<b>√</b>
4.3.2	The MAM and AMI seeking REC approval shall be compliant with the RGMA baseline and conform with the industry standard methods of communications. Work data flows shall conform to the relevant parts of the RGMA processes.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
4.3.3	The MAM shall confirm to REC the method of communication it uses to send data required by the RGMA baseline. MAMs shall also provide their Market Participant Short code. This data will be hosted on a secure section of the REC Portal and will be verified as a part of the MAMs audits. The MAM shall notify REC within 10 working days if this information is amended	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

		Respor	nsibility		Work C	Category	/
	Clause	MAM	AMI	C1	C2	C3	C4
4.4	Liability Insurance						
4.4.1	The MAM and AMI must maintain adequate Public and Employers Liability Insurance.	✓	✓	✓	✓	✓	✓
	Whilst minimum cover of £5,000,000 per incident is considered satisfactory for most situations, a higher cover may be appropriate.						
4.5	Legislation						
4.5.1	The MAM and AMI must meet the requirements of relevant legislation and shall comply with relevant standards and codes of practice. There are several general health and safety requirements that apply to this MCoP, in particular:	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
	<ul> <li>a) The Health &amp; Safety at Work etc Act 1974 (HASAWA) 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.</li> <li>b) The Management of Health and Safety at Work Regulations 1999 as amended (MHSWR) require</li> </ul>						
	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.						
	c) For domestic and commercial premises, GS(I&U)R must be applied in all appropriate circumstances. 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.						
	d) For Installations within non-domestic premises, the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) must be complied with, including Hazardous Area Assessment and provision of reports with drawings in line with IGEM/GM/7 or IGEM/SR/25.						
	e) The Pressure System Safety Regulations and Pressure Equipment Regulations must be complied with where applicable, including design control and approval processes, and inspection regimes.						
	f) 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 must be complied with (see Appendix 3).						
	g) Where any part of a meter installation is located upstream of the ECV the Gas Safety (Management) Regulations (GSMR) apply for the upstream part. GSMR place additional						

		Respoi	nsibility		Work C	Category	/
	Clause	MAM	AMI	C1	C2	C3	C4
	responsibilities on the MAM and the AMI in several respects, including regarding a Safety Case and required competencies for working on the Network						
4.6	Standards						
4.6.1	The MAM and AMI shall comply with the relevant Technical Standards in accordance with Appendix 1 for all aspects of work being undertaken, e.g. planning, design, installation, commissioning, maintenance, removal and disposal.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
4.7	Quality System						
4.7.1	The MAM and AMI shall have in place a quality management system which shall include the following elements:  a) competencies, knowledge, and experience of persons employed  b) management responsibility  c) verification of resources and personnel  d) design control  e) purchasing  f) process control and work management  g) inspection and testing  h) continuous improvement report and corrective action  i) handling, storage, packaging and delivery  j) quality records and passing on of information  k) internal quality audits  l) document development  m) training	<b>*</b>	<b>\( \)</b>	<b>\</b>			<b>\(\sigma\)</b>
MAM c	n) maintenance o) technical support.  Although certification to BS EN ISO 9001 or ISO 55000 is not a mandatory requirement of the MCoP, any or AMI accredited to either of these Standards will be deemed to have complied with the requirements of b-section 4.7.1						
4.8	Investigation, Suspension and Withdrawal						
4.8.1	The processes for investigating alleged breaches of this MCoP, for determining disputes in relation to compliance with this MCoP, and for suspending or withdrawing approval in respect of this MCoP are set out in [Schedule XX] of the REC. MAM and AMI approval may be withdrawn by the PAB in accordance with [Schedule XX].	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

		Respor	nsibility		Work C	ategor	/
	Clause	MAM	AMI	C1	C2	СЗ	C4
5 Perf	formance assurance and audit of activities						
5.1	General						
5.1.1	The MAM and AMI shall regularly undertake audits of all their activities covered by the scope of this MCoP. These include activities performed directly by the MAM and AMI and those which have been delegated to others.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
5.1.2	The MAM and AMI shall have a documented audit procedure and a rationale regarding the levels of audit for particular work activities.	<b>√</b>	<b>√</b>	✓	<b>√</b>	✓	<b>√</b>
5.1.3	The audit procedure shall:	✓	✓	✓	✓	✓	✓
	<ul> <li>p) check that the meter installation is constructed in compliance with the appropriate industry standards;</li> <li>q) check that the works are conducted in compliance with the appropriate industry standards</li> <li>r) ensure that audits are periodically carried out by a technically competent person;</li> <li>s) 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;</li> <li>t) ensure that identified deficiencies are closed-out within reasonable time periods; and,</li> <li>u) record and retain audit reports detailing findings and any corrective actions.</li> </ul>						
5.1.4	Reports of internal technical audits shall be made available on request to the Registration Body.	✓	✓	✓	✓	✓	<b>√</b>

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
6 Com	npetency and Conduct						
6.1	Employee and contractor vetting						
6.1.1	The MAM and AMI shall operate a suitable employee and contractor vetting procedure.	<b>√</b>	<b>√</b>	✓	✓	✓	✓
Note: A	Appendix 6 provides an example of an employee vetting procedure.						
6.1.2	The MAM and AMI must ensure that persons attending site are fit and proper persons within the meaning of the standard condition of the Electricity and Gas Markets Authority Gas Suppliers Licence.	<b>√</b>	<b>√</b>	<b>√</b>	✓	<b>√</b>	<b>√</b>
6.1.3	Standard Condition 13 of Gas Supplier Licences requires that members of the public may readily confirm the identity or authority of a representative of the Gas Supplier. The MAM/AMI operatives shall carry at all times and show to a gas consumer when gaining access to premises, a valid identity card which shall include a photograph. The MAM and AMI shall control the issue, use and redemption of the identity cards for its employees.	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>√</b>
6.2	Technical competency						
6.2.1	The MAM and AMI shall ensure that all work under its control is undertaken by competent persons, having the appropriate training, assessment and certification.	<b>√</b>	<b>√</b>	✓	✓	<b>√</b>	<b>✓</b>
6.2.2	Any works undertaken by the MAM and AMI shall not cause gas consumption to be incorrectly registered.	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Note: T	his includes design work and meter selection activities						
6.2.3	Persons who work on meter installations must be competent to do so and for installations within the requirements of GS(I&U)R be a 'member of a class of persons' as specified in GS(I&U)R. A register is maintained of the businesses and engineers who are a 'member of a class of persons'. This register is administered by an agency appointed by the Health and Safety Executive.	<b>√</b>	<b>√</b>	✓	✓	✓	<b>√</b>
6.2.4	Where the MAM instructs a 'member of a class of persons' (as specified in GS(I&U)R), who is not an AMI, to install, replace or modify a Meter installation, the MAM shall ensure that the works are inspected by an AMI within 20 working days.	<b>✓</b>		<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>
6.2.5	Additional skills may be required for certain types of installations that use fabricated or welded components or meter installations that incorporate flow computers other conversion systems or other electronic instrumentation and control equipment. The MAM and AMI shall ensure that any person performing such work shall possess the necessary skills, qualifications and training to be competent for that work.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
6.2.6	The MAM and AMI shall ensure that persons engaged on the design and management of the metering 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.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
6.2.7	The MAM and AMI shall review the competency of its staff and sub-contractors on a periodic basis in accordance with a documented procedure:  The review of the competency shall be led by an Engineer or Manager who shall possess the	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>
	appropriate level of relevant operational experience within the gas industry, be registered with an appropriate professional institution and be at least Engineering Technician (Eng Tech) level. Higher qualifications may be required dependent upon the category of work undertaken by the organisation.						
	Where the Engineer or Manager who leads the competency review does not hold the required registration, they shall be supported by another person from within the company or an external consultancy which is appropriately accredited.						
	The competency of the designated Engineer or Manager shall relate specifically to the category of accreditation. The base line competency for categories 1, 2 & 3 to be at least Eng Tech and category 4 to be at least Incorporated Engineer (I Eng). Where the Engineer or Manager does not hold the relevant appropriate registration there should be evidence that the Engineer or Manager is seeking to progress to the required level.						
	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.						
6.3	Rights of entry						
6.3.1	The MAM and AMI may enter a gas consumer's property to perform meter work if the gas consumer allows them entry.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
6.3.2	Where the MAM or AMI is acting as the agent of a GT or Gas Supplier in reliance on the Gas Supplier's or GT's statutory rights of access, the MAM and AMI must comply with the provisions of the Rights of Entry (Gas and Electricity Boards) Act 1954 and the Gas Safety (Rights of Entry) Regulations 1996.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
6.3.3	Keys to a gas consumer's premises, or meter housing, may be issued. These shall be kept secure when in the MAM's and AMI's possession and returned promptly. Copies of keys shall not be made, and keys shall not be passed on to a third party.	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
	IAMs/AMIs only have statutory rights of entry where they are acting as the agents of a licensed GT or Gas r. MAM's and AMI's do not have any other automatic right of entry to a gas consumer's property.						

		Respor	nsibility	,	Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
6.3.4	The MAM and AMI shall not abuse its opportunity, or the gas supplier's obligations, to enter premises and homes for performing meter work to promote or sell products, services or advice to gas consumers. This does not affect the duties and responsibilities of MAM and AMI employees to recognise and respond to unsafe gas situations as required by the Gas Industry Unsafe Situations Procedure.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>*</b>
6.3.5	The MAM and AMI shall ensure that their employees are competent to handle complaints from gas consumers. As a minimum, they shall be able to identify the relevant party for complaints as appropriate e.g. billing and meter accuracy queries/complaints to the Gas Supplier.	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
6.4	Code of Conduct						
6.4.1	The MAM and AMI employees or persons working on their behalf shall follow a code of conduct at least equivalent to that described in Appendix 7.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
7 Plar	nning						
7.1	General						
7.1.1	Planning is the process that ensures an appropriate meter installation is provided, at the relevant meter point.	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>
7.1.2	The MAM and AMI shall take due consideration of the individual needs of all gas consumers. In particular, the MAM and AMI shall 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.	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.1.3	Whenever a meter is connected or disconnected as part of the work covered in this document the MAM and AMI must ensure that the requirements of Gas Meters (Information on Connection and Disconnection) Regulations GM(C&D)R and GS(I&U)R are complied with (see Appendix 3).	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.1.4	The MAM shall ensure that its planning process considers 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.	<b>~</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>
7.1.5	The exchange and validation of information between the relevant parties is essential to the success of the planning process. The MAM shall ensure that it obtains all the relevant information regarding the provision and subsequent operation of the meter installation, and any information required is supplied to the AMI.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.2	Specific						
7.2.1	The MAM and AMI shall identify the site and location of the intended meter installation by address and the relevant GT's Meter Point Reference Number (MPRN) or, if the MPRN is not known, the connection reference number.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.2.2	Reliable information relating to the nature and size of the load shall be obtained by the MAM from the Gas Supplier or consumer or the load shall be assessed using applicable load assessment procedures.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.2.3	The MAM shall obtain details of the gas consumer's requirements including:  a) Minimum and maximum flow rate,  b) The load profile,	<b>√</b>		<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
	<ul> <li>c) Any major seasonal variations of consumption,</li> <li>d) Range of acceptable pressures at the outlet of the meter installation;</li> <li>e) Any proposed use of compressors or engines,</li> <li>f) The proposed use of any associated compressed air or other extraneous gases.</li> </ul>						
7.2.4	The MAM shall obtain confirmation from the Gas Supplier or GT, as appropriate, of the availability of a gas supply to meet the gas consumer's requirements, and the range of supply pressures that will be available at the end of the gas service.	<b>✓</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
work in	there is a duty on all GTs to provide information, where requested to do so by a person proposing to carry out relation to a gas fitting, about operating pressures of the gas at the outlet of the service pipe. GTs have s in place for providing such information e.g. ENA GDN/PM/GT/1						
7.2.5	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.	✓		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.2.6	The MAM shall advise the gas consumer to formally notify the GT if it intends to use compressors or engines, or any associated compressed air or any other extraneous gases, in accordance with paragraph 17 of Schedule 2B of the Gas Act. The GT may, in these circumstances, decide that it needs to participate in the selection and specification of the protective equipment at the design stage.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.2.7	The MAM shall either specify or determine the metering pressure 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.	✓		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.2.8	The MAM shall ensure that the responsibility for the provision of any meter box, meter housing or meter compound is determined/agreed.	<b>√</b>		<b>√</b>	✓	✓	<b>√</b>
7.2.9	The MAM's 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.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.2.10	Where the housing is to be provided by the consumer, the MAM shall ensure that the consumer is made aware of the relevant design standards, and of the requirements specific to the installation, including as relevant;	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
	<ul> <li>a) Size</li> <li>b) Access</li> <li>c) Ventilation</li> <li>d) Need for explosion relief</li> <li>e) Need for instrument compartment</li> </ul>						

