RETAIL ENERGY CODE

Consolidated Metering Code of Practice (CoMCoP)

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Contents

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1 Scope

1.1. SCOPE OF THIS CODE OF PRACTICE

(a) This Consolidated Metering Code of Practice (hereafter referred to as the CoMCoP) specifies the minimum requirements that apply to the undertaking of installation, operation and maintenance of Metering Equipment .

(b) This CoMCoP forms part of the Retail Energy Code (REC), and consolidates the four separate codes of practice (Gas Metering Codes of Practice (MCoP), Meter Operator Code of Practice (MOCoP), Automated Meter Reading Service Providers Code of Practice for Gas Meter (ASPCoP) and the Smart Meter Installation Schedule (REC Schedule 16, formally SMICoP) into one.

(c) This CoMCoP is aimed at anyone (including Independent Gas Transporter) acting as:

i. an approved Metering Equipment Manager (MEM),

a) in respect of gas the MEM is identified as Meter Asset Manager (MAM),

b) in respect of electricity the MEM is identified as Meter Operating Agent (MOA),

ii. an approved Meter Installer (AMI),

iii. an approved Electricity Metering Operative (EMO),

iv. a DNO

v. an AMR Service Provider (ASP),

vi. Energy Suppliers, and;

vii. Installer.

(d) This CoMCoP document is structured such that metering activities are dealt with in the order they occur in the life cycle of the meter installation.

(e) The term Consumer when used within this CoMCoP document can relate to a

Domestic, Micro-Business and Business user, unless otherwise specified within an individual clause.

(f) Schedule 1 (Interpretations and Definitions Schedule) of the REC applies to this CoMCoP and capitalised terms not defined in this CoMCoP will be interpreted accordingly.

1.2. **SPECIFIC SCOPE**

GAS SPECIFIC

(a) Gas 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 Appendix 1.

(b) The table provided in Appendix 1 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 CoMCoP where a conflict is identified.

SMART SPECIFIC

(c) The aim of the CoMCoP is to:

i. ensure that the Consumers experience of the Smart Meter installation process is positive;

ii. protects Consumers during the process;

iii. ensure Consumers are given appropriate assurances over what will take place during the installation process; and

iv. delivers Smart Metering Implementation Programme benefits, including long term behavioural changes.

1.3. **EXCLUSIONS**

(a) 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 CoMCoP. Such work is subject to the requirements of the Gas Safety (Installation and Use)

Regulations (GS(I&U)Regs) 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) The CoMCoP does not seek to restrict the commercial practice of ASPs but instead sets a standard that all participating ASPs must demonstrate compliance with thus promoting enhanced confidence in the market.

(c) For ASP's this CoMCoP is a voluntary code of practice that relevant ASP's can elect to comply with. In relation to ASP's this CoMCoP is not underpinned by legislation and therefore does not confer any new legal obligations or rights in relation to ASP's. Its purpose is to inform on best practice and establish minimum standards for ASPs.

(d) Meter operation services relating to private networks may not be within the scope of these CoMCoP requirements.

2 Responsibilities

2.1. **OVERALL RESPONSIBILITIES**

(a) Changes to this CoMCoP will be made in accordance with the REC Change Management Schedule procedures, generally overseen by the Metering Expert Group. Additionally, the REC Performance Assurance Board will be responsible for the operational governance of the CoMCoP, including investigating alleged matters of non-compliance, but not for arbitration of any subsequent commercial disputes.

(b) The Metering Expert Group provides a forum to manage this CoMCoP including the management of a formal change process, decision making and communications (for further information go to www.retailenergycode.co.uk).

(c) This CoMCoP assumes that the Supplier, GT, DNO or Consumer has arrangements with MEMs/AMIs/EMOs to undertake meter work and/or asset management activities.

(d) Further specific responsibilities and obligations for signatories to this CoMCoP are continued in section 1.2 to 1.4 below with further references available in Appendix 23.

2.2. **GAS RESPONSIBILITIES**

(a) 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 CoMCoP.

(b) 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 CoMCoP.

(c) The AMI and MAM shall be responsible for;

i. the secure and safe handling of any metering equipment in their control and,

ii. for the passing of relevant information (including any meter losses or the illegal use of meters) to

1. the meter owner,

2. the MAM,

3. Gas Supplier, or GT.

(d) The ASP shall be responsible for providing confidence to users of relevant services covered by this CoMCoP such that, when they purchase an AMR service from an CoMCoP signatory they know it will be compliant with and operate to a set of agreed and defined standards;

i. to enable competition, where possible by use of “open standards”;

ii. to promote Interoperability and the use of standard data formats;

iii. to provide reliable data, safe AMR Device installation and Interoperability; and,

iv. to encourage recognition, reference to and use of the CoMCoP both by participants in the energy market and Consumers.

(e) In addition, advanced gas meter solutions may also be installed as part of the smart meter implementation programme.

2.3. **SMART METERING RESPONSIBILITIES**

(a) This REC CoMCoP applies in respect of the installation of Smart Metering Systems, for both electricity and gas, where covered by Condition 41 or 42 of the

Electricity Supply Licence or Condition 35 or 36 of the Gas Supply Licence. These Conditions apply to installations at the properties of Domestic Consumers and Micro-Business Consumers. The requirements can be applied on a voluntary basis for Smart Metering Systems not installed under licence obligations.

2.4. ELECTRICITY RESPONSIBILITIES

(a) A MOA or its EMO is only able to break the seals on and work upon Metering Equipment and DNO Equipment, if:

i. at the relevant Metering Point, they are the appointed MOA (or they are the EMO contracted by the appointed MOA) and are instructed by the Electricity Supplier appointed to the relevant Metering Point; or

ii. for whole current metering only, at the relevant Metering Point, they are not the appointed MOA, but they are required, by a third party Electricity Supplier or by the Gas Supplier responsible under the DCUSA for the equipment used for the communications with gas meters at the Site, to carry out the following work at the Metering Point (excluding replacing meters):

1. Minimal reposition of third party Supplier's meter in communal meter position, to accommodate space for appointed Smart Meter installation;

2. Work on looped neutral(s) on Metering Equipment;

3. Work on a shared supply;

4. Investigation/remedial revenue protection work;

5. Installation of an isolator; and/or

6. Install, operate, inspect, maintain, repair, renew, reposition, replace and/or remove equipment used for communications with gas meters at the Site (including minimal repositioning of electricity metering equipment as allowed under DCUSA).

(b) The Registration Certificate also allows the MOA to break and re-seal DNOs equipment providing that the Meter Operative has been adequately trained and assessed to carry out this work. The MOA should ensure they comply with any individual DNO requirements.

(c) The principles contained within the CoMCoP form the basis of good practice for meter installation and the operation and maintenance of the Metering Equipment

attached to distribution networks.

(d) Any individual DNO's safety information relevant to MOAs should be provided to MOAs via the REC Portal to ensure the on-going safety of Meter Operative. This generic safety information must be reviewed at least annually. Additionally, a DNO should provide site specific information directly to a MOA as and when requested by the MOA.

Pre-Installation

3 Registration

3.1. **Approval to Operate**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
3.1.1 All relevant Parties may gain REC approval by demonstrating that it is able to comply with the relevant requirements of this CoMCoP on an ongoing basis. This will be done via an initial audit followed by an on-going audit regime (see REC Portal).The signatory will be assessed against the relevant requirements of this CoMCoP.	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
3.1.2 All relevant Parties shall comply with the relevant technical standards in accordance with Appendix 1, Appendix 2 and Appendix 3, where relevant, for all aspects of work being undertaken, including, but not limited to, planning, design, installation, commissioning, maintenance, removal and disposal.	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
3.1.3 The following types of documentation are appropriate to demonstrate compliance that meters and ancillary equipment	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4

are suitable for the intended use:				
(a) manufacturer's letters of conformance;	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
(b) a purchase specification;	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
(c) material certificates;	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
(d) test certificates;	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
(e) equipment suppliers' or manufacturers' literature or warranties, and,	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
(f) hazardous area certification (i.e. demonstrating conformance to ATEX requirements and CE marked as appropriate for the hazardous area)	MAM, AMI			C1, C2, C3, C4
3.1.4 All relevant Parties must hold a Registration Certificate or Provisional Certificate, or such other means of demonstrating their accreditation under the REC as may be issued by the Code Manager. This Registration Certificate authorises the parties to work in accordance with this CoMCoP.	MAM, AMI		MOA, EMO	C1, C2, C3, C4
3.1.5 The relevant Parties 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.	AMI, ASP, MAM	MI	DNO, MOA, EMO	C1, C2, C3, C4

4 System Capability

4.1. **Performance Monitoring**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
4.1.1 A policy, procedure and process for monitoring the performance and functionality of meters and meter installation components shall be established by the MEM to verify that the MEM's meter installations are operating as intended. The information obtained from the monitoring should be used to determine the replacement policy.	MAM		MOA	C1, C2, C3, C4

4.2. **Data Accuracy & Interoperability**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
4.2.1 Signatories must be able to demonstrate that they have adequate measures implemented to assure the accuracy of the data they provide. This will allow them to accurately reflect the meter register values to the Customer automatically. This must include end to end data integrity within their systems including where relevant the AMR Technology capability, data transfer, processing, storage and delivery.	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
4.2.2 Interoperability will be at the level of a "common" data format. Adoption of a standard data format will make it easier to deploy and manage differing hardware solutions, no matter which products or vendors the	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4

organisation chooses.				
4.2.3 The data format must provide for the delivery of consumption and interval data.	ASP			
4.2.4 Through this Interoperability referred to in clause 4.2.2, enterprises will be able to use the data format for billing, verification, energy management and automatic monitoring and targeting.	ASP			
4.2.5 Signatories must demonstrate that they or their agents can:	ASP			
(a) automatically communicate with AMR Technology where present at sites and acquire and store data from AMR Technology (where present); and,				
(b) provide accurate data.	ASP			
4.2.6 The AMR Technology when forming part of a gas meter installation must:	ASP			
(a) provide measured gas consumption data for multiple time periods, and be able to;	ASP			
(b) provide such data for hourly or shorter time-periods; and	ASP			
(c) provide remote access to such data.	ASP			

4.3. **Disaster Recovery/Business Continuity**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
4.3.1 The CoMCoP requires that all signatories must have a disaster recovery procedure such that in the event of	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4

catastrophe the service will be retained and data integrity protected.				
4.3.2 The disaster recovery plan must consider events that have a significant impact on an enterprise's ability to conduct normal business and define the policies and procedures for dealing with various types of disasters that can affect an organisation, especially the organisation's IT (Information Technology) infrastructure. This plan must include the processes and procedures needed to resume an organisation's operation after a disaster event and should include the following:	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
(a) protection of data by backups and cloning;	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
(b) mirror systems;	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
(c) a formal risk assessment in order to determine the requirements for the disaster recovery plan;	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
(d) restoration of all essential and critical business activities;	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
(e) scheduled review to ensure the plan is to be kept up to date to take into account changing circumstances.	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4

5 Regulatory Conformity

5.1. **Legislation**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
5.1.1 The signatories 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 CoP, in particular:	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
(a) The Health & 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.	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
i) Relevant Parties shall make each of their Meter Operatives aware of their individual duty of care to themselves and to other persons who may be affected by their acts and/or omissions at work. These duties are more specifically stated within provisions of the Health and Safety at Work etc. Act 1974. MEMs shall also ensure that their Meter Operatives have an awareness of the duties of other parties to secure their safety, particularly their	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4

employer (as indicated in the Management of the Health and Safety at Work Regulations 1999) and the occupier of the work Site, and of their rights to refuse to carry out work if they consider it unsafe.				
ii) The MEM should be aware of the Management of Health and Safety at Work Regulations 1999, which describe the responsibility for full assessment of the risks inherent in types of work generally, and for specific Sites in particular falling on the employer through his supervisory staff (Regulation 3 refers). In order to assist Meter Operatives in assessing risks associated with work on a particular Site, Appendix 4 contains a decision flow chart. More detailed information is contained in Appendix 1.	MAM		MOA	C1, C2, C3, C4
(b) For domestic and commercial premises, GS(I&U) Regs 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.	AMI, MAM			C1, C2, C3, C4
(c) For Installations within non-domestic premises, the Dangerous Substances and	AMI, MAM			C1, C2, C3, C4

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.				
(d) The Pressure System Safety Regulations and Pressure Equipment Regulations must be complied with where applicable, including design control and approval processes, and inspection regimes.	AMI, MAM			C1, C2, C3, C4
(e) 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) Regs must be complied with (see Appendix 5).	AMI, MAM			C1, C2, C3, C4
(f) 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 responsibilities on the MAM and the AMI in several respects, including regarding a Safety Case and required competencies for working on the Network	AMI, MAM			C1, C2, C3, C4
5.1.2 Under the Electricity Safety, Quality and Continuity Regulations 2002 (as amended), the relevant Parties will ensure accidents and dangerous			MOA, EMO	

occurrences are reported to the Health and Safety Executive. relevant Parties shall be responsible for reporting problems found on Metering Equipment that is from the outgoing terminals of DNO Equipment (see sub-section 6.2) to the out-going terminals of the Metering Equipment. For the avoidance of doubt, the legal owner (Customer, Meter Operator, DNO or anyone else) of the Metering Equipment is irrelevant.				
5.1.3 All work must be carried out in accordance with all relevant legislation, including:			MOA, EMO	
(a) the provisions of the Electricity Act, particularly the relevant parts of Schedule 7;			MOA, EMO	
(b) appropriate parts of the Meters (Certification) Regulations 1998 (as amended) and the Meters (Approval of Pattern or Construction and Method of Installation) Regulations 1990 (as amended); and			MOA, EMO	
(c) relevant provisions of the Electricity Safety, Quality and Continuity Regulations 2002 (as amended).			MOA, EMO	
5.1.4 The relevant Parties should also comply with, where appropriate, relevant guidance documentation issued under the BSC.			MOA, EMO	
5.1.5 Special regulations apply in the case of quarries and mines (where substations supplying the latter are not classified as separate premises). In these cases, the relevant Site manager			MOA, EMO	

will need to be consulted regarding safety requirements.				

5.2. **Electricity at Work Regulations (EWR)**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
5.2.1 Certain specific duties of the MEM, as an employer, regarding work activities on or near electrical installations (in so far as they relate to matters that are within its control), are set out in the Electricity at Work Regulations 1989, as amended. These duties include requirements to provide safe systems of work and to utilise safe practices and suitable protective equipment. Where a Meter Operative works at a Site for a Customer, the MEM will have direct responsibility for its Meter Operatives, whilst the Customer will have responsibilities for the Site in general (e.g. safe access and egress).	MAM		MOA	C1, C2, C3, C4
5.2.2 Regulation 16 of the Electricity at Work Regulations 1989 (as amended), requires that no person shall be engaged in any work activity where technical knowledge or experience is necessary to prevent danger or, where appropriate, injury, unless he possesses such knowledge or experience, or is under such degree of supervision as may be appropriate having regard to the nature of the work EMOs shall			EMO	

ensure that each of their Meter Operatives has sufficient knowledge and experience, backed up by suitable training as necessary, to meet the required level of competence (see clause 6.3.2 below).				
5.2.3 EMOs shall ensure that their Meter Operatives understand their responsibilities under the Electricity at Work Regulations 1989 (as amended) and have a sufficient level of knowledge and experience to avoid danger or injury (as indicated in Regulation 16 thereof) appropriate to the risk inherent in the work for which they are registered as competent.			EMO	
5.2.4 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 6).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.	AMI, MAM		MOA, EMO	C1, C2, C3, C4
5.2.5 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.	AMI, MAM			C1, C2, C3, C4

5.2.6 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:	AMI, MAM			C1, C2, C3, C4
(a) earthing – cross bonding (BS EN 60079 Part 17)	AMI, MAM			C1, C2, C3, C4
(b) cables	AMI, MAM			C1, C2, C3, C4
(c) apparatus	AMI, MAM			C1, C2, C3, C4
(d) portable tools and equipment	AMI, MAM			C1, C2, C3, C4
(e) distribution systems.	AMI, MAM			C1, C2, C3, C4

5.3. **Data and Confidentiality**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
5.3.1 The signatories must comply with the General Data Protection Regulation (GDPR) (EU) 2016/679 and all other data protection legislation and put in place adequate processes and procedures to ensure their compliance with such legislation.	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
5.3.2 The processes and procedures referred to in clause 5.3.1 must include without limitation:	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
(a) having a documented data protection policy (and such other policies or statements as may be reasonably expected pursuant to published guidance on, or considered best practice for,	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4

compliance with the DP Legislation) available to all Customers and no less onerous than that set out at Appendix 7;				
i) ability to demonstrate Compliance and that they operate in accordance with all such processes, procedures, policies and statements; and,	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
ii) appointment of an Information Protection Advisor at a senior level with specific responsibility for data protection.	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
5.3.3 Neither the MEM nor the DNO shall be required to disclose any Confidential Information, particularly commercially confidential tariff information or consumption information relating to a Customer, which would not otherwise be available to the DNO or MEM, as appropriate.	MAM		DNO, MOA	C1, C2, C3, C4

5.4. **Distribution Code Requirements**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
5.4.1 The signatories must comply with the General Data Protection Regulation (GDPR) (EU) 2016/679 and all other data protection legislation and put in	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4

place adequate processes and procedures to ensure their compliance with such legislation.				
5.4.2 The DNO has a duty of care to "others" which may, at the discretion of the DNO, be interpreted as a requirement that individual Meter Operatives of the EMO should be authorised under its Distribution Safety Rules (see section 14 (Installation Activity)). This is irrespective of what safety procedures have been established by the EMO.			DNO, EMO	
5.4.3 Work on or in the vicinity of DNO Equipment by the staff or agents of the relevant DNO is governed by the relevant Distribution Safety Rules. EMOs shall ensure, if their Meter Operatives are called upon to work with the DNO under conditions requiring compliance with the Distribution Safety Rules (as described in section 14 (Installation) below, that the Meter Operatives are sufficiently trained.			DNO, EMO	
5.4.4 The relevant Parties acknowledge that the Supplier, or, where appropriate, a Customer who contracts with a MOA, is responsible for ensuring that the MOA complies with any obligation imposed on a Supplier or Customer by the relevant parts of the Distribution Code and DCUSA. The Distribution Code requires the user's (usually the Customer's) electrical system to comply with relevant provisions of the Distribution Code and the Electricity Safety,			MOA	

Quality and Continuity Regulations 2002 (as amended). It also requires agreement to ownership boundaries at the interface and lays down technical requirements for connection. Associated distribution operating codes cover operational liaison which secures safety at this interface and the need for a safety management system to cover work or tests at the operational interface. There is also a duty on the Party responsible for the network or Site at which the Metering Equipment is located to record who is the Party responsible for the Metering Equipment.				
5.4.5 In the event of conflict or inconsistency between this CoMCoP, and either the DCUSA or the Distribution Code, then the latter agreement and code shall prevail to the extent of such conflict or inconsistency. If such a conflict or inconsistency arises, then the REC Metering Group shall meet to consider as soon as reasonably practicable after becoming aware of the conflict or inconsistency what changes, if any, should be made to this CoMCoP to address such conflict or inconsistency.				

6 Qualifications & Training

6.1. **Employee and contractor vetting**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
6.1.1 The relevant Parties shall operate a suitable employee and contractor vetting procedure, 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 Supply Licence.	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
Note: Appendix 8 provides an example of an employee vetting procedure.	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
6.1.2 Where Meter Operatives are to be given authority to operate DNO Equipment and/or enter DNO controlled substations (as in paragraph 11.2.6(a)), they may be authorised by the DNO under its Distribution Safety Rules. The DNO will carry out the necessary assessment and may refuse to authorise or permit to be authorised any person who fails to meet the standards required by it to operate on its network. The EMO shall be responsible for giving authority to Meter Installers under paragraph 11.2.6(b) below). Prior to giving such authority, the Meter Operatives will require training in the avoidance of relevant dangers.			DNO, EMO	
6.1.3 Work on or in the vicinity of DNO Equipment carried out by DNO employees or agents is governed by the Distribution Safety Rules of the respective DNO. The MOA shall ensure that its Meter Operatives are aware of the			DNO, EMO	

relevant DNO procedures and documentation (see clause 6.1.4 below). In order to receive certain safety documentation, Meter Operatives may need to be appointed by the DNO as Competent Persons within the meaning of the Distribution Safety Rules.				
6.1.4 In regard to works on its equipment, the DNO addresses these duties for its own employees through the safe systems of work and safety procedures detailed in its Distribution Safety Rules. These require, amongst other things, that persons carrying out work are trained and assessed as competent to avoid danger. However, the general duty extends to ensuring that equipment and Sites within its control are not in a defective or hazardous condition, so far as is "reasonably practicable".			DNO	

6.2. **Technical competency**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
6.2.1 The relevant Parties shall ensure that all work under its control is undertaken by competent persons, having the appropriate training, assessment and certification.	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
6.2.2 The relevant Parties shall ensure that their individual Meter Operatives working directly on Site comply with relevant	MAM, AMI		EMO	

requirements imposed on them set out in this CoMCoP and those documented in their own installation and maintenance procedures.				
6.2.3 The relevant Parties shall ensure that its Meter Operatives are familiar with the general practices employed in the installation, testing and maintenance of Metering Equipment and the implications of incorrect connection.	MAM, AMI		EMO	
6.2.4 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 relevant Parties shall ensure that any person performing such work shall possess the necessary skills, qualifications and training to be competent for that work.	AMI, MAM			C1, C2, C3, C4
6.2.5 The relevant Parties 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.	AMI, MAM			C1, C2, C3, C4

6.3. **Code of Conduct**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
6.3.1 The relevant Parties employees or persons working on their behalf shall follow a code of conduct at least equivalent to that described in Appendix 10.	AMI, MAM			C1, C2, C3, C4
6.3.2 Each Energy Supplier shall ensure that before being permitted to install Smart Metering Systems, Installers have received training at a level appropriate to the installation (taking into account the knowledge and skills necessary to fulfil the role), including, in the case of installations for Domestic Consumers, training and accreditation from a National Skills Academy for Power accredited provider or equivalent training and accreditation. Installations that are for training purposes must be supervised by an appropriately qualified Installer;		ES	EMO	
Note: The EMO should also refer to the guidelines of Appendix 9 which provide guidance to the training and/or assessment of Meter Operatives.		ES	EMO	
6.3.3 Each EMO shall be responsible for the training of its Meter Operatives to meet both the safety requirements and the technical requirements of Appendix 11. The results of any associated trade tests and/or records of such training shall be kept and shall be open to inspection by the Code Manager and where applicable to the relevant DNO requiring to			DNO, EMO	

authorise the EMO's employees and/or agents.				
6.3.4 Each EMO shall be responsible for testing its Meter Operatives to establish their technical and safety competence prior to confirming in writing that they are competent.			EMO	
6.3.5 The EMO shall maintain a register of competent persons authorised by it. This register shall be open to inspection by the Code Manager. Appendix 2 provides a model form of certificate of competency to be issued by EMOs to Meter Operatives giving suggested categories of authority, depending upon the experience of the Meter Operative and type of work expected to be undertaken by it.			EMO	
6.3.6 Each Energy Supplier shall ensure that Installers engaged to undertake gas meter work are appropriately registered with Gas Safe Register;		ES		
6.3.7 Each Energy Supplier shall ensure that Installers are competent in addressing Consumer queries and/or can refer them to an appropriate contact;		ES		
6.3.8 Each Energy Supplier shall ensure that Installers are trained and competent to provide Energy Efficiency Guidance that is appropriate to the Consumers needs;		ES		
6.3.9 Each Energy Supplier shall ensure that Installers have a basic knowledge and understanding (appropriate to their role) of data protection and privacy;		ES		

6.3.10 Each Energy Supplier shall ensure that the Energy Supplier's training materials and standards take into account changes in the market and to goods/services, legislation and regulation; and		ES		
6.3.11 Each Energy Supplier shall ensure that in the case of installations at Domestic Premises, Installers receive training that would enable them to have an understanding of the definition of Vulnerable Consumer, are able to identify potential cases of Vulnerable Consumers, and any guidance offered is responsive to the needs of Vulnerable Consumers (e.g. Priority Services Register).		ES		

7 Equipment specification

7.1. **Metering Equipment specification**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
7.1.1 All meters installed must conform to the requirements of Schedule 7 of the Electricity Act, i.e. shall be of a pattern approved by the Authority, appropriate and, in the case of a Domestic Consumer, shall be certified under the Authority's directions.	AMI, MAM		MOA, EMO	
7.1.2 Metering Equipment recording half-hourly values for the purposes of the BSC shall additionally be compliant with the relevant BSC Code of Practice			MOA, EMO	

and any dispensation or exemptions as appropriate.				
7.1.3 Stamped meters shall be used as required by the current industry standards listed in Appendix 1 and 6 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 approved after 30 October 2006). The meter manufacturer should be contacted if there is any doubt over the approval status of the meter.	AMI, MAM			C1, C2, C3, C4
7.1.4 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 °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.	AMI, MAM			C1, C2, C3, C4
7.1.5 An AMR Device or Embedded Meter must have hazardous area certification (i.e. demonstrating conformance to The Dangerous Substances and Explosive Atmospheres Regulations 2002 (ATEX) requirements and CE marking as	ASP			

appropriate for the hazardous area).				