		Respor	nsibility		Work C	ategory	,
	Clause	MAM	AMI	C1	C2	C3	C4
	f) Accommodation for any creep reliefs.						
7.2.11	The MAM shall identify the location of the meter installation and the ECV. The MAM shall ensure that the meter installation location, the design of both the housing and the ECV are suitable, taking account of all of the relevant requirements including;  a) Adequate space for the meter installation b) Adequate access to the ECV and the meter installation c) Ventilation d) Hazardous areas e) Sources of ignition	✓		<b>✓</b>	<b>✓</b>	<b>✓</b>	✓
	f) Not compromising the means of escape in the event of fire g) Any other requirements the GT may have for approving the housing						
7.2.12	A suitable location and housing shall be agreed by the MAM with all interested parties (GT, AMI, gas consumer, developer)	<b>√</b>		<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.2.13	The MAM shall determine any restrictions imposed by the gas consumer in the interests of safety (for example the extent of any hazardous area that the gas 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.).	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.2.14	The MAM shall determine any requirements for accessibility for meter reading, maintenance, operation of the ECV and any ancillary equipment. Any requirement for automatic meter reading (AMR) equipment, volume conversion systems, data logging or telemetry shall be established and included within the design.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.2.15	The MAM shall determine the requirement for and responsibility for the provision of any additional services, including but not restricted to:  a) electrical supplies b) lighting c) drainage d) environmental protection and control plant or systems e) site security f) civil engineering g) instrumentation h) telemetry i) maintenance.	✓		✓	<b>✓</b>	<b>✓</b>	<b>✓</b>
7.2.16	The MAM shall establish the person or organisation having site occupier duties	<b>√</b>		<b>√</b>	<b>√</b>	✓	<b>√</b>

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	С3	C4
7.2.17	The MAM shall establish any requirements that the site occupier has for "safe working" (for example permits to work, risk assessments, method statements, authorisations, personal protective equipment etc.).	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.2.18	The MAM shall establish and comply with any requirement that the GT has for authorisations or approvals (for example the setting and sealing of the regulator, by-passes and housings). Where another party is responsible, e.g. the gas consumer providing a housing, the MAM shall advise them of the need for GT approval.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.2.19	The MAM shall establish and comply with any requirement that the GT or other upstream gas conveyor has for safe working.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.2.20	Any requirement for continuity of supply shall be established by the MAM in consultation with the GT, Gas Supplier or gas consumer.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.2.21	The accuracy of registration of the quantity of gas conveyed through the meter installation must be determined by the MAM from statutory requirements or, when enhanced accuracy is required, in accordance with the contractual requirements.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.2.22	For installations where, to meet the needs of the gas consumer for an enhanced accuracy requirement, deviation is required from recognised standards of measurement uncertainty, the MAM shall agree the deviation with the gas consumer and Gas Supplier.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.2.23	Visits to a gas consumer's home shall only be made with prior appointment except where a visit is made in respect of a suspected theft of gas, disconnection for non-payment, an emergency or with Gas Supplier's consent.	✓	<b>√</b>	<b>√</b>	<b>√</b>	✓	✓
7.2.24	Prior to installation, maintenance, replacement or removal of pre-payment meters, the MAM shall ensure that its AMI is provided with clear instructions regarding the mechanisms of transfer of any outstanding balance e.g. the handling of outstanding credit or the setting of the meter (unless the AMI is under direct instruction from the gas supplier). The AMI shall ensure that they are in possession of such instructions.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
7.2.25	The AMI shall not install, replace or remove a pre-payment meter without the approval of the Gas Supplier or the approval of the MAM.		<b>√</b>	✓	✓		
7.2.26	The size and complexity of meter work covered by this MCoP may include components which are not immediately available. The MAM and AMI shall consider this when planning the timescale for such meter work.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

		Responsibility		Work Category			
	Clause	MAM	AMI	C1	C2	C3	C4
7.2.27	The approval of the installation by the GT will be dependent on an assessment of the implications of the additional load on the system upstream of the meter installation. The MAM and AMI shall take account of the timescale for any reinforcement work that may be required and ensure that the meter installation is not commissioned prior to such reinforcement work being completed.	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>
7.2.28	Where the AMI becomes aware of a 3 <sup>rd</sup> party connection to the gas meter e.g. as a result of undertaking a survey, they shall notify the MAM of their findings		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
7.2.29	Where the MAM is aware of ancillary equipment on site, the MAM shall notify the gas consumer, Gas Supplier or GT as appropriate, so that suitable arrangements can be made in instances where equipment connected to the meter, such as Data loggers or AMR Equipment may be affected by work carried out on the meter installation.	<b>√</b>		<b>√</b>	<b>√</b>	✓	<b>✓</b>

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
8 Des	ign						
8.1	Design						
8.1.1	The MAM shall use the information obtained from the upstream (GT) and downstream (gas consumer) organisations to ensure that the design of the meter installation complies with the relevant Standards (see Appendix 1 and 2) and provides an appropriate pressure to the consumer under all circumstances.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
8.1.2	The MAM's design and specification process shall ensure that the meter installation and any meter installation components are appropriate to and suitable for use with the gas supply and downstream system.	<b>√</b>		<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>
8.1.3	The MAM shall ensure the design and specification of the meter installation and any meter installation components are 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.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
8.1.4	The following types of documentation shall be used by MAMs as appropriate to demonstrate that any meter installation components and ancillary equipment are suitable for the intended use:  a) letters of conformance b) a purchase specification c) material certificates d) test certificates e) hazardous area certification (i.e. demonstrating conformance to ATEX requirements and CE marked as appropriate for the hazardous area) f) suppliers' or manufacturers' literature.	<b>~</b>		<b>✓</b>	<b>✓</b>	<b>✓</b>	✓
8.1.5	The MAM shall ensure that its design and selection process considers the requirements for:  a) the appropriate registration of the quantity of gas conveyed through the meter installation  b) Gas Flow Variations, which could affect the size and type of meter  c) Large loads at elevated pressures where additional protection equipment may be required by the  GT  d) Any requirement for pigging facilities that may require additional space  e) the provision of suitable pressure for the safe operation of appliances  f) the integrity of the meter installation itself  g) the pressure control and protection system provided to the existing or planned downstream installation	✓		<b>√</b>	✓	✓	<b>V</b>

	consumer (rather than via the MAM) to install the meter, the AMI shall accept all the MAM responsibilities that would apply under this MCoP.  Use of Stamped Meters  Stamped meters shall be used as required by the current industry standards listed in Appendix 1 and 2 and must meet the requirements of the Gas Act or the Measuring Instruments Regulations, 2016 — SI 2016/1153. Meters shall have either official seals fixed to the meter (for meters approved up to 30 October 2006) or bear the 'CE' and 'M' markings and notified body identification number (for meters	Responsibility		y Work Category					
	Clause	MAM	AMI	C1	C2	C3	C4		
	h) the future maintenance of the meter installation.								
8.1.6	meter installation components present to persons who install, operate, maintain or otherwise use, or require access to the installation. The specific requirements of relevant legislation and standards must be satisfied, including that the meter installation does not compromise the means of escape in the	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>		
8.1.7	installation and provide information as to the appropriate precautions that need to be taken by the gas consumer. The MAM may provide preliminary information at the design stage. Any such information shall be confirmed by the AMI at the time of installation in case anything has changed,	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
8.1.8	consumers following an interruption, e.g. for a water ingress incident. The MAM shall establish any special requirement for the operation and maintenance of the meter installation under such	<b>√</b>		<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>		
8.1.9	· · · · · · · · · · · · · · · · · · ·		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
8.1.10	consumer (rather than via the MAM) to install the meter, the AMI shall accept all the MAM		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
8.2	Use of Stamped Meters								
8.2.1	and must meet the requirements of the Gas Act or the Measuring Instruments Regulations, $2016-SI$ 2016/1153. Meters shall have either official seals fixed to the meter (for meters approved up to 30	<b>√</b>	<b>√</b>	✓ 	<b>√</b>	<b>√</b>	<b>√</b>		
8.2.2	In accordance with the Measuring Instruments Regulations, 2016 — SI 2016/1153, meters which are used under an agreement providing for the supply of a quantity of gas at a rate of flow which, if measured at a temperature of 15 $^{\circ}$ C and a barometric pressure of 1013.25 millibars, would exceed a flow rate of 1600 cubic metres an hour do not need to be approved or stamped. For meters not covered under the Regulations, consideration should be given to the accuracy class of the meter.	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>		

		Respo	nsibility	Work Category					
	Clause	MAM	AMI	C1	C2	C3	C4		
9 App	proval								
9.1	Third party approval								
9.1.1	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 Appendix 1).	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
9.2	Safety and Integrity of the System								
9.2.1	The approval (or waiver) of the relevant GT must be obtained by the MAM /AMI where one of these parties intends to provide or install a meter housing. Where the consumer or third party is providing the meter housing, the MAM shall advise the consumer/3 <sup>rd</sup> party of the need to obtain an approval from the relevant GT.	<b>√</b>	<b>✓</b>	<b>√</b>	✓	<b>✓</b>	<b>√</b>		
9.2.2	Where the MAM intends to provide a meter by-pass, the approval of the relevant Gas Supplier and GT must be obtained	<b>✓</b>	<b>✓</b>				<b>✓</b>		
installa	This activity will normally be undertaken by the MAM, the exception being where the AMI installs a meter ation and then seeks to have it adopted by the MAM, in which case the AMI is required to obtain the rals prior to installation and pass them to the MAM prior to adoption								
9.2.3	The AMI shall obtain confirmation of the GT and Gas Supplier approval (from the MAM where applicable) prior to installing a meter by-pass (see Appendix 4).		<b>√</b>				<b>√</b>		
9.2.4	The MAM must obtain an authorisation from the relevant GT for the setting, sealing and any subsequent re-setting and sealing of the meter regulator and any associated safety device. As part of the application the MAM shall provide information to the GT on the pressure control and safety arrangements, the associated pressure settings and the identity of the AMI responsible for the work.	<b>√</b>		✓	<b>√</b>	<b>√</b>	<b>√</b>		
Note: T	The completed meter installation may be subjected to inspection and acceptance by the GT.								
9.2.5	Where an inspection is required, which may result in a need to adjust the pressure regulator/ safety devices, the MAM or AMI, as appropriate shall ensure the relevant approval, appraisal or authorisation has been obtained from the relevant GT.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
9.2.6	Where the GT has in place processes or procedures as a pre-requirement to an authorisation, the MAM and AMI shall co-operate with any reasonable GT requests for relevant information e.g. ENA GDN/PM/GT2 process.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
9.2.7	The MAM and AMI shall ensure that a valid authorisation is in place prior to undertaking any works:	✓	✓	✓	✓	✓	✓		