7.2. **Accuracy**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
7.2.1 The initial calibration of Metering Equipment must comply with statutory requirements for limits of accuracy if the meter is a certified meter or within definitions set out in the relevant BSC Metering Code(s) of Practice. Copies of records of calibration and commissioning tests kept in accordance with BSC Metering Code of Practice 4 shall be made available upon request to the Code Manager, and/or the relevant DNO.			DNO, MOA	
7.2.2 Re-calibration of meters and routine tests shall be undertaken for Metering Equipment recording half-hourly values for settlement purposes in the manner specified in the BSC Metering Code of Practice 4.			MOA	
7.2.3 All portable measuring instruments used by EMOs for accuracy testing purposes, for example, measuring voltage and current, shall be calibrated, re-calibrated and traceable to the United Kingdom Accreditation Service (UKAS) standard at least annually to ensure that these instruments are operating within specification.			EMO	
The EMO shall ensure that adequate procedures are in			EMO	

place to ensure that Metering Equipment operates correctly and accurately and is not compromised during storage, delivery or installation.				

7.3. **Testing**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
7.3.1 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).	MAM			C1, C2, C3, C4
Note: To assist in selecting and managing sampling techniques reference can be made to BS 6002-1 Sampling procedures for inspection by variables.	MAM			C1, C2, C3, C4
7.3.2 All portable instruments used by EMOs for commissioning purposes shall be fit for their purpose and comply with the BSC Metering Code of Practice 4.			EMO	
7.3.3 Where instruments are used for voltage measurement they shall be equipped with fused leads.			EMO	

7.4. **Transportation, Handling and Storage of Meters and Meter Installation Components**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
7.4.1 Procedures for the safe, secure and appropriate handling and storage of all meter installation components, (including pipework), fittings, any meter and any tools and equipment, shall be available and used by the relevant Parties.	AMI, MAM		EMO	C1, C2, C3, C4
7.4.2 A Meter and its installation components are part of a precise measuring instrument and therefore the relevant Parties 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.	AMI, MAM		EMO	C1, C2, C3, C4
7.4.3 the relevant Parties 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 for gas); and otherwise in accordance with the applicable requirements of this CoMCoP. The relevant Parties shall have due regard to the manufacturer's recommendations on stacking and orientation.	AMI, MAM		EMO	C1, C2, C3, C4
7.4.4 Where the original packaging materials are not available, the relevant Parties shall ensure suitable precautions are taken to protect the meter from damage. The meter shall be stored in a clean, dry location.	AMI, MAM		EMO	C1, C2, C3, C4

7.4.5 Care shall always be taken to avoid damage to any meter seal.	AMI, MAM		EMO	C1, C2, C3, C4

8 Industry Notification

8.1. **Industry Contact**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
8.1.1 For the purpose of operational, safety, technical and escalation liaison, the MOA shall nominate one or more representatives to offer a "point of contact" with the DNO and shall notify the DNO as part of the provision of MOA information (Appendix 13, Part 4). This MOA information shall be provided on the REC Portal. This may be achieved by providing a link to the appropriate page of the MOA's own website(s).			DNO, MOA	
8.1.2 For the purpose of operational, safety technical and escalation liaison, the DNO shall nominate one or more representatives to offer a "point of contact" with the MOA and shall notify the MOA as part of the provision of DNO information (Appendix 13, Part 1).			DNO, MOA	
8.1.3 The DNO "point of contact" shall have responsibility for agreeing with the MOA an appropriate course of action for the situations specified in clause 11.2.7 below.			DNO, MOA	
8.1.4 Where a DNO notifies a MOA of any operational restrictions relating to plant or			DNO, MOA, EMO	

access, the MOA shall ensure that this information is passed on to any affected EMO and/or Meter Operatives. The EMO shall also ensure that its Meter Operatives are aware of their responsibility to report to the DNO any dangerous situations, defects or asset condition information which they encounter pertaining to its equipment or Sites in line with the DCUSA requirement for reporting such issues.				
8.1.5 MOAs shall, within the required timescales, provide DNOs with the information required in the Metering Operations Schedule for Supplier Volume Allocation metering.			DNO, MOA	
8.1.6 If a MOA authorises a new agent or Sub-contractor to carry out meter operation services it shall inform the Code Manager in writing within 15 Working Days after such authorisation.			MOA	
8.1.7 In addition to documentation and procedures required elsewhere by this Code, systems of documentation, recording and retention of data shall be established by a MOA to enable the following:			MOA	
(a) notification to the DNO that the MOA has been appointed at a particular Site, and, if appropriate, an indication of who is the responsible Party, as referred to in clause 5.4.4 above, save that under the arrangements for			DNO, MOA	

the Metering Point Administration Service this information will not be necessary since it is available through the Metering Point Administration Data;				
(b) requests for information to enable it to fulfil its duties set out in clause 21.6.11 including the details listed in Appendix 13, Part 2;			DNO, MOA	
(c) records as required by BSC Metering Code of Practice 4; and			DNO, MOA	
(d) records of work carried out (indicating which Meter Operative carried out the work).			DNO, MOA	

8.2. **Site Identification**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
8.2.1 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.	AMI, MAM			C1, C2, C3, C4
8.2.2 If a MOA requires the DNO to provide Site-specific information, it shall give the DNO as much prior notice as is reasonably practicable.			DNO, MOA	
8.2.3 Upon receipt of a request from the MOA appointed at a specific Site, the DNO shall provide to the Site-specific information shown in Appendix			DNO, MOA	

13 Part 2 in line with BSC Procedure 515: 'Licensed Distribution'. Where the DNO does not have relevant CT and VT details it shall notify the MOA of this fact and instead provide it with appropriate standard errors. It shall also advise the MOA where it is aware of the existing Metering Equipment being the subject of a dispute as regards meter readings or accuracy and is or may be subject to an investigation by the National Measurement and Regulation Office, such investigation precluding its removal pending such determination.				
8.2.4 The DNO shall provide to all MOAs the DNO information indicated in Appendix 13, Part 1. This DNO information shall be provided on the REC Portal. This may be achieved by providing a link to the appropriate page of the DNO's own website.			DNO, MOA	
8.2.5 All relevant Parties will comply with industry standard processes for data flows where required to do so.	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
8.2.6 ASPs will enter Meter Pulse Utilisation (MPU) Agreements with the relevant parties where appropriate.	ASP			

8.3. **Approval, Appraisal and Authorisation**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
8.3.1 The MAM shall establish and comply with any requirement	MAM			C1, C2, C3, C4

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.				
8.3.2 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.	MAM			C1, C2, C3, C4
8.3.3 The requirements of any relevant third party relating to approval, appraisal or authorisation of the work should be established and the third party's work management procedures must be taken into account prior to installation. Further guidance is given in the appropriate standards (see Appendix 1).	ASP, MAM			C1, C2, C3, C4
8.3.4 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/3rd party of the need to obtain an approval from the relevant GT.	AMI, MAM			C1, C2, C3, C4
8.3.5 Where the MAM intends to provide a meter by-pass, the approval of the relevant Gas Supplier and GT must be	AMI, MAM			C4

obtained.				
Note: This activity will normally be undertaken by the MAM, the exception being where the AMI installs a meter installation and then seeks to have it adopted by the MAM, in which case the AMI is required to obtain the approvals prior to installation and pass them to the MAM prior to adoption.	AMI, MAM			C4
8.3.6 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 14).	AMI			C4
Note: The completed meter installation may be subjected to inspection and acceptance by the GT.				
8.3.7 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.	AMI, MAM			C1, C2, C3, C4
8.3.8 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.	AMI, MAM			C1, C2, C3, C4
8.3.9 The MAM and AMI shall ensure that a valid authorisation is in place prior to undertaking any works:	AMI, MAM			C1, C2, C3, C4
(a) For Category 1, 2 and 3 meter installations,	AMI, MAM			C1, C2, C3, C4

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.				
8.3.10 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.	AMI, MAM			C1, C2, C3, C4
8.3.11 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.	MAM			C1, C2, C3, C4
8.3.12 The DNO shall have the right (see clause 11.2.3 below) to confirm the authorisation referred to in clause 5.2.3 above and to prevent access to its equipment if Meter Operatives refuse or are			DNO, EMO	

unable to produce evidence of their authorisation.				
8.3.13 DNO policy with regard to authorisation of Meter Operatives in accordance with its Distribution Safety Rules shall be stated in the DNO information provided pursuant to Appendix 13, Part 1.			DNO, EMO	

8.4. **Planning**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
8.4.1 The relevant Parties 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.	AMI, MAM			C1, C2, C3, C4
8.4.2 The relevant Parties 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.	AMI, MAM			C1, C2, C3, C4
8.4.3 The relevant Parties shall ensure that the responsibility for the provision of any meter box,	AMI, MAM			C1, C2, C3, C4

meter housing or meter compound is determined/agreed.				
8.4.4 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 6). 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.	MAM			C1, C2, C3, C4
8.4.5 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	MAM			C1, C2, C3, C4
8.4.6 In the case of new Metering Points, the following principles shall be adopted:				

(a) the DNO and the MOA shall liaise with each other to ensure that new metering work and energisations are completed with the minimum delay;			DNO, MOA	
(b) for cut-out-controlled supplies, the DNO is responsible for providing the fuse carriers and fuses. Where these cannot be left on Site (e.g. risk of unlawful energisation), the DNO shall be responsible for providing them to the EMO in a timely and acceptable manner for the EMO to perform the energisation (see Appendix 13, Part 1);			DNO, EMO	
8.4.7 relevant Parties should take note of any requirements in the relevant DNO's statement published as required by Appendix 13.			DNO, MOA, EMO	

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8.5. **Prepayment Specific Planning**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
8.5.1 Prior to installation, maintenance, replacement or removal of Prepayment 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	AMI, MAM			C1, C2

that they are in possession of such instructions.				
8.5.2 The AMI shall not install, replace or remove a Prepayment Meter without the approval of the Gas Supplier or the approval of the MAM.	AMI			C1, C2

8.6. **Modifications**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
8.6.1 The case of changes initiated by the DNO or by the Customer to an existing Metering Point, the following principles shall be adopted:			DNO	
(a) the DNO and the MOA shall liaise with each other to ensure that any work is completed with the minimum delay;			DNO, MOA	
8.6.2 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.	MAM			C1, C2, C3, C4
8.6.3 The suitability of the housing, irrespective of final ownership, shall be verified as part of the assessment of the work required. The appropriate	AMI, MAM			C1, C2, C3, C4

party shall be notified by the AMI of any changes or modifications required to the meter housing.				
8.6.4 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 clauses 5.1.1 and 16.3.3	AMI, MAM			C1, C2, C3, C4
8.6.5 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.	AMI, MAM			C1, C2, C3, C4
8.6.6 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.	MAM			C1, C2, C3, C4

9 Design Activity

9.1. **Design**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
9.1.1 The MAM shall use the information obtained from the	MAM			C1, C2, C3, C4

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 6) and provides an appropriate pressure to the Consumer under all circumstances.				
9.1.2 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.	MAM			C1, C2, C3, C4
9.1.3 The MAM shall ensure that its design and selection process considers the requirements for:	MAM			C1, C2, C3, C4
(a) the appropriate registration of the quantity of gas conveyed through the meter installation	MAM			C1, C2, C3, C4
(b) Gas Flow Variations, which could affect the size and type of meter	MAM			C1, C2, C3, C4
(c) Large loads at elevated pressures where additional protection equipment may be required by the GT	MAM			C1, C2, C3, C4
(d) Any requirement for pigging facilities that may require additional space	MAM			C1, C2, C3, C4
(e) the provision of suitable pressure for the safe operation of appliances	MAM			C1, C2, C3, C4
(f) the integrity of the meter installation itself	MAM			C1, C2, C3, C4
(g) the pressure control and protection system provided to the existing or planned downstream installation	MAM			C1, C2, C3, C4
(h) the future maintenance of	MAM			C1, C2,

the meter installation.				C3, C4
9.1.4 The MAM and AMI shall assess any hazards and risks that the design of the meter installation and any 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 event of fire. The risk to persons should be removed or be as low as reasonably practicable.	AMI, MAM			C1, C2, C3, C4
9.1.5 For Non-Domestic Premises, the MAM shall assess any Explosion Hazards arising from the meter 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, e.g. ventilation.	AMI, MAM			C1, C2, C3, C4
9.1.6 Under GS(M)R, the GT has responsibility for establishing procedures to restore safely the gas supply to 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 circumstances.	MAM			C1, C2, C3, C4
9.1.7 Where the AMI identifies issues with the design of the meter installation or meter	AMI			C1, C2, C3, C4

selection, the issues shall be notified to the MAM and if relevant the gas Consumer or GT				
9.1.8 Where the meter installation is owned by the gas Consumer and the AMI is engaged directly by the gas Consumer (rather than via the MAM) to install the meter, the AMI shall accept all the MAM responsibilities that would apply under this CoMCoP.	AMI			C1, C2, C3, C4