		Respor	nsibility		Work C	Category	/
	Clause	MAM	AMI	C1	C2	С3	C4
	<ul> <li>a) For Category 1, 2 and 3 meter installations, the MAM gains generic authorisation from the GT to install a meter on the GT's particular gas network with the use of a specified AMI and design on that network.</li> <li>b) For Category 4 installations the authorisations are issued on a site-specific basis. For installations with a metering pressure other than 21mbar, the authorisations are issued on a site-specific basis following the satisfactory completion of a gas consumer warrant.</li> </ul>						
9.2.8	For installations within the scope of GS(I&U)R, meter installation without pressure regulation (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). The scope of any exemption shall be limited to that 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.	<b>~</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓
9.2.9	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. e.g. ENA GDN/PM/GT2 process.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
9.2.10	Where the site occupier or developer has a requirement to approve the design and location of a meter installation (for example under DSEAR or for planning applications), the MAM shall co-operate with any reasonable requests for information from the site occupier.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
9.3	GS(M)R Safety Case						
9.3.1	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 Tables in Appendix 1 and 2). Generally, meter installations are installed downstream of the network and the MAM would not normally be required to produce a GS(M)R Safety Case. If, however, a MAM is responsible for a meter installation which is upstream of the ECV, GS(M)R and Pipeline Safety Regulations must be complied with.	<b>√</b>		<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>
9.3.2	Prior to any meter installation related activities taking place, where the meter installation forms part of the Network, the MAM should contact the gas conveyor, who shall remain responsible for the meter installation unless an alternative arrangement is made. If the MAM or other party takes responsibility for the meter installation, consideration shall be given to re-engineer the meter installation so that the meter installation 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 the corresponding GS(M)R Safety Case duties.	<b>✓</b>		<b>√</b>	<b>√</b>	<b>√</b>	✓

		Respor	sibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	С3	C4
LO Insta	allation						
10.1	Installation and Replacement works						
10.1.1	The process for installation also covers the requirements for exchange or replacement of components of the meter installation.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>
10.1.2	The AMI shall notify the gas consumer and the MAM so that suitable arrangements can be made in instances where equipment connected to the meter, such as Data loggers or AMR Equipment may be affected by work carried out on the meter installation. This will allow the MAM to contact the GT or Gas Supplier as appropriate.	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
10.1.3	The MAM and AMI shall ensure that the installation process achieves the following:  a) All work is undertaken by suitably competent persons  b) Meter Installation components are appropriately handled and stored  c) safe control of work is assured through the use of appropriate procedures  d) pre-installation checks are undertaken  e) the meter installation and any ancillary equipment is installed, inspected and tested in accordance with the appropriate Standard(s) and manufacturer's instructions  f) statutory and advisory labels are fitted, including any arising from the conditions imposed through the approval or authorisation by third parties.	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>V</b>
10.1.4	A meter installation shall only be installed or modified by an AMI or otherwise the MAM shall make arrangements for the installation to be inspected by an AMI within 20 working days.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
10.1.5	The MAM and AMI shall arrange for the relevant information notifications, as appropriate, to be made to, but not be limited to, the following parties:  a) HSE  b) local authority  c) relevant Gas Supplier  d) relevant GT  e) the site occupier  f) consumer  g) other utilities.	<b>√</b>	1	1	<b>√</b>	1	✓
10.1.6	The AMI shall ensure that any sealing equipment, security collars or other security fittings to be used on a meter installation are kept secure and only used as directed by the MAM.	✓	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>√</b>

		Respor	sibility	Work Category					
	Clause	MAM	AMI	C1	C2	С3	C4		
10.1.7	The AMI shall undertake work in accordance with satisfactory methods of work which shall be provided by or approved by the MAM.	<b>√</b>	<b>√</b>	✓	✓	<b>√</b>	<b>√</b>		
10.1.8	The AMI shall nominate a suitably competent person who shall be responsible for the co-ordination of work activities, including means of emergency contact, with, as appropriate:  a) site occupier b) consumer c) relevant GT d) relevant electricity distributors e) other utilities.		<b>~</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>		
10.1.9	The MAM and AMI shall be responsible for ensuring the meter installation is installed in accordance with the agreed specification and duty and complies with the relevant normative industry standards, manufacturer's instructions, see Appendix 1 and 2.	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>		
10.1.10	The MAM and AMI shall ensure that equipment installed in a hazardous area or connected to a meter installation located in a hazardous area is suitable for use in such areas and is installed in accordance with the relevant standards e.g. BS EN 60079, IGEM/GM/7 or IGEM/SR/25 as appropriate.	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>		
10.1.11	Care shall be taken by the MAM and AMI when handling a meter to ensure that the official seal or markings are protected from alteration, breakage or defacement.	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>		
10.1.12	The MAM and or AMI should confirm that a valid supply contract is in place with a registered gas supplier before installation.	<b>√</b>	<b>√</b>	✓	✓	<b>√</b>	<b>√</b>		
10.1.13	Pre-installation procedures shall be available and used in accordance with the relevant Standards. The procedure shall:  a) Ensure that the location and housing comply with the relevant Standards (Appendix 1 and 2). In the event that the location does not comply, the AMI shall notify the gas consumer and/or gas consumer representative and the MAM  b) Ascertain if the proposed meter installation location is in an area classified as hazardous, and the classification zone in such cases, by discussion with the gas consumer. This may include hazardous areas such as dust, which are not a result of the gas equipment.  c) Ensure that components and ancillary equipment are suitable for intended use and are compliant with the appropriate standards  d) Ensure the meter installation is installed at the appropriate position designated by the MPRN or Connections Quotation Reference Number (CQRN)	<b>✓</b>	<b>✓</b>	<b>*</b>	<b>✓</b>	<b>\</b>	<b>\</b>		

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
	e) Ensure that the MAM and gas consumer are notified so that suitable arrangements can be made in instances where equipment connected to the meter such as data loggers or AMR equipment may be affected by the work carried out on the meter installation						
10.1.14	Where the gas consumer has been identified by the Gas Supplier as vulnerable, the MAM shall ensure that this information is passed to the AMI. The AMI shall ensure that the design of the meter installation is appropriate for the consumer's needs and complies with the relevant legislation and Codes of Practice.	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	
10.1.15	The AMI shall undertake tests that assure the integrity of:  Meter Installation components (including all fittings, associated pipework)  any ancillary equipment and  electrical and instrumentation systems.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
10.1.16	Where meter work is undertaken which involves any part of the meter installation or the gas consumer's pipework being depressurised, the AMI shall verify its gas tightness in accordance with the industry standards.	<b>~</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
10.1.17	The AMI shall select the appropriate methods of testing and purging according to the applicable standards for the meter installation involved.	<b>√</b>	<b>√</b>	✓	<b>√</b>	<b>✓</b>	<b>√</b>
10.1.18	Immediately after such testing and examination, purging shall be carried out by the AMI throughout the meter installation and every fitting through which gas can subsequently flow.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
10.1.19	Where the gas consumer has extensive pipework, e.g. large commercial premises, the AMI shall consider maintaining this under pressure with natural gas in a safe manner during meter installation work. Although this minimises the need to test and purge the gas consumer's pipework the risks of this approach should be carefully considered through a site-specific risk assessment.	<b>√</b>			<b>√</b>	<b>√</b>	<b>√</b>
10.1.20	The AMI shall ensure that the appropriate technical information (e.g. asset data, strength and tightness testing details, location issues that might result in corrosion, constraints related to the downstream equipment etc.) is provided to the MAM, to enable the MAM to pass this information onto persons undertaking subsequent work activities including any specific required and/or recommended maintenance procedures.	<b>√</b>	✓ ·	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
10.1.21	For non-domestic premises, the AMI shall undertake a hazardous area assessment of the meter location. The AMI shall affix appropriate hazardous area labels. The AMI shall also provide a detailed hazardous area drawing to the MAM and gas consumer, unless the consumer advises that a more onerous hazardous area classification exists.		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

		Respor	nsibility	Work Category					
	Clause	MAM	AMI	C1	C2	C3	C4		
10.1.22	The AMI shall advise the gas consumer to formally notify the GT if it intends to use compressors or engines, or any associated compressed air or any other gases, in accordance with paragraph 17 of Schedule 2B of the Gas Act.	✓	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
10.2	Prepayment and SMART Meters								
10.2.1	At the time of installation, the AMI shall draw the gas consumer's attention to any warning notices and operation instructions for the meter.		<b>√</b>	<b>√</b>	<b>√</b>				
10.2.2	The AMI shall take into account the ability of the gas consumer to conveniently access the payment mechanism of any proposed prepayment meter and the security of the payment mechanism against unauthorised access when choosing the meter location.		<b>√</b>	<b>✓</b>	<b>√</b>				
10.2.3	The AMI must not install a pre-payment meter as a primary meter if there is a secondary meter used to render a charge to a consumer on its downstream side.		<b>√</b>	<b>√</b>	✓				
10.2.4	The AMI must not install a SMART meter in prepayment mode, as a primary meter if there is a secondary meter used to render a charge to a consumer on its downstream side. The AMI shall advise the MAM of the presence of secondary meters who in turn shall advise the gas supplier		<b>√</b>	<b>√</b>	<b>√</b>				
10.3	Meter and component replacement								
10.3.1	Where directed by the MAM to undertake meter replacement work, the AMI shall assess the connected load and load profile to identify if the size and type of meter installation is appropriate for flow measurement and its associated control.	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
10.3.2	If, as a result of the assessment, a meter of a different capacity is required, the AMI shall advise the MAM, and suitable action should be taken to ensure an appropriate meter and installation is installed.	<b>√</b>	✓	✓	✓	✓	✓		
10.3.3	Following a risk assessment, where the meter installation is considered to operate safely, the AMI should continue to undertake a component replacement e.g. meter, regulator, filter or strainer (or any combination thereof) by other components of equivalent size, type and performance.		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>		
10.3.4	Where the meter installation is considered to be unsafe the AMI shall take the appropriate action in accordance with the Gas Industry Unsafe Situations procedures.		<b>√</b>	✓	<b>√</b>	✓	<b>√</b>		
10.4	Ancillary Equipment								
10.4.1	Where the AMI finds connected Ancillary Equipment during metering work, the AMI shall notify the MAM of the presence of such equipment.	<b>√</b>	<b>√</b>	✓	<b>√</b>	✓	✓		
10.4.2	As directed by the MAM, the AMI shall provide a suitable connection point, and ensure the Ancillary Equipment is left on site for reinstallation or reconnection.	<b>√</b>	✓	✓	✓	✓	✓		

		Respon	sibility	Work Category				
	Clause	MAM	AMI	C1	C2	C3	C4	
10.4.3	If directed by the MAM, where the ancillary equipment needs to be temporarily moved or disconnected in order to carry out work on the meter, the AMI shall restore the connections of this equipment and leave it functioning as found.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>~</b>	

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
11 Mod	dification						
11.1	Scope of modifications						
11.1.1	The requirements of this section are applicable to modifications being undertaken to a meter installation. The MAM may be required to modify meter installations for which it is responsible, and 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.	<b>√</b>		<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
11.1.2	The suitability of the housing, irrespective of final ownership, shall be verified as part of the assessment of the work required. The appropriate party shall be notified by the AMI of any changes or modifications required to the meter housing.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
11.2	Notification and re-authorisation						
11.2.1	If any modification to the meter installation requires the meter installation to be disconnected, the MAM and AMI must give the relevant formal notifications in accordance with Sub-Sections 4.5.1 and 10.1.5.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
11.2.2	Where the modification work invalidates the existing design approval, e.g. where the regulator settings are to be modified, or the pressures given on the GT/2 submission are no longer valid, the AMI shall advise the MAM in order that a new authorisation may be obtained. The AMI shall not undertake the modification work until such new authorisation has been received.	<b>√</b>	<b>√</b>	<b>√</b>	✓	✓	✓
11.3	Policy Meter or Component Exchange						
11.3.1	A meter or meter installation component may need to be exchanged for a number of reasons (e.g. fault, end of life, change of circumstances of the gas consumer). Where the type of meter or meter installation component is recalled by the MAM for safety or other reasons, the MAM shall undertake an initial risk assessment to establish the type of exchange policy to be adopted.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
11.3.2	Where the MAM implements an exchange policy for safety reasons, the MAM shall inform the component manufacturer, the meter asset owner and the Supplier that an exchange policy has been implemented and the reasons for doing so.	<b>✓</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
11.3.3	Where the MAM is notified by the Gas Supplier of a replacement policy arising from the result of In-Service testing or safety concerns being identified, the MAM shall act upon the instruction accordingly.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
11.3.4	Where meter installations are being modified, the MAM should obtain the load details from the Gas Supplier. Alternatively, a load assessment shall be performed by the MAM prior to undertaking any exchange work to determine the appropriateness of the meter and the meter installation components.	<b>✓</b>		<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	С3	C4
11.4	Credit for Pre-payment Meter Exchange						
11.4.1	Where an exchange of credit for pre-payment meter is required, it shall be established that the location is suitable for a prepayment meter (see clause 10.2).	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
11.5	Unsuitable Installations						
11.5.1	The MAM and AMI should establish procedures on the actions to be taken by the AMI where it encounters an unsuitable meter installation. The following list, which is not exhaustive, provides specific examples of factors which can result in an unsuitable meter installation:  a) safety or integrity of the meter installation b) access to the ECV c) accessibility to read the meter d) accessibility to maintain the meter installation e) accessibility to exchange the meter or meter installation components f) proximity and suitability of electrical equipment g) property alterations h) inappropriate or unsuitable by-pass arrangements i) inadequate ventilation j) suitability for the load k) installation of, or alteration to, third party equipment l) unapproved equipment connected to the meter installation m) Inappropriate components and pressure controls for the upstream pressure tier.	✓		<b>✓</b>	✓	✓	<b>✓</b>
11.5.2	Where safety issues are identified, the Gas Industry Unsafe Situations Procedure (IGEM/G/11)) shall be followed.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
11.5.3	For safety reasons arising from unsuitable meter installations outlined in Section 11.9, repositioning of the meter installation or its components may be required. In such circumstances, all work undertaken shall be in accordance with current Standards (Appendix 1 and 2)	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>
11.6	Upgrading to Current Standards						
11.6.1	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 (Appendix 1 &2).	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>
11.7	Ancillary Equipment Replacement						
11.7.1	The MAM and AMI shall be aware of the requirements for, and the effect of, any other equipment which is to interface with the meter installation (e.g. Automatic Meter Reading equipment (AMR))	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

		Respor	nsibility	/ Work Category					
	Clause	MAM	AMI	C1	C2	C3	C4		
11.7.2	The MAM shall maintain records of all Ancillary Equipment that the MAM has connected to, or has given authority to be connected to, any meter installation to which it is appointed.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
11.7.3	Where a MAM is appointed to a meter and third parties have not provided details of their connected ancillary equipment, the appointed MAM should not be obliged to obtain those records.	✓		✓	<b>√</b>	<b>√</b>	✓		
11.7.4	When the AMI and MAM is replacing or installing Ancillary Equipment, the MAM and AMI shall ensure that:	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓		
	<ul> <li>a) Ancillary Equipment connected to the meter is installed to appropriate Standards;</li> <li>b) Ancillary Equipment connected to the meter installation is undertaken by appropriately trained and competent operatives;</li> <li>c) Following the fitting of Ancillary Equipment to the meter installation, all relevant information is communicated to the interested parties in the supply chain.</li> </ul>								
11.7.5	In the event that a third-party requests permission to connect Ancillary Equipment to a meter installation, the MAM shall:	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
	<ul> <li>a) specify the appropriate Standards to which the ancillary equipment is to be installed</li> <li>b) require that appropriately trained and qualified operatives undertake the work</li> <li>c) respond to the request in writing either granting permission or explaining why permission is withheld.</li> </ul>								

		Respor	nsibility		Work C	Category	/
	Clause	MAM	AMI	C1	C2	C3	C4
12 Com	nmissioning						
12.1	General						
12.1.1	The requirements of this section covers commissioning of the Metering Installation. It is specialised and is normally specific to site, equipment used and the procedure. However, in the case of small low-pressure installations it may be possible to utilise a generic approach.	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>
12.1.2	Commissioning ensures that a meter installation will operate as intended and within defined parameters. Therefore, all meter installations shall be commissioned in accordance with the relevant Standard(s).	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
12.1.3	A meter installation shall not be commissioned until the MAM has received assurance that a relevant Gas Supply contract is in place and the AMI has been advised.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓	✓
12.1.4	The AMI shall ensure no unauthorised use of Gas occurs; the meter installation shall be labelled and locked or disabled until such assurances have been given and the installation has been commissioned. In the event where there is no MAM, the AMI shall be responsible for ensuring a Gas Supply contract is in place.		<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>
12.1.5	Where the MAM has a responsibility to restore a Gas Supply following work on the meter installation, the MAM or the AMI shall ensure that any re-commissioning of the downstream system is undertaken in accordance with the appropriate Industry Standards.	<b>√</b>	✓	<b>√</b>	✓	<b>√</b>	<b>√</b>
12.1.6	Commissioning procedures shall be developed and shall take into account as appropriate, the requirements of:  a) Legislation b) International, European, British and Industry Standards c) Site owner requirements d) Manufacturer's instructions	<b>√</b>	<b>√</b>	√	<b>\</b>	<b>✓</b>	<b>✓</b>
12.1.7	The proposed work schedule and timescales should be agreed with the consumer or responsible person.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
12.1.8	The AMI shall not commission an installation that contains a by-pass unless they have confirmed that authorisation has been granted by the GT and Gas Supplier.		<b>√</b>				<b>√</b>
Note: Th	he GT approval may recommend the type of meter by-pass valve and method of sealing to be applied.						

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	С3	C4
12.2	Pre-commissioning Checks						
12.2.1	Any pre-initialisation procedures, which may be required in accordance with the manufacturer's instructions, shall be carried out.		<b>√</b>	✓	✓	✓	✓
12.2.2	The MAM shall ensure that the correct details of the meter installation to be commissioned are provided to the AMI.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓
12.2.3	The AMI shall ensure that the details provided by the MAM are validated against the meter installation to be commissioned.	<b>√</b>	<b>√</b>	✓	✓	✓	✓
2.2.4	The MAM and AMI shall ensure that any relevant test certificate(s), as required by Industry Standards, are available.	<b>√</b>	<b>√</b>	✓	✓	<b>√</b>	<b>√</b>
2.2.5	The AMI shall ensure the meter installation is subject to a visual and physical check, including tightness testing.		<b>√</b>	✓	✓	✓	✓
12.3	Commissioning Procedures						
12.3.1	Generic commissioning procedures may be acceptable for meter installations in accordance with BS $6400 - 1$ , BS $6400 - 2$ or IGEM/GM/6 as appropriate.	<b>√</b>	<b>√</b>	✓	✓	✓	
12.3.2	For non-standard meter installations, installation specific commissioning procedures shall be produced and agreed with interested parties in accordance with IGEM/GM/8 or IGEM/GM/4 and IGEM/TD/13 as appropriate.	<b>√</b>	<b>√</b>				<b>√</b>
12.3.3	Suitable and adequate test equipment shall be selected and used.	✓	✓	✓	✓	✓	✓
12.3.4	The AMI shall set the meter regulator operating pressure to the range of pressures detailed in the GT's letter of authorisation.		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓
12.3.5	Where possible, meter regulators that are supplied by the manufacturer shall be pre-set to the authorised pressure settings and pre-sealed, with a seal marked with the manufacturer's trademark or name.	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	
12.3.6	Where it is not possible to pre-set the meter regulator, or the AMI has had to break the seal and adjust the regulator, the AMI shall seal the regulator with a seal marked with the AMI registration number indicated on the GT approval.		<b>√</b>	<b>√</b>	<b>√</b>	✓	<b>√</b>
safety a	/here it has not been necessary to break a factory fitted manufacturers seal on a pre-set regulator or levice, it is not necessary to remove it and fit a seal marked with the AMI number on the GT approval, but eptable for the AMI to add an additional seal if desired.						

		Respor	nsibility		Work C	ategory	,
	Clause	MAM	AMI	C1	C2	C3	C4
12.3.7	Following closure any meter by-pass shall be sealed. Any seals used for sealing regulators, safety devices, by-passes or sealed purge points shall be marked with the AMI registration number as indicated on the GT approval.		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>
12.3.8	Test and Commissioning records shall be created and made available by the AMI, as required. The requirements of GM(C&D)R must be met (see Appendix 3)		<b>√</b>	<b>√</b>	✓	<b>√</b>	<b>√</b>
12.3.9	Where the work carried out by/for the MAM is not carried out by an AMI, the MAM takes on the responsibilities as though it were the AMI and must ensure that the meter installation is inspected by an AMI within 20 working days of the works.	<b>✓</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
12.3.10	Where required, volume conversion equipment shall be commissioned in accordance with IGEM/GM/5 but where flow computer equipment is fitted it shall be commissioned in accordance with IGEM/GM/4 & IGEM/GM/5.	<b>√</b>	<b>√</b>			<b>√</b>	<b>√</b>
12.3.11	Where it is agreed between the GT and the MAM that a network data logging system is to be provided, the provision, commissioning and maintenance of this system will be the responsibility of the GT.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	✓

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
13 Una	uthorised interference						
13.1	Tamper Checks						
13.1.1	When attending a meter Installation, the MAM and AMI shall determine whether, on the balance of probabilities and taking into account all of the evidence then available, one or more instances of tampers has occurred. In making such a determination, the person shall have regard to the descriptions in Schedule XX (Unbilled Energy Code of Practice) of the REC concerning what constitutes theft of gas. The person may not make such a determination unless it has sufficient evidence to substantiate the occurrence of theft of gas.	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>
13.1.2	The MAM and AMI shall record the evidence of tampering as well as, but not limited to the meter, converter readings and the meter details and any meter status displays that are activated as a result of tampering.	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>~</b>
13.1.3	If a MAM and AMI deems the meter installation is unsafe (i.e. the integrity of the installation has been affected by interference), the MAM and AMI shall manage the situation appropriately e.g. in accordance with the GIUSP.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
13.1.4	The AMI shall provide all available evidence to the MAM.	✓	✓	✓	✓	✓	✓
13.1.5	The MAM shall provide all of the evidence along with any other supporting information that is available to either the Gas Supplier or the GT.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
13.1.6	The MAM and AMI must at all times be mindful of its safety, the safety of the gas consumer and the safety of the general public. The MAM and AMI should use its own judgement to ensure that safety is not compromised.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
14 Prov	vision of Information						
14.1	Information for safe and efficient operation						
14.1.1	MAMs and AMIs shall ensure that the 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 is made available to the appropriate persons	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
14.2	Availability of Pressure and Capacity Information						
14.2.1	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 by the AMI, for use by the consumer or other persons who may undertake work on the downstream system.		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
14.3	Description of Installation						
14.3.1	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 GS(I&U)R. The description shall be updated as necessary. The MAM may delegate this task to the AMI in which case the MAM should obtain assurance that the description has been provided.	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>
14.3.2	Where known, 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.	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>
14.4	Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) and Control of						
	Substances Hazardous to Health Regulations (COSHH)						
14.4.1	For meter installations in non-domestic premises, 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.	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
14.5	Gas (Calculation of Thermal Energy) Regulations						
14.5.1	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, as amended, and provide this information to the Gas supplier.	<b>✓</b>				<b>√</b>	<b>√</b>