9.2. **General**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
9.2.1 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.	AMI, MAM			C1, C2, C3, C4
9.2.2 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 5).	AMI, MAM			C1, C2, C3, C4
9.2.3 The MAM shall ensure that its planning process considers	MAM			C1, C2,

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.				C3, C4
9.2.4 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.	MAM			C1, C2, C3, C4

9.3. **Specific**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
9.3.1 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.	MAM			C1, C2, C3, C4
9.3.2 The MAM shall obtain details of the gas Consumer's requirements including:	MAM			C1, C2, C3, C4
(a) Minimum and maximum flow rate,	MAM			C1, C2, C3, C4
(b) The load profile,	MAM			C1, C2, C3, C4
(c) Any major seasonal variations of consumption,	MAM			C1, C2, C3, C4
(d) Range of acceptable pressures at the outlet of the meter installation;	MAM			C1, C2, C3, C4
(e) Any proposed use of compressors or engines,	MAM			C1, C2, C3, C4
(f) The proposed use of any associated compressed air or other extraneous gases.	MAM			C1, C2, C3, C4
9.3.3 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.	MAM			C1, C2, C3, C4
Note: There is a duty on all GTs to provide information, where requested to do so by a person proposing to carry out work in relation to a gas fitting, about operating pressures of the gas at	MAM			C1, C2, C3, C4

the outlet of the service pipe. GTs have systems in place for providing such information e.g. ENA GDN/PM/GT/1				
9.3.4 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.	MAM			C1, C2, C3, C4
9.3.5 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.	MAM			C1, C2, C3, C4
9.3.6 The size and complexity of meter work covered by this CoMCoP may include components which are not immediately available. The MAM and AMI shall consider this when planning the timescale for such meter work.	AMI, MAM			C1, C2, C3, C4
9.3.7 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.	AMI, MAM			C1, C2, C3, C4

9.4. **Design forethought**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
9.4.1 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.	AMI, MAM			C1, C2, C3, C4
9.4.2 Where prior commercial arrangements have been made in relation to the continued use of meters and/or meter installation components, the incoming relevant Parties shall ensure that they are 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.	AMI, MAM			C1, C2, C3, C4

10 Customer notification

10.1. Appointment Booking

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
10.1.1 The MEM shall establish the person or organisation having site occupier duties.	MAM		MOA	C1, C2, C3, C4
10.1.2 For an Installation Visit that is being scheduled for housing that is known to be sheltered accommodation, approval should be gained from the warden, or other person in authority before making approaches to the residents.		ES, MI		
10.1.3 Visits to an Energy Consumer's home shall only be made with prior appointment except where a visit is made in respect of a suspected theft of gas or electricity, disconnection for non-payment, an emergency or with the Energy Supplier's consent.	AMI, MEM MAM		MOA, EMO	C1, C2, C3, C4
10.1.4 When scheduling a visit, each Energy Supplier shall ensure that:		ES		
(a) the Consumer receives notification prior to the Installation Visit (by whatever method the Energy Supplier deems most appropriate) that their meter(s) is due to be replaced with a Smart Metering System, and when the Energy Supplier anticipates this will happen;		ES		
(b) the Consumer is provided with the relevant contact details to arrange an Installation Visit;		ES		
(c) the Domestic Consumer is advised in advance of		ES		

the Installation Visit that they will not be charged an upfront or one-off charge for the supply and installation of the Smart Metering System;				
Note: The Consumer may be subject to an up-front or one-off charge if, prior to the Installation Visit, the Consumer (a) expressly requests the installation of equipment that exceeds the minimum requirements of the Smart Metering System technical specification; and (b) enters into a contract for the provision of such equipment.		ES		
(d) for Micro-Business Consumers, where there is a charge for the Smart Metering System and installation, the Consumer is advised prior to the Installation Visit;		ES		
(e) where an installation appointment has been agreed with the Consumer, the date and time band is confirmed with the Consumer, by any appropriate media prior to the Installation Visit;		ES		
(f) when scheduling an Installation Visit, the Energy Supplier will accommodate reasonable Consumer requir ements (e.g. any arising from specific cultural traditions or religious beliefs, the needs of Vulnerable Consumers, the needs of domestic residents at the property of a Micro-Business Consumer, the needs of Micro-Business Consumers at protected		ES		

sites, or any operational business needs of a Micro-Business Consumer);				
Note: Protected sites are those that are defined as a category A or B gas priority site under the emergency arrangements. They are sites that get left on gas in an emergency as shutting them down would endanger life. This includes hospitals, care homes etc.		ES		
(g) where possible, the Consumer is notified in advance as to how many personnel will attend the Installation Visit, and if a third-party organisation is being used, and the name of the organisation;		ES, MI		
(h) if the first appointment offered for an Installation Visit is inconvenient, the Consumer is made aware of the range of installation appointment time bands that the Energy Supplier operates and that are available to the Consumer;		ES, MI		
(i) if the Consumer requests to cancel or reschedule an Installation Visit, that is accommodated (in line with existing policies and processes);		ES, MI		
Note: No charge will be incurred if more than two Working Days' notice is given. The Energy Supplier must make clear to the Consumer during the pre-installation period, any charges that may be applied if the Consumer cancels or reschedules an Installation Visit.		ES, MI		

(j) the Consumer is informed about their rights in relation to the installation appointment, where relevant;		ES		
Note: This is as may be set out in regulations made by the Authority under section 33A, 33AA, 33AB, 33D or 47 of the Gas Act 1986 and/or section 39, 39A, 39B, 42A or 60 of the Electricity Act 1989.		ES		
(k) where appropriate, the Consumer is alerted to the Energy Supplier's password scheme, for example Consumers on the Priority Services Register or other circumstances where it appears appropriate;		ES, MI		
(l) its communications regarding the Installation Visit should clearly explain to the Consumer what the Installation Visit will entail (including the need for the Consumer to be at the premises, an indication as to how long a typical Installation Visit takes, that safe access, working conditions, and access to the meter will be required, that the gas and/or electricity supply will be shut off, that the operation of the Smart Metering System will be demonstrated, and that Energy Efficiency Guidance will be offered);		ES, MI		
Note: Except for situations where work can be carried out without the Consumer being present, for		ES, MI		

example; the replacement of tampered meters or aspects of an Installation Visit carried out in Proactive Install and Leave instances.				
(m) where both fuels are supplied by one Energy Supplier (or Energy Suppliers in the same Energy Company Corporate Group), all reasonable steps shall be taken to exchange both meters at the same Installation Visit. In instances where this may not be possible, the Energy Supplier will provide an explanation to the Consumer and advise what will happen;		ES		
(n) at sites where different Energy Suppliers (that are not in the same Energy Company Corporate Group) supply the electricity and gas, the Energy Supplier will advise the Consumer that the installation of the Smart Metering System may be undertaken on two separate Installation Visits, which meter they are replacing and that the individual Energy Suppliers will make their own contact arrangements		ES		
10.15 When arranging an appointment for an Installation Visit, all reasonable endeavours will be used (by checking records and through discussion with the Consumer), to identify whether the Consumer has specific needs, such as visual impairment, hearing		ES		

impairment, low levels of literacy, or other known characteristics of a Vulnerable Consumer. Where it is identified that the Consumer is a Vulnerable Consumer and that has not previously been recorded, it is to be notified to the appropriate Energy Supplier personnel to be recorded and where appropriate, the installation appointment should be arranged with the carer or the person with legal responsibility over the Consumer, and they should be present during the Installation Visit (if required or requested by the Consumer).				

10.2. **Communications**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
10.2.1. Prior to, or during, the Installation Visit, the Energy Supplier shall take all reasonable steps to inform the Consumer (by whatever means deemed appropriate) that the Energy Supplier is bound by this CoMCoP and what this means.		ES		
10.2.2 Each Energy Supplier shall ensure that its communication materials regarding Smart Metering System installations and energy efficiency goods and services:		ES		
(a) complement the Consumer-engagement material (if any) provided by the Smart Metering Implementation Programme;		ES		

(b) are clear, concise and drafted in a way that it is reasonably expected that they will be understood by the Consumer;		ES		
(c) are made available to the Consumer in a variety of media and in a format appropriate to or tailored for groups with specific needs, such as visual impairment, hearing impairment, low levels of literacy; or other known characteristics of a Vulnerable Consumer;		ES		
(d) alert the Consumer to the benefits smart metering can bring, for example, an improved understanding of energy consumption, bills for actual consumption rather than estimated, information and advice about their Smart Metering System and how they can use it to improve their energy efficiency, and the availability and range of energy efficiency goods and services available;		ES		
(e) point the Consumer to sources from which they may obtain additional and impartial information or assistance about improving the efficiency with which they use the electricity and/or gas supplied to them; and		ES		
(f) are updated regularly and in a timely way.		ES		
10.2.3 Each Energy Supplier shall take all reasonable steps to communicate effectively with Consumers for whom		ES		

English is not their first language.				
10.2.4 All interactions with the Consumer in relation to the Installation Visit (verbal or written) must follow the principles as set out in this sub-section 10.2.		ES		
10.2.5 Each Energy Supplier shall take all reasonable steps to provide the Consumer with a copy of the Data Guide, or to make the Consumer aware of the Data Guide commitments, prior to the Installation Visit.		ES		
10.2.6 When an Installer leaves the Energy Supplier's service, IDs and any other branded materials related to the role are returned to the Energy Supplier, and if appropriate, duly destroyed.		ES, MI		

10.3. Site Detail

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
10.3.1 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;	MAM			C1, C2, C3, C4
(a) Size	MAM			C1, C2, C3, C4
(b) Access	MAM			C1, C2, C3, C4
(c) Ventilation	MAM			C1, C2, C3, C4
(d) Need for explosion relief	MAM			C1, C2, C3, C4

(e) Need for instrument compartment	MAM			C1, C2, C3, C4
(f) Accommodation for any creep reliefs.	MAM			C1, C2, C3, C4
10.3.2 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.	MAM			C1, C2, C3, C4

Installation

11 Access & Safety Checks

11.1. Entry to Consumer premises

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
11.1.1 The relevant Party may enter a Consumer's property to perform meter work if the Consumer allows them entry.	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4
11.1.2 Keys to a Consumer's premises, or meter housing, may be issued. These shall be kept secure when in the signatory's possession and returned promptly. Copies of keys shall not be made, and keys shall not be passed on to a third party.	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
Note: Relevant Parties only have statutory rights of entry where they are acting as the agents of a licensed GT or Supplier. Signatories do not have any other automatic right of entry to a Consumer's property.				