		Respor	sibility	Work Category				
	Clause	MAM	AMI	C1	C2	C3	C4	
14.6	Other Commercial Data Flows							
14.6.1	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.	<b>✓</b>		<b>√</b>	<b>\</b>	<b>√</b>	<b>✓</b>	
14.7	Gas Meters (Information on Connection and Disconnection) Regulations							
14.7.1	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.	<b>✓</b>	<b>✓</b>	✓	<b>√</b>	✓	<b>√</b>	

		Respor	nsibility				_
	Clause	MAM	AMI	C1	C2	C3	C4
15 Ope	rations						
15.1	Operational responsibilities						
15.1.1	The operation of the meter installation must be conducted in accordance with the relevant legislation listed in Appendix 1 and 2, to ensure that all equipment functions as intended when in normal use. The operation of the meter installation shall be conducted in accordance with agreed procedures that conform to the requirements of:  a) Procedures for reporting and dealing with gas escapes.  b) Network Codes.  c) Recognised industry Standards.  d) The GT's safe control of operations procedures.  e) Any safe control of operations procedures operated by the consumer or site owner.	✓	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
	f) Any warrants issued between the respective parties.						
15.1.2	Information resulting from such activities shall be sent to relevant market participants.	✓	✓				✓
15.1.3	In operating the meter installation, the responsibilities of each relevant party shall be defined or identified. Areas of responsibilities such as boundary fencing, meter housing, earthing, protective (equipotential) bonding, instrumentation and maintenance would typically need to be established. Once established, the MAM shall communicate them to the relevant parties.	<b>√</b>	<b>✓</b>	<b>\</b>	<b>~</b>	<b>~</b>	<b>V</b>
15.2	Normal and Planned Operational Activities						
15.2.1	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:  a) commissioning of the meter installation  b) the control and operation of any meter by-pass (see Appendix 4)  c) maintenance activities  d) safety or statutory inspections  e) the temporary disconnection and connection of the meter installation  f) isolation of the meter installation.	<b>✓</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
15.3	Unplanned Operational Activities						
15.3.1	The MAM shall develop and comply with procedures to manage unplanned events that may affect the operation of the meter installation. The procedures shall include but not be limited to:  a) General enquiries by the consumer or persons acting on their behalf (for example capacity inquiries or pressure problems)	<b>✓</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

	Respoi	nsibility	,	Work C	ategory	/
Clause	MAM	AMI	C1	C2	C3	C4
<ul> <li>b) Meter accuracy or meter reading disputes including any requests for a BEIS Official Meter Accuracy Tests</li> <li>c) Other disputes (for example pressure related disputes)</li> <li>d) Theft of gas incidents</li> <li>e) Operation of the by-pass</li> <li>f) Meter installation operational faults (for example, inadvertent operation of safety devices)</li> <li>g) 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</li> <li>h) Cooperation in the investigation of carbon monoxide (CO) emission and other incidents</li> </ul>						
15.3.2 Information resulting from such activities shall be sent to relevant market participants.	✓		✓	✓	✓	✓

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
16 Maii	ntenance						
16.1	Maintenance philosophy						
16.1.1	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.	<b>√</b>	<b>√</b>	1	1	<b>✓</b>	<b>√</b>
16.1.2	The MAM should undertake a maintenance review every three years or upon a major change of circumstance, if sooner.	<b>✓</b>		<b>√</b>	✓	<b>√</b>	<b>√</b>
16.2	Procedures and records						
16.2.1	The MAM shall develop and ensure compliance with procedures for maintenance 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:	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
	<ul> <li>a) maintenance procedures are applicable to the specific meter installation and that the correct meter installation is being maintained,</li> <li>b) arrangements have been made for safe access, egress and adequate working space,</li> <li>c) risk assessments are available for the work intended,</li> <li>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,</li> <li>e) The risk from electricity should be mitigated (for example through the use of a Voltage Detector and temporary continuity bond),</li> <li>f) if there is a need to replace any meter installation component the replacement meter installation component should be compliant with current Standards (Appendix 1 and 2).</li> </ul>						
16.2.2	Maintenance records shall be kept by the relevant MAM 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,	<b>✓</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

		Respor	nsibility		Work C	Category	/
	Clause	MAM	AMI	C1	C2	С3	C4
	<ul> <li>e) the date(s) the maintenance work was carried out,</li> <li>f) a description of any other work identified as being necessary and the date by which it should be completed,</li> <li>g) any by-pass operation details and times, in accordance with Network Code,</li> <li>h) the settings of pressure protection devices,</li> <li>i) Any ancillary equipment operated by the MAM.</li> </ul>						
16.2.3	Where a meter installation and any ancillary equipment is installed in a hazardous area, maintenance shall be undertaken so to not jeopardise the integrity of any protection classification of the meter installation components and any ancillary equipment.	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>
16.2.4	If there is a need to replace any meter installation component, ancillary equipment or meter housing, a risk assessment shall be undertaken to determine whether to replace with an identical meter installation component or to upgrade to current Standards.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
16.2.5	Any works carried out within the hazardous area shall be the subject of a risk assessment and where appropriate be under the control of a Permit to Work.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓	<b>✓</b>
16.3	Specific Maintenance Requirements						
16.3.1	The specific and appropriate maintenance requirements shall be described for the meter installation by the MAM. 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 (in accordance with manufacturer's instructions) 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.						

		Respor	nsibility		Work C	ategory	,
	Clause	MAM	AMI	C1	C2	C3	C4
17 Insp	ections arising from Statutory Requirements						
17.1	Requirements to inspect						
17.1.1	An inspection process shall ensure that the meter installation is suitable for further operation within the design or performance limits specified by the designer or competent person. It may be scheduled to occur at the same site visit, in which case the notification of the inspection should be included in the job notification flow. Inspection activities shall take into account the requirements of legislation, licence conditions and the MAM's own asset management policies.	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
17.2	Safety Inspections for the Gas Act owner						
17.2.1	Where safety inspections are undertaken by the MAM or the AMI on behalf of the Gas Act owner, the inspections should include:	<b>√</b>	<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>
	reading the meter						
	<ul> <li>inspecting the meter and associated meter installation for evidence of tampering</li> </ul>						
	<ul> <li>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</li> </ul>						
	<ul> <li>arranging for information in respect of any gas leakage identified in the vicinity of the meter to be passed on in accordance with 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</li> </ul>						
	<ul> <li>inspecting the meter for any evidence of deterioration which might affect its due functioning or safety</li> </ul>						
	<ul> <li>where necessary and subject to the consent of the owner of the meter, changing any batteries in the meter.</li> </ul>						

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
17.3	Pressure System Safety Regulations						
17.3.1	The Pressure System Safety Regulations (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 of PSSR. The inspection process is distinct from maintenance.	<b>~</b>					<b>✓</b>
	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.						
17.3.2	It shall be determined by the MAM 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.	<b>√</b>					<b>√</b>
17.4	Electricity at Work Regulations (EWR)						
17.4.1	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 (Appendix 1 and 2). 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.	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>√</b>
17.4.2	Procedures must be put in place by the MAM and AMI 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.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
17.4.3	Under EWR Regulation 4, the MAM and AMI must have procedures in place for the testing and inspection of electrical systems if danger would otherwise result. Such procedures shall include but not be limited to:	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
	<ul><li>a) earthing – cross bonding (BS EN 60079 Part 17)</li><li>b) cables</li><li>c) apparatus</li></ul>						

		Respor	nsibility		Work C	ategory	•
	Clause	MAM	AMI	C1	C2	C3	C4
	<ul><li>d) portable tools and equipment</li><li>e) distribution systems.</li></ul>						
17.4.4	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.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
17.4.5	The interval between safety inspection, maintenance and testing of systems and equipment not associated with hazardous areas should be no greater than three years. Comprehensive records of safety inspection, maintenance and test visits shall be kept by MAMs.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	✓
17.4.6	Information from safety inspection, maintenance and tests shall be continually reviewed by MAMs to determine appropriate future actions (for example replacement or increased inspection frequencies).	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
17.4.7	An appropriate inspection and testing regime shall be applied to portable equipment and tools e.g. Portable Appliance Testing.	<b>√</b>	<b>~</b>	<b>√</b>	<b>√</b>	✓	<b>√</b>

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
18 Duty	y of Care beyond Meter Installation						
18.1	General						
18.1.1	The MAM shall ensure meter installations do not cause a safety hazard to the public during the life cycle of the meter installation.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
18.1.2	The AMI 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 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 AMI to verify that any connected appliances are working correctly when they are re-lit following purging operations by that AMI.		<b>√</b>	<b>√</b>	√	<b>√</b>	<b>√</b>
18.1.3	MAMs and AMIs 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.	<b>\( \)</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
18.1.4	MAMs and AMIs shall have procedures in place for complying with the industry standard on 'unsafe situations' procedures (IGEM/G/11)	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

		Respor	nsibility		Work C	Category	/
	Clause	MAM	AMI	C1	C2	C3	C4
19 Duty	y of Cooperation						
19.1	General						
19.1.1	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:	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
	<ul><li>a) Providing information on how to isolate the MAM's meter installation is left at the meter installation</li><li>b) If changes are made that affect the method of isolation, the information at the meter installation</li></ul>						
	shall be updated						
	c) Sharing safety related information with the appropriate parties (for example safety related defects with meters and/or meter installation components).						
	d) Sharing information on faults or Meter performance with the appropriate parties (for example Ofgem, BEIS, Citizens Advice)						
	e) Sharing information on identified methods of theft of Gas with other Metering Agents and the relevant parties						
	f) Informing appropriate parties of any procedure or equipment required to reinstate a Gas Supply following interruption						
	g) Liaising with the GT or emergency service provider (ESP) on instances of over or under pressurisation, gas escapes, water ingress, loss of supply, etc.						
	h) Co-operating with the Meter reading agencies.						