11.1.3 The relevant Parties shall not abuse its opportunity, or the Supplier's obligations, to enter premises and homes for performing meter work to promote or sell products, services or advice to Consumers. This does not affect the duties and responsibilities of employees to recognise and respond to unsafe situations as required by the Industry Unsafe Situations Procedure.	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
11.1.4 In certain circumstances, the DNOs may have rights of access to Customer premises under Schedule 6 of the Electricity Act.			DNO	
11.1.5 The MEM shall, in the case of access problems, check whether the Customer has an authorised person for the Site who can grant access.	MAM		MOA	C1, C2, C3, C4
11.1.6 The Consumer premises is left in a similar state as found as far as is reasonably possible;	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4

11.2. Access to equipment

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
11.2.1 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.	AMI, MAM			C1, C2, C3, C4
11.2.2 To ensure control of safety at the point of work the DNO shall allow Meter Operatives access to its equipment (as defined in 11.2.6)			DNO, EMO	

without the need for attendance by its staff, where such equipment is not situated in premises subject to access control procedures under its Distribution Safety Rules. Such access will be subject to satisfactory evidence that the Meter Operative is employed by an EMO which holds a valid Registration Certificate (see clause 3.1.4), has proof of identity and has the relevant authorisation, including, where the DNO deems appropriate, authorisation under the DNO's Distribution Safety Rules. The DNO has the right to establish these facts, and to satisfy itself generally of the safety and technical competence of the EMO, and to refuse authority for access if it is not satisfied, provided that such action is not taken in an obstructive or trivial manner.				
11.2.3 Where equipment is situated in shared premises subject to control procedures or is in premises where access is restricted to DNO staff, then the procedures of clause 11.2.6 shall apply.			DNO, EMO	
11.2.4 The standard arrangements for CT metering equipment shall include accessible test/isolating facilities in accordance with the BSC Metering Code of Practice 4. Where test/isolating facilities are required but do not exist, are inaccessible, or the CT and/or VT secondary connections are not connected to earth on the DNO side of the test/isolating facilities, the DNO shall provide suitable and accessible test/isolating facilities, with CT and VT secondary circuits connected to earth (see Appendix 16 - Earthing of Current Transformers), to enable			DNO, MOA	

connection of the new metering. This work, subject to the Customer's consent where the DNO is required to interrupt the supply, will be carried out within a reasonable timescale after a MOA's request. DNO policy with regard to dealing with the existing Metering Equipment on Site and use of or access to its metering cubicles/panels shall be stated in the DNO information provided as in Appendix 13, Part 1.				
11.2.5 In the majority of cases, EMOs will have unrestricted access to the physical locations of the supply fuses (or switches), test/isolating facilities and voltage fuses necessary to enable control of safety at the point of work as indicated in clause 14.8.12 below. Such cases will be deemed not to require the attendance of the DNO, subject to the provisions of clause 11.2.2 above.			DNO, EMO	
11.2.6 In any other case where, for example, interface equipment or the meter position is situated in a substation where access is restricted under the relevant Distribution Safety Rules, four options will be available to the EMO. Each option requires the agreement of the DNO:			DNO, EMO	
(a) the DNO may, in accordance with the procedures of the Distribution Safety Rules authorise a specific Meter Operative of the EMO to enter the substation and carry out the work;			DNO, EMO	
(b) the DNO may issue an authorisation as in (a) above, but to the EMO, who will then be responsible for providing			DNO, EMO	

sufficient training to its EMOs and for granting individual authority under his own procedures;				
(c) a DNO representative may attend, grant access and stand by whilst the work is carried out. If this work requires the removal of supply or voltage fuses, then attendance will also be required to restore supplies when the works are completed (see clause 11.6.7 below); or			DNO,	
(d) the DNO may arrange for interface equipment to be relocated to, or for secondary isolation facilities to be fitted in, a non-restricted area.			DNO,	
Note: Option (a) may involve use of a joint access agreement whereby dual (or multiple) locking is provided and each user determines which of his staff has authority to enter.			DNO EMO	
Note: The options (a) to (d) above will also apply in the case of Meter Operatives working on whole-current metering and needing to take safety precautions by removal (and subsequent replacement) of a DNO fuse or fuses. The authorisation in cases (a) and (b) will be required for work to be carried out on relevant equipment. In case (c) the DNO representative will remove and replace fuses under his own authorisation.			DNO EMO	
11.2.7 The procedures within this Meter Operation Code of Practice are intended to minimise the need for DNO staff to attend Sites where a EMO is carrying out works. However, the following situations, amongst others, may call for DNO attendance:			DNO EMO	

(a) lack of the Site-specific information described in clause 21.6.11 below;			DNO, MOA, EMO	
(b) access problems as in clause 11.2.6 above;			DNO, MOA, EMO	
(c) where the meter is CT or CT/VT-operated and there are no test/isolating facilities and/or the CT or VT secondary circuits are not connected to earth on the DNO side of the test/isolating facilities; or			DNO, MOA, EMO	
(d) where work needs to be carried out in the vicinity of live, bare conductors which cannot be adequately screened			DNO, MOA, EMO	
Note: In situation (c), the DNO shall, at its own expense, provide, or procure the provision of, suitable and accessible test/isolating facilities (note technical requirements as in 14.8.12), and ensure the CT and VT secondary circuits are connected to earth (see Appendix 16 - Earthing of Current Transformers).			DNO, MOA, EMO	
Note: In situation (d), which is likely to involve only Low Voltage supplies, DNO attendance may not be necessary if safety can be secured by isolation of the supply by the EMO.			DNO, EMO	
11.2.8 DNO attendance may also take place at the request of the EMO to provide technical support or assistance.			DNO, EMO	

11.3. Risk Assessment

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
11.3.1 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.	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
11.3.2 Upon conducting an installation, pre-installation checks are undertaken; including risk assessments and method statements where applicable or required and approval from the relevant parties with respect to this CoMCoP. Any required formal notifications are made prior to commencing work;	AMI, ASP, MAM	MI	DNO, MOA, EMO	C1, C2, C3, C4
11.3.3 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.	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
11.3.4 It is the responsibility of the relevant Parties to carry out the assessment of risk on Site and to ensure that safety precautions are in place to ensure that its Meter Operatives on Site are given control of safety at the point of work (see paragraph 5.1.1(ii) above).	AMI, ASP, MAM	MI	DNO, EMO	C1, C2, C3, C4
NOTE: In practice, this means that the Meter Operative on Site will carry out such risk assessment. The decision flow chart of Appendix 2 is an aid to this assessment and indicates particularly situations which may require referral to a representative of the DNO.		MI	DNO, EMO	
11.3.5 The MAM shall ensure that its representative or Meter Operatives understand the extent of	AMI, ASP, MAM	MI	DNO, MOA, EMO	C1, C2, C3, C4

the works required to be undertaken and undertake a risk assessment of the risks to safety on Site (see paragraph 5.1.1(ii) above). The MEM shall ensure that its representative or Meter Operatives shall report to it if they feel unable to proceed because:				
(a) their level of knowledge or experience is insufficient;	AMI, ASP, MAM	MI	DNO, EMO	C1, C2, C3, C4
(b) they have inadequate supervision or need to be accompanied (but are not);	AMI, ASP, MAM	MI	DNO, EMO	C1, C2, C3, C4
(c) they have inadequate information;	AMI, ASP, MAM	MI	DNO, EMO	C1, C2, C3, C4
(d) they require the attendance of DNO staff to assist or clarify that there is adequate safety at the workplace; and/or		MI	DNO, EMO	
(e) they have any other reason to believe that it is unsafe to continue.	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4

11.4. Pre-Checks

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
11.4.1 The relevant Parties 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.	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
11.4.2 The MAM and or AMI should confirm that a valid supply contract	AMI, MAM			C1, C2,

is in place with a registered Gas Supplier before installation.				C3, C4
11.4.3 Pre-installation procedures shall be available and used in accordance with the relevant standards. The procedure shall:	AMI, MAM			C1, C2, C3, C4
(a) Ensure that the location and housing comply with the relevant standards (Appendix 1 and 6). In the event that the location does not comply, the AMI shall notify the gas Consumer and/or gas Consumer representative and the MAM.	AMI, MAM			C1, C2, C3, C4
(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.	AMI, MAM			C1, C2, C3, C4
(c) Ensure that components and ancillary equipment are suitable for intended use and are compliant with the appropriate standards	AMI, MAM			C1, C2, C3, C4
(d) Ensure the meter installation is installed at the appropriate position designated by the MPRN or Connections Quotation Reference Number (CQRN)	AMI, MAM			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	AMI, MAM			C1, C2, C3, C4

out on the meter installation				
11.4.4 The AMI shall ensure that the details provided by the MAM are validated against the meter installation to be commissioned.	AMI, MAM			C1, C2, C3, C4
11.4.5 The MAM and AMI shall ensure that any relevant test certificate(s), as required by Industry standards, are available.	AMI, MAM			C1, C2, C3, C4

11.5. Equipment Location

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
11.5.1 The relevant Parties shall ensure that the local environment in the vicinity of the meter installation does not have or introduce any hazard that will compromise the safe and effective operation and use of the Device or ancillary equipment.	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4
11.5.2 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;	MAM			C1, C2, C3, F4
(a) Adequate space for the meter installation	MAM			C1, C2, C3, F4
(b) Adequate access to the ECV and the Meter Installation	MAM			C1, C2, C3, F4
(c) Ventilation	MAM			C1, C2, C3, F4
(d) Hazardous areas	MAM			C1, C2, C3, F4
(e) Sources of ignition	MAM			C1, C2, C3, F4
(f) Not compromising the means of escape in the event of fire	MAM			C1, C2, C3, F4

(g) Any other requirements the GT may have for approving the housing	MAM			C1, C2, C3, F4
11.5.3 A suitable location and housing shall be agreed by the MEM with all interested Parties (DNO, GT, AMI, Consumer, developer)	AMI, ASP, MAM	ES, MI	DNO, MOA	C1, C2, C3, C4
11.5.4 The relevant Parties shall determine any restrictions imposed by the 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.).	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4
11.5.5 The MEM 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	MAM			C1, C2, C3, F4
11.5.6 The MAM shall determine the requirement for and responsibility for the provision of any additional services, including but not restricted to:	MAM			C1, C2, C3, F4
(a) electrical supplies	MAM			C1, C2, C3, F4
(b) lighting	MAM			C1, C2, C3, F4
(c) drainage	MAM			C1, C2, C3, F4
(d) environmental protection and control plant or systems	MAM			C1, C2, C3, F4
(e) site security	MAM			C1, C2,

				C3, F4
(f) civil engineering	MAM			C1, C2, C3, F4
(g) instrumentation	MAM			C1, C2, C3, F4
(h) telemetry	MAM			C1, C2, C3, F4
(i) maintenance.	MAM			C1, C2, C3, F4
11.5.7 The MAM shall establish and comply with any requirement that the GT or other upstream gas conveyor has for safe working.	MAM			C1, C2, C3, F4
11.5.8 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.	AMI			C1, C2, C3, F4
11.5.9 Where an exchange of credit for Prepayment Meter is required, it shall be established that the location is suitable for a prepayment meter (see clause 15.7).	AMI, ASP, MAM	ES, MI	DNO, MOA	C1, C2
11.5.10 Operatives must be aware of the differing levels of technical complexity and potential safety risk to parties who may work on or in the vicinity of distribution and/or Metering Equipment .	AMI, ASP, MAM	ES, MI	DNO, MOA	C1, C2, C3, C4

11.6. Controlled Work

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
11.6.1 Installation process must ensure that:	ASP			

(a) safe control of work is assured;	ASP			
(b) the AMR Device and any ancillary equipment are installed in accordance with best practice and all relevant standards;	ASP			
(c) the AMR Device and any ancillary equipment are inspected and tested on installation;	ASP			
(d) the AMR Device and any ancillary equipment when installed do not have a detrimental effect on other legacy devices other than where compliance with this condition would compromise safety or not be reasonably practical;	ASP			
(e) statutory and advisory labels are fitted.	ASP			
11.6.2 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.	AMI, MAM			C1, C2, C3, C4
11.6.3 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.	AMI, MAM			C1, C2, C3, C4
11.6.4 In the event that a third-party requests permission to connect Ancillary Equipment to a meter installation, the MAM shall specify the appropriate standards to which the ancillary equipment is to be installed.	AMI, ASP, MAM	ES, MI	DNO, MOA	C1, C2, C3, C4

11.6.5 The AMI shall ensure the meter installation is subject to a visual and physical check, including tightness testing.	AMI			C1, C2, C3, C4
11.6.6 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.	MAM			C4
11.6.7 Where staff of the DNO and the EMO become jointly involved in works, such as in paragraph 11.2.6 (b) above, both Parties will follow the DNO Distribution Safety Rules. This may involve the use of a specific document to ensure that work does not commence before safety precautions have been taken and that the supply is not restored until works are completed or suspended (see 8.1.6(c)).			DNO, EMO	
Note: Appendix 9 provides guidance to EMOs on typical DNO operational and safety considerations at the interface. This should be read in conjunction with DNO information provided (see sub-section 21.6.and Appendix 13, Part 1.			DNO, EMO	
11.6.8 There are specific duties in the Electricity Safety, Quality and Continuity Regulations 2002 (as amended), (in particular Regulation 25) and also a general duty of care under health and safety legislation to ensure that members of the public are protected from work carried out.			DNO, EMO	
11.6.9 Together, the above place the onus on the EMO and/or DNO to ensure work is carried out safely when it is connecting an installation that is found disconnected, or de-			DNO, EMO	

energised, or where it is asked to add additional circuits.				
11.6.10 EMOs shall establish procedures for ensuring that it is safe to connect installations in compliance with the Electricity Safety, Quality and Continuity Regulations 2002 (as amended), at the date of this Code and as amended from time to time, to cover situations in which it is working at a meter installation where it may be reconnecting existing circuits, or adding new circuits.			EMO	

11.7. Safety Inspections

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
11.7.1 Where safety inspections are undertaken by the relevant Party (or the AMI on behalf of the Gas Act Owner or DNO), the inspections should include:	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4
(a) reading the meter	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4
(b) inspecting the meter and associated meter installation for evidence of tampering	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4
(c) 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	AMI, MAM			C1, C2, C3, C4
(d) 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	AMI, MAM			C1, C2, C3, C4

escapes and gas safety related issues should be reported immediately to 0800 111 999 and the owner/Consumer given appropriate gas safety advice				
(e) inspecting the meter for any evidence of deterioration which might affect its due functioning or safety	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4
(f) where necessary and subject to the consent of the owner of the meter, changing any batteries in the meter.	AMI, MAM			C1, C2, C3, C4

11.8. **Tamper Checks**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
11.8.1 When attending a meter Installation, the signatory 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 8 (Unbilled Energy Code of Practice) of the REC concerning what constitutes theft of gas or abstraction of electricity. The person may not make such a determination unless it has sufficient evidence to substantiate the occurrence of theft of gas or abstraction of electricity	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4
11.8.2 The relevant Parties 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	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4

result of tampering.				
11.8.3 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.	AMI, MAM			C1, C2, C3, C4
11.8.4 The relevant Parties must at all times be mindful of its safety, the safety of the Consumer and the safety of the general public. The signatory should use its own judgement to ensure that safety is not compromised.	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4

11.9. Issue Reporting

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
11.9.1 The ASP and any installers acting on behalf of the ASP must have procedures in place for reporting any dangerous occurrences as required by the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR).	ASP			
11.9.2 Any person carrying out installation work covered by this CoMCoP who becomes aware of an unsafe or dangerous installation or gas leak during the course of that work, has a duty to inform a Responsible Person. However, this duty only extends to those issues which are within the competence of the person engaged in work and which it is reasonable to expect the person to notice through visual inspection or olfactory sense by that person.	ASP			

11.9.3 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.	AMI			C1, C2, C3, C4
11.9.4 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 Consumer). Where the type of meter or meter installation component is recalled by the MEM for safety or other reasons, the MEM shall undertake an initial risk assessment to establish the type of exchange policy to be adopted.	MAM		MOA	C1, C2, C3, C4
11.9.5 Where safety issues are identified, the Gas Industry Unsafe Situations Procedure (IGEM/G/11)) shall be followed.	AMI, MAM			C1, C2, C3, C4
11.9.6 For safety reasons arising from unsuitable meter installations, 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 6)	AMI, MAM			C1, C2, C3, C4
11.9.7 The EMO shall ensure that its Meter Operatives have access to a current version of the Guidance for Service Termination Issue Reporting document while on Site (this may be a physical or electronic version) and report to the DNO:			DNO, EMO	
(a) any DNO Equipment which they find to be defective such as to present the possibility of danger (category A);			DNO, EMO	
(b) any parts of the DNO Equipment, Sites or situations which are or which they reasonably believe may			DNO, MOA, EMO	

become hazardous (category B); or				
(c) any relevant asset condition information (category C).			DNO, MOA, EMO	
11.9.8 Where such defects or hazards additionally involve damage to or suspected interference with Metering Equipment, then the procedures detailed in clauses 14.7.1 to 14.7.6 below shall also apply. The EMO shall ensure that its Meter Operatives do not interfere with apparatus belonging to the DNO to which they have not been granted access.			EMO	
11.9.9 The EMO shall also ensure that its procedures require its Meter Operatives to follow the requirements under relevant safety legislation to report incidents/accidents and dangerous occurrences to the relevant reporting authority.			EMO	
11.9.10 The EMO shall ensure that its Meter Operatives on Site assess any technical problems associated with the works required to be undertaken and do not proceed if:			EMO	
(a) their level of technical knowledge or experience is insufficient;			EMO	
(b) they have inadequate supervision;			EMO	
(c) they have inadequate information;			EMO	
(d) they require the attendance of DNO, GT or GDN staff to assist or clarify that there is adequate safety at the workplace; and/or			DNO, EMO	
(e) they have any other reason to believe that it is unsafe to continue.			EMO	

11.9.11 Technical problems may have safety implications which should also be referred to the EMO as they may affect the assessment of on-Site safety (see clause 5.2.2).			EMO	
11.9.12 Each DNO has an obligation to maintain its equipment in a safe condition, but relies on staff on Site to report any deficiencies (as detailed in clause 11.9.7 above), which it will then remedy.			DNO, EMO	
11.9.13 The DNO shall ensure that its DNO Operatives have access to a current version of the CoMCoP Guidance for Service Termination Issue Reporting document while on Site. This may be a physical or electronic version.			DNO	
11.9.14 Any DNO to whom a relevant Party reports a dangerous situation, defect or hazard in accordance with paragraph 11.9.1 to 11.9.14 shall repair such dangerous situation, defect or hazard and inform the currently appointed MOA in line with the Service Level Agreement for Resolving Network Operational Issues and Associated Reporting Requirements detailed within DCUSA.			DNO, MOA, EMO	

12 Equipment Specification

12.1. Site Detail

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
12.1.1 Pre-Installation procedures must include, but not be limited to,	ASP			

ensuring:				
a) whether there is an existing AMR Device attached or available use of the meter pulse output;	ASP			
b) the installation is to be installed at the appropriate site and to the appropriate meter as stated by the MPRN or other appropriate reference details;	ASP			
c) the AMR Device and any ancillary equipment are suitable for the intended purpose;	ASP			
12.1.2 The ASP must make reasonable endeavours to establish the requirements for, and the effect of, any existing equipment which is to interface with the meter installation (for example Converters, other AMR Devices and building management systems). Where any such existing equipment is disconnected (for safety or any other reason) the ASP must inform the Responsible Person of such disconnection.	ASP			

12.2. Pressure measurement

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
12.2.1 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.	MAM			C1, C2, C3, C4

12.2.2 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.	AMI, MAM			C3, C4
12.2.3 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.	MAM			C4

12.3. **Sealing Equipment**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
12.3.1 The AMI shall ensure that any sealing equipment, security collars or other security fittings to be used on a meter installation are	AMI, MAM			C1, C2, C3, C4

kept secure and only used as directed by the MAM.				
12.3.2 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.	AMI, MAM			C1, C2, C3, C4
12.3.3 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.	AMI, MAM			C1, C2, C3
12.3.4 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.	AMI			C1, C2, C3, C4
Note: Where it has not been necessary to break a factory fitted manufacturers seal on a pre-set regulator or safety device, it is not necessary to remove it and fit a seal marked with the AMI number on the GT approval, but it is acceptable for the AMI to add an additional seal if desired.	AMI			C1, C2, C3, C4
12.3.5 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.	AMI			

12.4. **Phase Lamps**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
12.4.1 DNOs are responsible for ensuring any existing phase failure indicator lamps are kept operational. DNOs should have ceased fitting phase failure indicator lamps at new Metering Points from 1 January 2009. When the DNO or EMO make a material change to the Metering Point, or at their own initiation, any existing phase failure indicator lamps should be disabled and clearly labelled as such or removed leaving the panel safe (e.g. unused holes filled). For the purposes of this clause, phase failure indicator lamps are defined as one or more lamps intended to visually demonstrate that voltage is available on one or more phases.			DNO, EMO	

13 Competency & Conduct

13.1. Technical Competency

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
13.1.1 Relevant Parties of this CoMCoP must be able to demonstrate that works covered by this CoMCoP (including Ancillary equipment) are completed in compliance with industry safety and technical standards and equipment meets the requirements of the environment in which it is installed e.g. hazardous areas and zoning. A participating signatory must ensure that all work under its control is undertaken by Competent Persons	AMI, ASP, MAM	ES, MI	DNO, MOA, EMO	C1, C2, C3, C4

as determined by an independently accredited training programme, having the appropriate training, assessment and certification.				
13.1.2 All equipment (including Ancillary equipment) must be installed in accordance with appropriate standards by Competent Persons. A list of standards and procedures can be found in the Appendices.	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4
13.1.3 Installation must be performed by appropriately accredited and Competent Persons ("installers") in accordance with this code of practice, best practice, relevant normative standards, manufacturers' information and appropriate installer's field procedures.	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4
13.1.4 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) Regs. 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.	AMI, MAM			C1, C2, C3, C4
13.1.5 The EMO shall require that its Meter Operatives carry on Site with them their certificate of competency detailing the work for which they are authorised, including, where relevant, any certificate issued by the DNO.			DNO, EMO	
13.1.6 In the event that a third-party requests permission to connect Ancillary Equipment to a meter installation, the relevant Parties shall require that appropriately trained and qualified operatives undertake the work	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4

14 Installation Activity

14.1. Legislation

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
14.1.1 The process for installation also covers the requirements for exchange or replacement of components of the meter installation	AMI, MAM			C1, C2, C3, C4
14.1.2 The relevant Parties 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 6.	AMI, MAM		MOA, EMO	C1, C2, C3, C4
14.1.3 The AMI shall undertake tests that assure the integrity of:	AMI, MAM			C1, C2, C3, C4
(a) Meter installation components (including all fittings, associated pipework)	AMI, MAM			C1, C2, C3, C4
(b) any ancillary equipment and	AMI, MAM			C1, C2, C3, C4
(c) electrical and instrumentation systems.	AMI, MAM			C1, C2, C3, C4
14.1.4 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.	AMI, MAM			C1, C2, C3, C4
14.1.5. The AMI shall select the appropriate methods of testing and purging according to the applicable standards for the meter installation involved.	AMI, MAM			C1, C2, C3, C4

14.1.6 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.	AMI, MAM			C1, C2, C3, C4
14.1.7 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.	AMI, MAM			C2, C3, C4
14.1.8 When a DNO installs new Metering Equipment or changes existing Metering Equipment it shall provide or update, as appropriate, the information on the HV/LV CT metering label described in Appendix 13, Part 3. In addition, the DNO will adhere to the requirements outlined in the BSC Metering Code of Practice 4.			DNO	
14.1.9 Diagrams in relevant BSC Metering Code of Practice 3 and 5 show basic meter connection arrangements, namely Low Voltage CT operated and High Voltage CT and VT-operated. Connections are generally made to separate test/isolating facilities, with on-going connections to the meter and it should be noted that there are alternative methods of connection for High Voltage CT/VT-operated metering.			DNO, MOA, EMO	
14.1.10 In dealing with Low Voltage supplies the EMO operatives must be aware that, in			DNO, EMO	

some cases, live conductors may be exposed when covers of the Metering Equipment are removed. In the case of High Voltage, access is restricted to voltage fuses, test/isolating facilities and to the meter position where these are sited within a DNO substation to which the Customer does not have access.				
14.1.11 Whenever work is carried out at the meter position (including, but not exclusively, new connections, service alterations, meter changes and connection of additional Customers' circuits), conductors shall be coloured and marked in accordance with Appendix 15.			DNO, EMO	
14.1.12 In the case of new Metering Points, the following principles shall be adopted:			DNO, MOA	
(a) the DNO shall agree with the Customer or developer the position and space for the Metering Equipment, and shall, in so much as it is within its reasonable control, ensure it remains reserved. The location must be accessible to the Customer so they can read their meter and to the MOA (via the Customer). Consideration shall be given to the accessibility of the location to all users. The DNOs' service termination equipment and the Metering Equipment should be located between 0.5 and 1.8m above finished floor level, subject to unavoidable constraints such as security, vandalism or fire risk mitigation;			DNO, MOA	

(b) for HV and LV CT metered supplies, the interface test/isolating facilities shall be installed in an accessible position near to the location of the proposed Metering Equipment. A label must be fitted in accordance with Appendix 13, Part 3. The CT and VT secondary circuits shall be connected to earth on the DNO side of the interface (see Appendix 16);			DNO, EMO	
(c) for whole current supplies, a means of isolating voltage supplies (e.g. cut-out) shall be installed in an area to which the EMO has access (via the Customer);			DNO, EMO	
(d) it is the responsibility of the DNO to determine the rating of the cut-out fuses. For whole current metered supplies, the EMOs Meter Operative shall check the conductors being provided by the Customer are suitably rated for the cut-out fuses provided before he connects them, or Energises the supply (this is limited to checking at the point of connection without needing to take into account any de-rating for thermal conditions within the installation);			DNO, EMO	
(e) the DNO is responsible for commissioning the service (e.g., checking voltage, earth loop impedance, phase rotation, polarity and any protection settings, etc at the cut-out/switchgear);			DNO	
(f) the EMO shall confirm the voltage, phase rotation and polarity at the supply terminals			EMO	