		Respor	nsibility		Work C	ategory	<b>,</b>
	Clause	MAM	AMI	C1	C2	C3	C4
20 Me	ter Reading						
20.1	General						
20.1	Meter readings must be provided to the appropriate parties as required by the $GM(C&D)R$ (see Appendix 3 and also Table in Appendix 1 and 2).	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Note: F notifica	Readings may be sent to the relevant market participants in the standard flows as part of the job ation.						
20.2	Whenever a meter by-pass is put into operation, the appropriate parties shall be informed in accordance with Network Code requirements.	<b>√</b>	<b>√</b>				<b>√</b>
20.3	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 Appendix 4.	<b>√</b>	<b>√</b>				<b>√</b>

		Respor	nsibility		Work C	ategory	/ _
	Clause	MAM	AMI	C1	C2	C3	C4
21 Insta	allation Performance and Functionality Monitoring						
21.1	Performance monitoring						
21.1.1	A policy, procedure and process for monitoring the performance and functionality of meters and meter installation components shall be established by the MAM to verify that the MAM's meter installations are operating as intended. The information obtained from the monitoring should be used to determine the replacement policy.	<b>√</b>		<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>
21.2	General Disputes						
21.2.1	In the event that a consumer disputes the performance of the meter installation, the MAM shall determine whether the meter installation is functioning correctly, and it shall be demonstrated to the consumer accordingly.	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>
	his may entail demonstrating that the problem lies either with the gas consumer's own plant or the network.						
21.2.2	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 by MAM.	✓	<b>√</b>	✓	<b>√</b>	✓	<b>√</b>
21.2.3	In the event that the meter installation functionality is being adversely affected by the consumer's own plant, advice shall be given by MAM to the consumer on the appropriate flow and pressure characteristics that are acceptable at the Meter outlet.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
21.2.4	In the event that it is not possible to satisfy the accuracy concerns related to a meter installation; For Stamped Meters (in accordance with section 8.2) consumers have the right to dispute the accuracy of that Meter and have it submitted for an Official Meter Accuracy Test (OFMAT) which is arranged via the Gas Supplier. Any other Meter accuracy tests are subject to the terms of the relevant Gas Supply contract.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
21.3	Disputed Meter Testing						
21.3.1	On receiving a request for a disputed meter test, the MAM and AMI shall ensure that a specific procedure for removing disputed meters is being followed. The meter shall be removed in accordance with Section 23.	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

		Respor	nsibility		Work C	ategory	,
	Clause	MAM	AMI	C1	C2	C3	C4
21.3.2	Where an Official Meter Accuracy Test is needed, 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. If liquid is present in the measuring chamber of the meter it shall not be drained but an estimate of the amount should be noted and submitted with the meter. However, any purpose provided lubrication oil shall be drained and placed in a suitable container and returned with the meter. Arrangements for any necessary special equipment for transporting such meters shall be made available.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>&gt;</b>
21.4	Verification of Meter Accuracy						
21.4.1	The Gas Act requires that any meter installation must be kept in proper working order by the 'Gas Act Owner' to correctly register the quantity of Gas supplied. The Gas Act Owner thus responsible may be the Consumer, the Gas Supplier or a GT.	<b>√</b>		<b>✓</b>	<b>*</b>	<b>~</b>	<
	EIS's Office of Product Safety and Standards (OPSS) manages a process for sample testing of meters to as In-Service Testing. Gas Suppliers are obliged to co-operate with OPSS.						
21.4.2	The MAM shall co-operate with GTs, Gas Suppliers or gas consumers that request the submission of Meters for In-service Testing.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
21.4.3	<ul> <li>The MAM shall verify the accuracy of meter installations under its management;</li> <li>a) In the case of maintainable Industrial &amp; Commercial meters such as Rotary Positive Displacement (RPD) or Turbine meters the MAM may achieve this by appropriate maintenance regimes as described in Section 'Maintenance'.</li> <li>b) For domestic Meters and larger diaphragm Meters, the MAM may establish a process for meter populations; this may be done by sample testing.</li> </ul>	<b>√</b>		<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>
21.5	Procedure for Sample Testing						
21.5.1	If sampling of meters is employed, it shall be undertaken periodically and should be on the basis of the following characteristics;  a) Manufacturer b) Meter designation c) Version number of software if appropriate d) Badged capacity; and e) Year of Manufacturer.	<b>√</b>		<b>√</b>	<b>√</b>	✓	<b>✓</b>
21.5.2	For domestic size meters, sample sizes shall be statistically robust with respect to determining the inservice accuracy requirements specified in legislation or the appropriate Standard.	<b>√</b>		<b>√</b>	<b>√</b>		

		Respor	nsibility		Work C	ategory	,
	Clause	MAM	AMI	C1	C2	C3	C4
21.5.3	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.	<b>√</b>				<b>√</b>	<b>✓</b>
21.5.4	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).	<b>√</b>		<b>✓</b>	<b>√</b>	<b>✓</b>	<b>√</b>
	o assist in selecting and managing sampling techniques reference can be made to BS 6002-1 Sampling ares for inspection by variables.						

		Respor	nsibility		Work C	Category	/
	Clause	MAM	AMI	C1	C2	C3	C4
22 Cess	sation of Supply						
22.1	General						
22.1.1	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. The terms under which a supply of gas or gas flow may cease are:	<b>~</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
	<ul> <li>a) Discontinuance – An act by a Gas Supplier as a means of stopping the flow of Gas at a Gas supply meter point</li> <li>b) Disconnection – An act by a GT to ensure that Gas cannot be off-taken through a Gas supply meter point.</li> </ul>						
22.1.2	Where the MAM or AMI 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.	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
22.1.3	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. The Gas Supplier shall be notified once the discontinuance has been carried out.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
22.1.4	Where the 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.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
23 Rem	noval and Returns						
23.1	Safe removal of meter installation						
23.1.1	Meter removal shall be undertaken using a 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.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
23.2	Prior to Removal						
23.2.1	Where the MAM or AMI 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 ensuring that the Meter records for the Meter Point match the details of the Meter on site.	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	✓
23.2.2	Electrical continuity shall be maintained during and after the removal of the Meter and/or a meter installation component in accordance with the appropriate and current standards	<b>√</b>	<b>√</b>	✓	<b>√</b>	✓	<b>√</b>
23.2.3	Prior to removing any Meter and/or meter installation component, the party undertaking the work shall ensure that the Meter is decommissioned in accordance with the appropriate and current standards.		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
23.3	Removal						
23.3.1	When removing a Meter and/or a meter installation component, the MAM and AMI 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 reused or refurbished. For Meters which are the subject of an accuracy dispute, reference should be made to Section 21.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓
23.4	Following Removal						
23.4.1	Where required in order to implement IGEM/UP/1, IGEM/UP/1A, IGEM/UP/1B or IGEM/UP/1C, or other IGEM Standards or recommendations, the MAM and/or AMI 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.	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>
23.4.2	Where a Meter is removed, and a replacement Meter is not to be fitted immediately, disconnection, purging and capping of the supplies and open ends must be carried out by the AMI in accordance with GS(I&U)R as amended.		<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>

		Respoi	nsibility		Work Categor		/
	Clause	MAM	AMI	C1	C2	C3	C4
23.4.3	The MAM and AMI 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 party that removed them.	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>
23.4.4	Any removed Meter, with the exception of ultrasonic and thermal mass types, 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.	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>\</b>
23.4.5	Where required in order to implement IGEM/UP/1, IGEM/UP/1A, IGEM/UP/1B or IGEM/UP/1C or other IGEM Standards or recommendations, outlet pipework shall be purged.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>
23.4.6	The MAM and/or AMI shall seal any open ends of pipework (including the ECV) left by the removal of a meter with an appropriate fitting, taking into account the GT's requirements in respect of sealing the ECV.	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>~</b>
23.4.7	The MAM and/or AMI must inform The Gas Supplier if the meter is not immediately replaced to enable the Gas Supplier to notify the GT so that it can arrange for the closure of any service valve controlling the supply of gas to that meter if that valve does not supply other meters.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>~</b>
23.5	Position on Change of MAM with exchange of asset						
23.5.1	When an incoming MAM is exchanging a meter installation, the incoming MAM shall 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 shall have positive confirmation from the existing meter/ meter installation component owner that there is an arrangement in place.	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>\</b>
23.5.2	Where 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 and the outgoing MAM ceases to have responsibility or liability for that equipment.	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>
23.5.3	Where the MAM has removed a Meter and/or meter installation component, the MAM shall ensure that it is removed from the site, subject to any other arrangements with the owner.	<b>√</b>	<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>

		Respor	nsibility_		Work C	ategory	ory	
	Clause	MAM	AMI	C1	C2	C3	C4	
23.5.4	Within 30 days after removing a meter and/or meter installation component, the incoming MAM shall (save where Section 23.5.5 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.	<b>√</b>	<b>√</b>	✓	<b>√</b>	<b>√</b>	✓	
23.5.5	Where the owner of a meter and/or meter installation component which has been removed is not known and cannot readily be ascertained, the 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.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	
23.5.6	Where 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.	<b>√</b>		<b>✓</b>	<b>✓</b>	<b>✓</b>	✓ ·	
23.5.7	The 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 23.5.6, for at least 30 days from the date the e-mail was sent).	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>	
23.5.8	If any meter and/or meter installation component has not been collected within the 30-day period set out in Section 23.5.7, and alternative 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 26.	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	
23.5.9	Where a Meter and/or meter installation component is to be disposed of, any official seals shall be permanently defaced. Where practicable, the meter shall be rendered inoperable e.g. diaphragm meters can be spiked. The MAM shall maintain sufficient auditable Meter and/or meter installation component disposal records.	<b>√</b>	<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>	
23.5.10	Following 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 23.5.6, the MAM has not identified the owner).	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	

		Respor	nsibility		Work C	ategory	,
	Clause	MAM	AMI	C1	C2	СЗ	C4
23.5.11	Where the MAM agrees with the owner that the Meter and/or meter installation components will be returned or are being collected by 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.	<b>✓</b>	<b>~</b>	<b>✓</b>	<b>✓</b>	<b>\</b>	
23.5.12	Where the AMI comes into possession of a Meter and/or other meter installation component, it shall hold it in the condition in which it was received with the index unaltered and contact the meter owner(s) or the Gas Supplier (if known) for further instructions.		<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
23.5.13	MAMs and AMIs shall handle all Meters and other meter installation components with care and store them in a secure manner at all times.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
	nsportation, Handling and Storage of Meters and Meter Installation apponents						
24.1	General						
24.1.1	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 by the AMI and MAM.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>
24.1.2	A Gas Meter and its installation components are part of a precise measuring instrument and therefore MAMs and AMIs shall handle and store all Meters and other meter installation components with care and in accordance with the manufacturer's recommendations. meters and meter installation components shall be stored in a secure manner at all times.	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>
24.1.3	MAMs and AMIs shall store, handle and transport meters in their original packaging materials wherever possible, with any inlet and outlet connections covered to prevent the ingress of dirt and moisture; and otherwise in accordance with the applicable requirements of this MCoP. The MAM and AMI shall have due regard to the manufacturer's recommendations on stacking and orientation.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
24.1.4	here the original packaging materials are not available, the MAM and AMI shall ensure suitable precautions are taken to protect the meter from damage. The meter shall be stored in a clean, dry location.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
24.1.5	Care shall always be taken to avoid damage to any meter seal.	✓	✓	✓	✓	✓	✓

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
25 Reco	ords						
25.1	Meter Installation records						
25.1.1	Meter Installation records shall be maintained by the MAM throughout the operational life of the meter installation.	<b>√</b>		<b>√</b>	✓	<b>√</b>	<b>√</b>
25.1.2	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.	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
25.1.3	A copy of each meter installation notification record must be retained for 6 years. The minimum requirements of a meter installation record form have been provided in Appendix 5.	<b>√</b>		<b>√</b>	✓	<b>√</b>	<b>√</b>
25.1.4	Appropriate details of other meter installation components that contribute to safety and accuracy of the meter installation should also be recorded.	<b>√</b>		<b>√</b>	✓	<b>√</b>	<b>√</b>
25.2	Other Records						
25.2.1	There are other details that the MAM should record. The following list highlights the main records that should be held where appropriate:  a) regulator settings and details b) protection system settings and details c) hazardous area classification d) pressure system certificates relating to Pressure Equipment Regulations (PER) and PSSR e) Records of safety inspection, maintenance and test visits	<b>√</b>					
Note: Fu	urther details are available in BS 6400 - 1, BS 6400 - 2, IGEM/GM/6, IGEM/GM/8, IGEM/GM/5 and iM/7A.						

		Respor	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
26 Tran	sfer of assets						
26.1	General						
26.1.1	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".	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
26.1.2	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. A flow of accurate and relevant information will facilitate a transfer process	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
26.1.3	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 removed and returned to the owner (see section 23.5.1).	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
26.1.4	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. 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.	<b>√</b>		<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
26.2	Information to be Transferred						
26.2.1	The following information shall be transferred by data flow or agreed alternative method by the MAM:	✓					
26.2.1.1	<ul> <li>Site Details</li> <li>MPRN</li> <li>meter installation address</li> </ul>	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
26.2.1.2	<ul> <li>Details of the Meter and/or meter installation Component</li> <li>pressure tier at which the meter and/or meter installation component is connected</li> <li>meter type (for example, diaphragm)</li> <li>manufacturer</li> <li>year of manufacture meter model (for example G4)</li> <li>meter serial number or meter module number</li> <li>maximum stamped (badged) capacity (Q<sub>max</sub>)</li> <li>number of dials or drums for billing purposes</li> <li>index scaling (for example x1, x10, x100)</li> </ul>	<b>✓</b>		<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>

	Respoi	nsibility		Work C	Category	/
Clause	MAM	AMI	C1	C2	C3	C4
<ul> <li>registration units (for example m3)</li> <li>payment type (for example SMART, credit or pre-payment)</li> <li>whether a by-pass is fitted</li> <li>whether any by-pass which is fitted is open or closed</li> <li>whether a security collar is fitted</li> <li>converter details (including pressure transducer, temperature probe and cabling)</li> </ul>						
26.2.1.3 Billing Information  contracted metering pressure meter height above sea level conversion factor as defined under GTER	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
26.2.1.4 Location Information  • meter location in the premises  • location code	<b>√</b>		<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>
26.3 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.	<b>√</b>		<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>
26.3.1.1 Site Details  co-ordinates (using X (Eastings), Y (Northings)) details for gaining access to the installation contact details of the person responsible for the site any specific access details (for example location of keys to housing)	<b>√</b>		<b>✓</b>	<b>√</b>	<b>✓</b>	✓ ·
<ul> <li>Design Specification Information</li> <li>design and quotation technical project records, drawings, initial request for customer information, customer pressure and flow information, and manufacturer's design parameters</li> <li>GT/1 information (for example inlet pressure tier, etc).</li> <li>Ancillary pressure agreement</li> </ul>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
26.3.1.3 Details of the Meter and/or meter installation Component  • details of meter diagnostic flags	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

	Respo	nsibility		Work C	ategory	/
Clause	MAM	AMI	C1	C2	C3	C4
<ul> <li>Meter module serial number</li> <li>maximum capacity of meter module</li> <li>whether the installation is a single or multiple streamed installation</li> <li>type of any multi stream installation (for capacity/for continuity)</li> <li>regulator and protection system details</li> <li>converter details</li> <li>flow computer details</li> <li>data logger/AMR details</li> <li>Meter Pulse Utilisation (MPU) agreement</li> <li>component details (make, model, serial number of all significant components)</li> <li>most recent available photographs of items being transferred</li> <li>set points, regulators, safety devices and creep reliefs</li> <li>cathodic protection (CP) installed</li> <li>non-return valve (NRV) installed (details)</li> <li>warranty details</li> </ul>						
26.3.1.4 Approvals and Authorisations  DSEAR certification record pressure test certificates GT/2 authorisation application form GT/2 consumer warrant	<b>✓</b>		<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>
<ul> <li>26.3.1.5 Housing Details</li> <li>meter housing details (type, size etc)</li> <li>hazardous area classification and drawing</li> <li>records of any outstanding issues with housing/consumer equipment.</li> <li>declaration to the GT concerning suitability of the housing</li> <li>details of status of the ownership of the housing and responsibility for maintenance</li> <li>agreements relating to housing.</li> </ul>	<b>√</b>		✓	✓	<b>√</b>	✓
26.3.1.6 Maintenance Records  • record of any consumer complaints (excluding personal data)  • description of any technical complaint  • record of all maintenance visits (date, type of visit, outcome).  • record of rectification work undertaken.  • maintenance results sheets.	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

	Respor	nsibility		Work C	Category	/
Clause	MAM	AMI	C1	C2	C3	C4
<ul> <li>record of results of functional checks.</li> <li>site husbandry form(s).</li> <li>details of any planned rectification works which are outstanding or confirmation that no rectification works are outstanding.</li> </ul>						
<ul> <li>26.3.1.7 Pressure Systems Safety Regulations (PSSR) Records</li> <li>written schemes of examination.</li> <li>PSSR Drawing.</li> <li>record of any PSSR visits (date, type of visit, outcome).</li> <li>PSSR inspection sheets</li> <li>record of all PSSR failings, and status.</li> <li>all Information held by PSSR competent body.</li> <li>VS02 inspection reports.</li> </ul>	<b>*</b>					<b>~</b>
<ul> <li>26.3.1.8 Modifications and Repairs</li> <li>records of all modifications and repairs, including all GL/5 paperwork.</li> <li>26.4 Declarations</li> </ul>	<b>√</b>					<b>√</b>
26.4.1 In relation to any meter installation, meter or meter installation component which is transferred, the outgoing MAM must confirm to the incoming MAM that the outgoing MAM has the authority to grant the 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.	<b>✓</b>		<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>

		Respoi	nsibility		Work C	ategory	/
	Clause	MAM	AMI	C1	C2	C3	C4
27 Disp	osal						
27.1	Disposal of meter assets						
27.1.1	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.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
27.1.2	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 MCoP there are RGMA data requirements which relate to removing metering and meter installation components. These include notifying the Gas Act Owner and/or MAM and MAP (Title Owner) of the removal and collection details.	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
27.2	Specific Requirements						
27.2.1	Care should be taken to consider environmental impact when disposing of Meters or meter installation components. In particular, the following factors apply:	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
	<ul> <li>a) where possible, all components of the Meter and any meter installation components should be reused or recycled, provided this does not involve excessive cost,</li> <li>b) where appropriate the Meter/Meter Installation shall be purged prior to scrapping,</li> <li>c) all meter batteries must be removed and disposed of in accordance with current environmental and waste disposal legislation,</li> <li>d) electronics and instrumentation, e.g. loggers, conversion devices, communications hubs, electronic indexes, must be disposed of in accordance with WEEE regulations,</li> <li>e) any oil should be drained from the meter and must be disposed of in accordance with current environmental and waste disposal legislation,</li> <li>f) Meter components containing or likely to contain mercury or other hazardous materials/substances 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,</li> <li>g) 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).</li> </ul>						
27.2.2	Evidence shall be retained that the meter has been rendered inoperable. A record of all meters permanently disposed of shall be maintained for a minimum period of 6 years.	✓		<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>

		Respor	nsibility	ility Work Ca			/
	Clause	MAM	AMI	C1	C2	C3	C4
28 Data	a and Confidentiality						
28.1	General						
28.1.1	In order to carry out meter work, the MAM and AMI may have access to information that includes personal details of gas consumer s (e.g. name, address, security password etc.) and commercially sensitive details (e.g. name of Supplier, meter capacity, etc.).	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
28.1.2	The MAM and AMI must comply with the General Data Protection Regulation (GDPR) (EU) 2016/679 and all other data protection legislation.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
28.1.3	The MAM and AMI shall also implement a policy for all its employees to be bound by a confidentiality agreement regarding the control of commercially sensitive information. In particular, if the MAM and AMI carries out meter work for a number of companies, procedures shall be implemented to ensure that one company's data is not divulged to another company.	<b>√</b>	√	<b>√</b>	<b>√</b>	✓	√ 

Appendix 1: Work Category Table

Work Category	Installation Details	Required Standard	Main Legislation	GT Approval
Category 1	Q <sub>max</sub> ≤ 6 m <sup>3</sup> h <sup>-1</sup> MOPu ≤ 75 mbar Pm = 21mbar Standard Installation Generic fixed factor volume conversion	BS 6400 - 1 IGEM/GM/7A (Electrical connections to meter) IGEM/GM/7B¹(Hazardous Area Zoning) IGEM/UP/1b (Testing and Purging)	GS(I&U)R  DSEAR <sup>1</sup> Gas (Calculation of Thermal Energy) Regs.	Generic C1
Category 2	Q <sub>max</sub> ≤ 6 m <sup>3</sup> h <sup>-1</sup> 75 mbar < MOPu ≤ 2 bar Pm = 21mbar Standard Installation Generic fixed factor volume conversion	BS 6400 - 2 IGEM/GM/7A (Electrical connections to meter) IGEM/GM/7B <sup>1</sup> (Hazardous Area Zoning) IGEM/UP/1B (Testing and Purging)	GS(I&U)R  DSEAR <sup>1</sup> Gas (Calculation of Thermal Energy) Regs PSSR <sup>2</sup>	Generic C2
Category 3A	6 m³ h⁻¹ < Q <sub>max</sub> ≤ 40 m³ h⁻¹  MOPu ≤ 75 mbar  Pm = 21mbar  Standard installation (Diaphragm or RPD meter)  No flanged pipework  Fixed factor volume conversion⁴	IGEM/GM/6 IGEM/GM/7A (Electrical connections to meter) IGEM/GM/7B <sup>1</sup> (Hazardous Area Zoning) IGEM/UP/1b (Testing and Purging) <sup>3</sup> IGEM/UP/1a (Testing and Purging) <sup>5</sup> IGEM/UP/1c (Testing and Purging) <sup>7</sup>	GS(I&U)R DSEAR <sup>1</sup> Gas (Calculation of Thermal Energy) Regs	Generic C3A <sup>10</sup>
Category 3B	40 m³ h⁻¹< Q <sub>max</sub> ≤ 1076 m³ h⁻¹  MOPu ≤ 75 mbar  Pm = 21mbar  Standard Installation  Fixed factor volume conversion or electronic PTZ volume converter⁴	IGEM/GM/6 IGEM/GM/5 (Volume conversion) IGEM/GM/7A (Electrical connections to meter) IGEM/GM/7B (Hazardous Area Zoning) IGEM/UP/1a (Testing and Purging) <sup>5</sup> IGEM/UP/1c (Testing and Purging)	GS(I&U)R DSEAR Gas (Calculation of Thermal Energy) Regs	Generic C3A <sup>10</sup> Generic C3B <sup>11</sup>
Category 4A	$Q_{max} > 6 \text{ m}^3 \text{ h}^{-1}$ $MOPu \leq 38 \text{ bar}$ $Pm = 21 \text{mbar}$ $Non-standard Installation$	IGEM/GM/8 IGEM/GM/5 (Volume conversion) IGEM/GM/7A (Electrical connections to meter)	GS(I&U)R DSEAR <sup>1</sup> Gas (Calculation of Thermal Energy) Regs PSSR <sup>2</sup>	Site Specific C4A By-pass approval

Work Category	Installation Details	Required Standard	Main Legislation	GT Approval
		IGEM/GM/7B (Hazardous Area Zoning) IGEM/UP/1a (Testing and Purging) <sup>6</sup> IGEM/UP/1 (Testing and Purging) <sup>5</sup> IGEM/UP/1c (Testing and Purging) <sup>8</sup>		(Where relevant)
Category 4B1	Q <sub>max</sub> > 6 m <sup>3</sup> h <sup>-1</sup> MOPu < 38 bar Pm > 21mbar Non-standard Installation	IGEM/GM/8 IGEM/GM/5 (Volume conversion) IGEM/GM/7A (Electrical connections to meter) IGEM/GM/7B (Hazardous Area Zoning) IGEM/UP/1a (Testing and Purging) <sup>6</sup> IGEM/UP/1 (Testing and Purging) <sup>5</sup> IGEM/UP/1c (Testing and Purging) <sup>8</sup>	GS(I&U)R DSEAR <sup>1</sup> Gas (Calculation of Thermal Energy) Regs PSSR <sup>2</sup>	Site Specific C4B  By-pass approval (Where relevant)
Category 4B2	Q <sub>max</sub> > 6 m <sup>3</sup> h <sup>-1</sup> 38 bar < MOPu < 85 bar Pm > 21mbar Non-standard Installation	IGEM/GM/4 IGEM/TD/13 (Pressure Reduction Installation, but consider aspects of IGE/GM/8 to ensure that the installation provides appropriate pressures for the downstream system) IGEM/GM/5 (Volume conversion) IGEM/GM/7A (Electrical connections to meter) IGEM/GM/7B (Hazardous Area Zoning) <sup>9</sup> IGEM/SR/25 (Hazardous Area Zoning)	GS(I&U)R  DSEAR  Gas (Calculation of Thermal Energy) Regs PSSR <sup>2</sup>	Site Specific C4B  By-pass approval (Where relevant)

# NOTES to the table

<sup>&</sup>lt;sup>1</sup> The DSEAR and ATEX Regulations apply to NON DOMESTIC premises irrespective of the type and size of meter, they do not apply to DOMESTIC dwellings.