(metering output terminals or isolator switch terminals);				
(g) for whole current metered supplies, the EMO shall make the necessary connections between the DNO Equipment, Metering Equipment and the Customer's equipment;			DNO, EMO	
(h) where the DNO is to provide an earth terminal for the Customer, the DNO shall ensure the terminal is accessible to the Customer or contractor or take responsibility for making the earth connection. (Note: the Customer should have ongoing access to the earth terminal in order to carry out routine tests of his installation);			DNO	
(i) for HV and LV CT-metered supplies, before connecting Customer conduct ors, or facilitating the Customer's contractor safe access to suitable terminals, the DNO shall check the conductors being provided by the Customer are suitably rated for the cut-out fuse or circuit breaker protection;			DNO	
(j) for whole current and cut-out-controlled LV CT metered supplies, the EMO shall Energise the supply subject to the DNO having previously satisfied (e) and (k);			DNO, EMO	
(k) for circuit breaker-controlled LV and HV metered supplies, the DNO shall Energise the			DNO	

supply, in response to a request from the Supplier;				
(l) a relevant Party shall not agree to Energise a supply until it is appropriately metered;			DNO, EMO	
(m) the EMO shall not carry out energisation work unless and until authorised under the DCUSA; and			EMO	
(n) Conductors shall be coloured and marked in accordance with Appendix 15.			DNO, EMO	
Note: Items (b) and (c) above shall be provided by the DNO, chargeable to the Customer, and shall be capable of being sealed to prevent unauthorised access.			DNO	
Note: Due regard shall be paid in siting meters to the requirements for overall Metering Equipment accuracy. These are affected by the burden imposed, which is related to the length of connections between current transformers and meters.			DNO, EMO	

14.2. Meter and component replacement

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
14.2.1 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.	AMI, MAM			C1, C2, C3, C4
14.2.2 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,	AMI			C1, C2, C3, C4

regulator, filter or strainer (or any combination thereof) by other components of equivalent size, type and performance.				
14.2.3 Meter board replacement			DNO, EMO	
(a) When there is a requirement to replace the meter board (or any other surface) onto which the Metering Equipment or DNO Equipment is fixed then the following shall be adopted:			DNO	
i) Where there is only the need to displace the DNO Equipment, then arrangements should be made with the DNO to attend;			DNO	
ii) Where there is only the need to displace the Metering Equipment, then arrangements should be made for the EMO to attend, via the relevant Supplier;			EMO	
iii) Where there is the need to displace the DNO Equipment and Metering Equipment, then arrangements should be made with the DNO and with the EMO (via the relevant Supplier) to attend, as appropriate.			DNO, EMO	

14.3. Ancillary Equipment & Ancillary Replacement

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
14.3.1 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.	AMI, MAM			C1, C2, C3, C4
14.3.2 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.	AMI, MAM			C1, C2, C3, C4
14.3.3 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))	AMI, MAM			C1, C2, C3, C4
14.3.4 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.	MAM			C1, C2, C3, C4
14.3.5 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.	MAM			C1, C2, C3, C4
14.3.6 When the AMI and MAM is replacing or installing Ancillary Equipment, the MAM and AMI shall ensure that the Ancillary Equipment connected to the meter is installed to appropriate standards	AMI, MAM			C1, C2, C3, C4

14.4. **Commissioning**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
14.4.1. 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.	AMI, MAM			C1, C2, C3, C4
14.4.2 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).	AMI, MAM			C1, C2, C3, C4
14.4.3 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.	AMI, MAM			C1, C2, C3, C4
14.4.4 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.	AMI, MAM			C1, C2, C3, C4
14.4.5 Commissioning procedures shall be developed and shall take into account as appropriate, the requirements of:	AMI, MAM			C1, C2, C3, C4
(a) Legislation	AMI, MAM			C1, C2, C3, C4

(b) International, European, British and Industry standards	AMI, MAM			C1, C2, C3, C4
(c) Site owner requirements	AMI, MAM			C1, C2, C3, C4
(d) Manufacturer's instructions	AMI, MAM			C1, C2, C3, C4
14.4.6 Any pre-initialisation procedures, which may be required in accordance with the manufacturer's instructions, shall be carried out.	AMI			C1, C2, C3, C4
14.4.7 Operational liaison between the relevant Parties and the DNO during commissioning of new Metering Equipment shall be covered by the Distribution Safety Rules.			DNO, MOA, EMO	
14.4.8 Generic commissioning procedures may be acceptable for meter installations in accordance with BSC 6400 – 1, BS 6400 - 2 or IGEM/GM/6 as appropriate.	AMI, MAM			C1, C2, C3
14.4.9 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.	AMI, MAM			C4
14.4.10 Suitable and adequate test equipment shall be selected and used.	AMI, MAM			C1, C2, C3, C4
14.4.11 The AMI shall set the meter regulator operating pressure to the range of pressures detailed in the GT's letter of authorisation.	AMI			C1, C2, C3, C4

14.5. Modification

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
14.5.1. 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:	AMI, MAM			C1, C2, C3, C4
(a) safety or integrity of the meter installation	AMI, MAM			C1, C2, C3, C4
(b) access to the ECV	AMI, MAM			C1, C2, C3, C4
(c) accessibility to read the meter	AMI, MAM			C1, C2, C3, C4
(d) accessibility to maintain the meter installation	AMI, MAM			C1, C2, C3, C4
(e) accessibility to exchange the meter or meter installation components	AMI, MAM			C1, C2, C3, C4
(f) proximity and suitability of electrical equipment	AMI, MAM			C1, C2, C3, C4
(g) property alterations	AMI, MAM			C1, C2, C3, C4
(h) inappropriate or unsuitable by-pass arrangements	AMI, MAM			C1, C2, C3, C4
(i) inadequate ventilation	AMI, MAM			C1, C2, C3, C4
(j) suitability for the load	AMI, MAM			C1, C2, C3, C4
(k) installation of, or alteration to, third party equipment	AMI, MAM			C1, C2, C3, C4
(l) unapproved equipment connected to the meter installation	AMI, MAM			C1, C2, C3, C4
(m) Inappropriate components and pressure controls for the upstream pressure tier.	AMI, MAM			C1, C2, C3, C4
14.5.2 Where a meter installation component is to be exchanged and	AMI, MAM			C1, C2, C3, C4

the meter installation, although safe, does not conform to current standards, consideration shall be given to updating the whole meter installation (Appendix 1 & 6).				
14.5.3 No modification may be made to any Party's equipment except in accordance with the following provisions of sub-section 14.5.			DNO, EMO	
14.5.4 Modifications to termination arrangements or Metering Equipment should always meet the requirements of sub-section 14.8.			DNO, EMO	
14.5.5 In the case of changes initiated by the DNO or by the Customer to an existing Metering Point, the following principles shall be adopted:			DNO, MOA	
(a) for HV and LV CT metered supplies, the interface test/isolating facilities shall be installed in an accessible position near to the location of the proposed Metering Equipment. A label must be fitted in accordance with Appendix 13, Part 3;			DNO, EMO	
(b) for whole current supplies, a means of isolating voltage supplies (e.g., cut-out) shall be installed in an area to which the EMO has access (via the Customer);			DNO	
(c) for cut-out-controlled supplies, the DNO is responsible for providing and installing the required changes to the fuse carriers and/or fuses;			DNO	
(d) it is the responsibility of the DNO to determine the rating of the cut-out fuses. Where there is no change to the Metering Equipment,			DNO, MOA	

the DNO shall check the meter conductors are suitably rated for the new cut-out fuses provided before they connect them (this is limited to checking at the point of connection without needing to take into account any de-rating for thermal conditions within the installation). Where they are not appropriate, the DNO shall arrange with the MOA for whole current supplies and/or Customer for CT supplies, as appropriate, to install new conductors;				
(e) the DNO is responsible for commissioning the service (e.g. checking voltage, earth loop impedance, phase rotation, polarity and any protection settings, etc at the cut-out/switchgear) in accordance with the BSC Metering Code of Practice 4;			DNO	
(f) when performing any metering work the EMO shall confirm the voltage, phase rotation and polarity at the supply terminals (metering output terminals or isolator switch terminals);			EMO	
(g) for whole current metered supplies, the EMO shall make the necessary additional connections and/or replacements between the DNO Equipment, Metering Equipment, and the Customer's equipment; and to facilitate de-energisation and energisation as agreed with the Supplier or Customer;			DNO, EMO	

(h) where the DNO is to provide an earth terminal for the Customer, the DNO shall ensure the terminal is accessible to the Customer or contractor or take responsibility for making the earth connection. (Note: The Customer should have ongoing access to the earth terminal in order to carry out routine tests of his installation);			DNO	
(i) for HV and LV CT metered supplies, before connecting additional load, replacement of Customer conductors, or facilitating the Customer's contractor safe access to suitable terminals, the DNO shall check the conductors being provided by the Customer are suitably rated for the cut-out fuse or circuit breaker protection;			DNO	
(j) when performing any metering work for whole current and cut-out- controlled LV CT metered supplies, the EMO shall De-energise or Energise the supply subject to the DNO having previously satisfied paragraph (c) & (i);			DNO, EMO	
(k) for circuit breaker-controlled LV and HV metered supplies, the DNO shall de-energise and Energise the supply, in response to a request from the Supplier;			DNO	
(l) a relevant Party shall not Energise a supply until it is appropriately metered;			DNO, EMO	

(m) the EMO shall not carry out de-energisation or energisation work unless and until authorised under the DCUSA; and			EMO	
(n) Conductors shall be coloured and marked in accordance with Appendix 15.			DNO, EMO	
Note: Items (a) and (b) above shall be provided by the DNO, chargeable to the Customer, and shall be capable of being sealed to prevent unauthorised access.			DNO	
Note: EMOs should take note of any requirements in the DNO's statement published as required by Appendix 13 of this Schedule.			DNO, EMO	
Note: Due regard shall be paid in siting meters to the requirements for overall Metering Equipment accuracy. These are affected by the burden imposed, which is related to the length of connections between current transformers and meters.			DNO, EMO	
14.5.6 For the avoidance of doubt, a material change means a permanent change to the DNO Equipment other than:			DNO, EMO	
(a) a change to repair, modify or replace any component which is not, in the judgement of the DNO, a substantial part of the DNO Equipment;			DNO, EMO	
(b) a change to repair another part or other parts of the DNO Equipment, which are not deemed to be substantial, using an enhanced or equivalent component; and			DNO, EMO	
(c) a change to another part or other parts of the DNO Equipment, each of which is not of itself (and, where taken			DNO, EMO	

together with other such changes, are not) a substantial part of the DNO Equipment necessitated, in the judgement of the DNO acting as a reasonable operator in all circumstances, by any change under (a) above, in each case where an enhanced or equivalent component is used for the repair, modification or replacement rather than an identical component.				

14.6. **Maintenance**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
14.6.1 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:	MAM			C1, C2, C3, C4
(a) maintenance procedures are applicable to the specific meter installation and that the correct meter installation is being maintained,	MAM			C1, C2, C3, C4
(b) arrangements have been made for safe access, egress and adequate working space,	MAM			C1, C2, C3, C4
(c) risk assessments are available for the work intended,	MAM			C1, C2, C3, C4
(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	MAM			C1, C2, C3, C4

of operations procedures,				
(e) The risk from electricity should be mitigated (for example through the use of a Voltage Detector and temporary continuity bond),	MAM			C1, C2, C3, C4
(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 6).	MAM			C1, C2, C3, C4
14.6.2 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.	AMI, MAM			C1, C2, C3, C4
14.6.3 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:	MAM			C1, C2, C3, C4
(a) equipment or meter installation component manufacturer's instructions	MAM			C1, C2, C3, C4
(b) the operational or maintenance history of the meter installation	MAM			C1, C2, C3, C4
(c) an inspection for damage, leakage, corrosion and tampering	MAM			C1, C2, C3, C4
(d) functional checks of the pressure control and protection devices	MAM			C1, C2, C3, C4
(e) functional checks on the meter (not necessarily a calibration)	MAM			C1, C2, C3, C4
(f) functional checks on any volume conversion equipment	MAM			C1, C2, C3, C4
(g) oil changes and lubrication	MAM			C1, C2, C3, C4

(h) battery changes (in accordance with manufacturer's instructions)	MAM			C1, C2, C3, C4
(i) replacement of meter installation components with a specified operating life	MAM			C1, C2, C3, C4
(j) replacement of meter installation components with known defects or failure modes	MAM			C1, C2, C3, C4
(k) any specific requirements for the maintenance of electrical or instrumentation equipment or systems certified for use in hazardous areas	MAM			C1, C2, C3, C4
(l) verification that suitable ventilation and working space is available in the meter housing	MAM			C1, C2, C3, C4
(m) regulator outlet pressure setting should be checked and verified when the regulator seal has been found to be broken.	MAM			C1, C2, C3, C4
14.6.4 If the DNO wishes to retain its own Metering for non-settlement purposes, alongside MOA's metering, the DNO shall ensure it is clearly labelled "DNO metering, required until …" or similar.			DNO, MOA	
14.6.5 The accuracy requirements relating to the Metering Equipment which specify compliant equipment are as specified in the relevant BSC Metering Codes of Practice.			DNO, MOA	

14.7. **Damage**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
14.7.1 Reporting of damage			DNO, MOA, EMO	