<sup>&</sup>lt;sup>2</sup> PSSR apply to all installations with an MOP exceeding 0.5Bar, however, installations that do not include a pressure vessel exceeding 250BarLitres are exempt from some of the Regulations, this will include all Category 2 installations.

- $^3$  IGEM/UP/1B applies to meter installations with a capacity not exceeding 16m $^3$ /h, other restrictions also apply.
- <sup>4</sup> The Generic fixed factor applies to installations with an annual consumption not exceeding 732 MWh/annum (25,000 therms/annum), above this a site-specific fixed factor is used, or an electronic PTZ conversion device.
- <sup>5</sup> Engineers who are competent to test and purge to IGEM/UP/1, may use this standard instead of IGEM/UP/1a which is subservient.
- $^{6}$  IGEM/UP/1A only covers low pressure meter installations, with a total volume to be test/purged of  $1 \text{m}^{3}$ /h.
- <sup>7</sup> IGEM/UP/1c is not applicable to installations within the scope of IGEM/UP/1b.
- <sup>8</sup> IGEM/UP/1c applies to installations with an MOPu not exceeding 7Bar.
- <sup>9</sup> IGEM/GM/7B scope is limited to installations with MOPu not exceeding 75Bar
- <sup>10</sup> The Generic C3A GT2 approval covers meter installations with capacity not exceeding 40m³/h irrespective of meter technology.
- <sup>11</sup> The Generic C3B GT2 approval covers meter installations with capacity exceeding 40m³/h irrespective of meter technology.
- <u>Note 1:</u> Under GDN/PM/GT/2 when a meter is not to be installed within the premises or a prefabricated *enclosure manufactured to a relevant standard or specification, GT approval is required.*
- <u>Note 2:</u> The Gas Act, Connection and Disconnection Regulations and Competition Act apply to all of the different categories of meter installation.
- Note 3: The above table assumes that meter installations are wholly installed downstream of the ECV, where this is not the case the installation will be classified in law as "Network" rather than "Installation pipework" and as such that part of the installation will fall under the scope of the Gas Safety Management Regulations and will require a safety case to be in place. This will also have an impact on the applicability of the Pressure System Safety Regulations.
- Note 4: The GS(I&U)R do not apply to factories quarries and mines, however, MCoP requires that their requirements be applied to such installations where relevant.

Appendix 2: Legislative References and Technical Publications

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 2015
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
EPR	Environmental Permitting (England & Wales) Regulations 2016
EPS	Equipment and Protective Systems Intended 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
GS SLC	Gas Suppliers' Standard Licence Condition
GTER	Gas (Calculation of Thermal Energy) (Amendment) Regulations 2015
HSWA	Health & Safety at Work Act 1974
HWR	Hazardous Waste (England & Wales) (Amendment) Regulations 2016
LOLER	Lifting Operations and Lifting Equipment Regulations 1998
LA	Limitation Act 1980
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

Acronym	Full Name
NRSWA	New Roads and Street Works Act 1991
NWR	The Noise at Work Regulations 1989
PED	Pressure Equipment Directive 2014/68/eu
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

Publication Reference	Title (Current Editions apply unless otherwise stated)
BS 6400-1	Specification for the installation, exchange, relocation, maintenance and removal of gas meters with a maximum capacity not exceeding 6m3/h. Low pressure (2nd family gases)
BS 6400-2	Specification for installation, exchange, relocation and removal of gas meters with a maximum capacity not exceeding 6m3/h. Medium pressure (2nd family gases)
BS 7671	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 1359	Gas meters – diaphragm gas meters
BS EN 60079- 10-1	Explosive atmospheres. Classification of areas. Explosive gas atmospheres
BS EN 60079- 14	Explosive atmospheres. Electrical installation design, selection and erection
BS EN 60079- 17	Explosive atmospheres, Electrical installations inspection and maintenance
BS EN ISO 9001: 2015	Quality management system. Requirements
BS ISO 3951-1	Sampling procedures for inspection by variables
BS ISO 55001	Asset management. Specification for the optimized management of physical assets
Directive 2014/32/EU	Measurement Instrumentation
GDN/PM/GT/1	Management Procedure for requesting gas, service pipe pressure and capacity information from Gas Transporters

Publication Reference	Title (Current Editions apply unless otherwise stated)
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
GER2	Gas Engineering Recommendation 2 provided a guide for industry parties regarding 'Business as Usual' issues relating to Smart Meters.
IGEM/G/1	Defining the end of the Network, a meter installation and installation pipework
IGEM/G/4	Definitions for the gas industry
IGEM/G/5	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	Permitry for the safe flow of gas
IGEM/GL/8	Reporting and investigating gas related incidents
IGEM/GM/4	Flow metering practice for pressure between 38 and 250 bar
IGEM/GM/5	Selection, installation and use of electronic gas meter volume conversion systems
IGEM/GM/6	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
IGEM/GM/8 Parts 1 to 5	Non-domestic meter installations. Flow rate exceeding 6 m3 h-1 and inlet pressure not exceeding 38 bar
IGEM/SR/15	Integrity of Safety – related Systems in the Gas Industry
IGEM/SR/25	Hazardous area classification of Natural Gas installations
IGEM/TD/4	Gas services
IGEM/TD/13	Pressure regulating installations for transmission and distribution systems
IGEM/UP/1	Strength and tightness testing and direct purging of industrial and commercial gas installations
IGEM/UP/1A	Strength and tightness testing and direct purging of small low pressure industrial and commercial Natural Gas installations
IGEM/UP/1B	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/16	Design for Natural Gas installations on industrial and commercial premises with respect to hazardous area classification and preparation of risk assessments
IGEM/UP/2	Installation pipework, on industrial and commercial premises
IGEM/UP/6	Application of compressors to Natural Gas fuel systems
IGEM/UP/9	Application of Natural Gas and fuel oil systems to gas turbines and supplementary and auxiliary fired burners
SMICoP	Smart Metering Installation Code of Practice

# Appendix 3: 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

# Relevant Gas Supplier (or Gas Transporter)

a) Contact and address

# **Description of Work**

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

# Further information relating to the connection and/or disconnection

Details of proposed connection and/or disconnection:

- a) time......am/pm/.....(day)/.....(month)/....(year); and
- b) place......(no. (if any) and street)......(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.

## Meter Information

a) 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.

# 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.

# **By-passes**

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

## Meter Collars

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

# 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.

## Date of Notice

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

# Appendix 4: Meter By-Pass Provision and Use

# Requirements

This Appendix specifies the requirements for the:

- a) Provision of a by-pass
- b) Actions to be taken when a by-pass is operated
- c) Sealing of a by-pass valve
- d) Basis for estimating the quantity of gas when a by-pass is used by the MAM.

# Definition of a Meter By-Pass

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 continues offtake of gas in the event of any failure or maintenance of the meter or which would otherwise impede the flow of gas.

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

A meter by-pass may be used to:

- a) 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
- b) allow a meter to be replaced, recalibrated, checked or maintained without interruption to the gas supply.

# Provision of a Meter By-Pass

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).

## Gas Supplier's Approval

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.

# 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 bypass.

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

The MAM shall determine whether any existent meter installation by-pass, under their commercial arrangements, is approved by the gas supplier.

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.

# 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.

# Operation of a By-Pass

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.

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

- a) 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.
- b) Action should be taken according to Sub-Section 11 below if theft of gas is suspected.
- c) The gas supplier shall be advised of broken seals.
- d) 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

- a) 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.
- b) Where the MAM suspects that there has been theft of gas then the relevant gas supplier shall be notified.

# Appendix 5: Meter Installation and Exchange Record – Minimum Requirements

The list below provides the minimum requirements for inclusion in a meter installation and exchange record:

#### Administration and Contact Details:

- Supplier contact details if known, other the relevant GT details
- AMI Registration Number
- AMI Company contact details, including registration number
- Operative contact details and competency level
- Name of person requesting meter work (Supplier/MAM/Consumer)
- Name of person who placed contract for meter work
- Contact details, including address, of the person who placed the contract for meter work
- Details of the meter work location, including the site name, contact name and meter point reference number
- Name of person/company authorising work, their position and contact details

## Job Details (to be completed on site):

- Meter Installed/Exchanged/Removed and the reason for doing so
- Old and New meter details:
  - o Date and time installation/exchange/removal
  - o Final meter reading
  - Meter module diagnostic flags
  - o Meter Serial Number
  - Manufacturer
  - o Condition of seal
  - Type (Diaphragm /Ultrasonic/Turbine/Rotary)
  - o Meter Model
  - Maximum Stamped Capacity
  - Year of manufacture
  - Number of reading dials
  - o Index scaling (x1, x10, x100)
  - o Registration units (Cubic Ft/Meters)
  - Meter Type (Credit, Prepayment token/credit)
  - o Data logger/AMR equipment details
  - o Any secondary meters installed (Y/N)

## **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.

#### Details for Meters above 25,000tpa/732,000kWh:

- Gas meter height above sea level (metres)
- Meter pressure (millibars)
- Meter locator

- Confirmation of
  - o GT approval of By-pass
  - o By-pass fitting
  - o By-pass seal
- Confirmation of if a meter collar is fitted

#### Converter details:

- Disconnection from meter and connection to meter details:
  - Manufacturer
  - Year of manufacture
  - o Converter model
  - o Serial number
  - Reading (converted/unconverted)
  - o Number of dials (converted/unconverted)
  - o Temperature conversion
  - o Pressure conversion
  - o Compressibility conversion
  - o Density conversion

# New Meter/New Converter owner details:

- Name of owner
- Address of owner
- Post code
- Telephone number
- Emergency contact telephone number

# Appliance details where required:

- Appliance
- Location
- General condition
- Flue
- Ventilation
- Flame picture
- Warning notice issued (yes, including reference/no)
- RIDDOR notice raised (yes, including reference/no)

# Appendix 6: Vetting Procedure

The information in column 1 below is required from all applicants who shall sign to confirm the information is correct. Any false declaration shall constitute grounds for immediate dismissal. All information shall be verified in accordance with column 2.

The verification is to be recorded in column 3 and signed by the supervisor/manager responsible.

Information to be obtained	Verification required	Verification OK? Yes/No
Applicant's Name	Documentary evidence of identity, ideally with photograph or minimum 2 documents with name and address e.g. driving licence.	
Current Address and length of time at this address.	Documentary evidence of residence e.g. driving licence, utility bill.	
Is current address a permanent or temporary home?	Applicant to confirm details in writing.	
Previous Address(es) if less than 5 years at current address.	As for current address.	
Is Applicant registered on the Electoral Role? If so, at what address?	Applicant to confirm details in writing.	
Applicant's NI Number.	Documentary evidence e.g. P45, P60 Tax Coding notice.	
Previous employment history (minimum 10 years or since leaving full time education).	Confirm employment history with each employer.	
Name and addresses of 2 referees.	References to be obtained in writing.	
Any previous convictions or criminal record.	Applicant to confirm details in writing.	
	Any convictions not regarded as spent under the Rehabilitation of Offenders Act 1974 to be subject to management review with due regard to the duties to be undertaken.	
Undertaking to notify employer of any change to the above information.	Written undertaking required.	
Undertake a competency check against the required work category	Documentary evidence of Appropriate ACS certification. Further guidance can be found in the Competency Section of the MAMCoP.	

# Appendix 7: Example of a Code of Conduct

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

# 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.

# 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.

# 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.

# 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.

## 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.