Note: 'Damage' here includes external physical damage and any internal fault which manifests itself externally.			DNO, MOA, EMO	
14.7.2 Where Metering Equipment on Site is found at any time by a representative of the DNO to be damaged, this shall be reported to the relevant Supplier.			DNO	
14.7.3 Where damage is found by a Meter Operative, then he shall inform all relevant persons.			EMO	
14.7.4 Where the damage appears to be due to deliberate tampering/interference, then the procedures set out in sub-section 14.9 shall apply.			DNO, MOA, EMO	
14.7.5 Where there is a need for damaged Metering Equipment to be replaced, then such Metering Equipment shall not be destroyed or otherwise disposed of without the permission of any relevant Party (usually the Supplier or the DNO) which may be involved in an insurance claim or dispute. Such Party may require the original equipment be reserved/set aside and made available for subsequent investigation; in this case it shall be the responsibility of such Party to notify the initial period for which the equipment shall be kept (typically 6 months) and to advise of its subsequent requirements.			DNO, MOA, EMO	
14.7.6 Where the damage or deficiency has been such as to interfere with the correct operation of the Metering Equipment, then the Supplier will subsequently agree with the Customer and the DNO, in consultation with the relevant MOA, the quantity of any electrical energy not recorded.			DNO, MOA	

14.8. Operational activities

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
14.8.1 Any works undertaken by the MAM and AMI shall not cause gas consumption to be incorrectly registered.	AMI, MAM			C1, C2, C3, C4
Note: This includes design work and meter selection activities	AMI, MAM			C1, C2, C3, C4
14.8.2 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	AMI, MAM			C1, C2, C3, C4
14.8.3 The operation of the meter installation must be conducted in accordance with the relevant legislation listed in Appendix 1 and 6, 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:	AMI, MAM			C1, C2, C3, C4
(a) Procedures for reporting and dealing with gas escapes.	AMI, MAM			C1, C2, C3, C4
(b) Network Codes.	AMI, MAM			C1, C2, C3, C4
(c) Recognised industry standards.	AMI, MAM			C1, C2, C3, C4
(d) The GT's safe control of operations procedures.	AMI, MAM			C1, C2, C3, C4
(e) Any safe control of operations procedures operated by the Consumer or site owner.	AMI, MAM			C1, C2, C3, C4
(f) Any warrants issued between the respective parties.	AMI, MAM			C1, C2, C3, C4

14.8.4 Information resulting from such activities shall be sent to relevant Market Participants.	AMI, MAM			C1, C2, C3, C4
14.8.5 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:	MAM			C1, C2, C3, C4
(a) General enquiries by the Consumer or persons acting on their behalf (for example capacity inquiries or pressure problems)	MAM			C1, C2, C3, C4
(b) Meter accuracy or meter reading disputes including any requests for a BEIS Official Meter Accuracy Tests	MAM			C1, C2, C3, C4
(c) Other disputes (for example pressure related disputes)	MAM			C1, C2, C3, C4
(d) Theft of gas incidents	MAM			C1, C2, C3, C4
(e) Operation of the by-pass	MAM			C1, C2, C3, C4
(f) Meter installation operational faults (for example, inadvertent operation of safety devices)	MAM			C1, C2, C3, C4
(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	MAM			C1, C2, C3, C4
(h) Cooperation in the investigation of carbon monoxide (CO) emission and other incidents	MAM			C1, C2, C3, C4
14.8.6 Information resulting from such activities shall be sent to relevant Market Participants.	MAM			C1, C2, C3, C4
Note: The meter installation is generally installed downstream of the ECV that terminates the	MAM			C4

pipeline, however, in the case of existing meter installations (i.e. Legacy Gas Supply Arrangements), exceptions may arise.				
14.8.7 Metering Equipment and related DNO Equipment shall be sealed following commissioning and shall be resealed following any subsequent works by any Party that require the removal of seals, either owned by that Party or the property of another Party. Appendix 19 provides details of the equipment to be sealed, the seals to be used and relevant procedures. Reference should also be made to the BSC and the relevant BSC Procedures.			DNO, EMO	
14.8.8 The EMO shall ensure that its Meter Operatives provide timely and accurate information to enable it to keep records and provide other required documentation as specified in clause 8.1.6 above, in particular the essential commissioning information referred to in paragraph 8.1.6(c) above.			EMO	
14.8.9 The Meter Operative must implement procedures developed by the EMO business. These will include ensuring that:			EMO	
(a) a check of the meter installation is carried out before and after work, including connection configuration for meters and tariff or contract details; in the case of CT and CT/VT-operated metering, the secondary circuits should be tested that they are connected to earth;			EMO	
(b) the polarity and phase rotation of the supply and connections to the Metering Equipment is correct (taking account of, if			EMO	

appropriate, whether the connection is deliberately non-standard);				
(c) the Metering Equipment is recording the correct measurement of the load;			EMO	
(d) the Site is safe and secure before and on completion of work or inspections;			EMO	
(e) if non-standard arrangements of Metering Equipment are discovered they are reported to the MOA who will advise the Supplier;			MOA, EMO	
(f) if any DNO non-settlement metering is encountered at a supply point, providing it is not labelled "DNO metering, required until …", it is to be removed. This includes ancillary equipment, such as time switches, that was part of a previous metering arrangement.			DNO, EMO	
(g) the correct personal protective equipment is available and used;			DNO, EMO	
(h) the equipment to be worked on is made and proved not live or, if not, there are clear guidelines or procedures for the use of shrouding equipment, and they are fully complied with; and			DNO, EMO	
(i) the Customer's electrical installation at the service position is visually inspected to identify signs of risk and if identified, to inform the Customer of this risk and any preventative actions required. An EMO may use the suggested template in Appendix 18 this Schedule to fulfil this recommendation.			EMO	

14.8.10 The DNO shall re-seal Metering Equipment after it has removed MEM seals in order to carry out any work upon such Metering Equipment, including where it carries out post-commissioning testing.			DNO, EMO	
14.8.11 As regards the interface between the DNO Equipment and the Metering Equipment:			DNO, EMO	
(a) for whole-current metering, the normal interface point will be the cables from a cut-out or Switch at the outgoing terminals of the cut-out or Switch. However, there will be occasions (e.g., with rising mains) where this is not the case, and guidance should be sought from the DNO. Where a DNO meter is to be left on Site, then the interface will be the outgoing terminals of that DNO meter;			DNO, MOA, EMO	
(b) for CT and CT/VT metering, the normal interface point will be the outgoing connections from the test/isolating facilities and the voltage fuses. The test/isolating facility provided must allow the following operations to be carried out via a safe electrical connection and without the need to disturb any wiring:			DNO, MOA, EMO	
i) short circuit individual current transformers;			DNO, MOA, EMO	
ii) directly connect an ammeter;			DNO, MOA, EMO	
iii) connect test equipment to inject current into the secondary circuit towards the meter;			DNO, MOA, EMO	
iv) connect a testing device on each phase of the			DNO, MOA, EMO	

voltage circuit.				
14.8.12 For the purposes of meter connection, the CTs, VTs, meter panel and associated cable, test/isolating facilities and voltage fuses will be provided by the DNO or by an independent connections provider, providing an adoptable connection meeting the requirements of the relevant BSC Metering Code(s) of Practice for the installation. Once commissioned, these CTs, VTs, meter panel and associated cable, test/isolating facilities and voltage fuses will become the property and the on-going responsibility of the DNO. Meter panels will accommodate affixing of the meter(s) which should be situated behind a Customer accessible door or on the front of the panel, the rest of the panel will be sealed in accordance with Appendix 19. The surface of the meter panel should be of sufficient area for the fitting of all the meters required, in accordance with the relevant BSC Metering Code(s) of Practice for the installation. The meter panel may be metal or plastic construction dependent on the Site conditions.			DNO, MOA, EMO	
14.8.13 To enable work on the meter to be carried out safely, case (a) above requires the removal of the main supply fuses or opening of the supply switch and measures to prevent inadvertent restoration of supply. Case (b) above requires the shorting out of CT connections at the test/isolating facilities, and the removal of voltage fuses at the point of supply. Following a risk assessment any other precautions necessary shall be taken.			DNO, MOA, EMO	

14.8.14 Connection to a DNO meter to be left in operation			DNO, MOA, EMO	
14.8.15 Where DNOs metering is to operate alongside settlement metering (and has been labelled in accordance with clause 14.1.8) then the method of connection shall be as shown in relevant BSC Metering Codes of Practice and both left in an operational state. The responsibility for connections and for sealing of any or both terminal covers and other sealable connection points rests with the Party carrying out the last on-Site work, and the general principles of sealing set out in clause 14.8.8 above shall apply.			DNO, MOA, EMO	

14.9. Tampering

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
14.9.1 Where either a Meter Operative or a representative of the DNO finds apparent evidence on Site of deliberate tampering/interference he shall comply with the relevant provisions of the Unbilled Energy Code of Practice and, in a potentially dangerous situation the Meter Operative or DNO representative shall take appropriate action to make the Site safe, while, so far as it is able, avoiding damaging any such evidence.			DNO, MOA, EMO	

14.10. Removal & Returns

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
14.10.1 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 sub-section 14.10	AMI, MAM			C1, C2, C3, C4
14.10.2 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.	AMI, MAM			C1, C2, C3, C4
14.10.3 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:	AMI, MAM			C1, C2, C3, C4
(a) Discontinuance – An act by a Gas Supplier as a means of stopping the flow of Gas at a Gas supply meter point	AMI, MAM			C1, C2, C3, C4
(b) Disconnection – An act by a GT to ensure that Gas cannot be off-taken through a Gas supply meter point.	AMI, MAM			C1, C2, C3, C4

14.10.4 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.	AMI, MAM			C1, C2, C3, C4
14.10.5 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.	AMI, MAM			C1, C2, C3, C4
14.10.6 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.	MAM			C1, C2, C3, C4
14.10.7 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.	AMI, MAM			C1, C2, C3, C4
14.10.8 Electrical continuity shall be maintained during and after the removal of the Meter and/or a meter	AMI, MAM			C1, C2, C3, C4

installation component in accordance with the appropriate and current standards				
14.10.9 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.	AMI			C1, C2, C3, C4
14.10.10 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 19	AMI, MAM			C1, C2, C3, C4
14.10.11 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.	AMI, MAM			C1, C2, C3, C4
14.10.12 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.	AMI			C1, C2, C3, C4
14.10.13 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	AMI, MAM			C1, C2, C3, C4

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.				
14.10.14 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.	AMI, MAM			C1, C2, C3, C4
14.10.15 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.	AMI, MAM			C1, C2, C3, C4
14.10.16 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.	AMI, MAM			C1, C2, C3, C4
14.10.17 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.	AMI, MAM			C1, C2, C3, C4
14.10.18 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	AMI, MAM			C1, C2, C3, C4

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.				
14.10.19 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.	AMI, MAM			C1, C2, C3, C4
14.10.20 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 clause 14.10.18).	MAM			C1, C2, C3, C4
14.10.21 Where Metering Equipment is to be removed, the EMO and/or the DNO shall ensure that any holes left in metering panels are blanked off and any redundant wiring removed.			DNO, EMO	
14.10.22 The EMO shall ensure that connected burdens are within acceptable limits. The EMO shall use all reasonable endeavours to ensure that no metering other than that of the current MOA, and where required that of the DNO, is connected.			DNO, MOA, EMO	
14.10.23 It shall be the responsibility of the current MOA to identify and arrange removal of all redundant Metering Equipment for which the appointed MOA is			MOA	

responsible and return the Metering Equipment in accordance with Clause 14.10.21				

15 Consumer Engagement

15.1. Representation

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
15.1.1 The relevant Party's operative is courteous and professional, and maintains a suitable standard of presentation when attending the Consumer premises, for example is suitably attired	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4

15.2. Identification

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
15.2.1 On attending the Consumer premises, the relevant Party's operative identifies themselves and where applicable the Energy Supplier they represent, and states the purpose of the visit.	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4
15.2.2 Members of the public must be able to readily confirm the identity and authority of a representative of a relevant Party. The representative shall carry at all times and show to a Consumer when gaining access to premises, a valid identity card. The issue, use and redemption of identity cards shall be controlled by each relevant Party in relation to their representatives. T311927he identity	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4

cards shall;				
(a) include the representative's name;	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4
(b) include a clear photograph of the representative;	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4
(c) be within the displayed expiry date;	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4
(d) where relevant, clearly displays the Energy Suppliers name; and	AMI, ASP, MAM	ES, MI	EMO	C1, C2, C3, C4
(e) include a contact telephone number for the relevant Party.	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4
15.2.3 The Consumer is able to check the validity of the identity card with the Energy Supplier;	AMI, ASP, MAM	ES, MI	EMO	C1, C2, C3, C4
15.2.4 The Installer carries the Gas Safe Registration ID Card when undertaking work on gas Smart Metering System installations. Where the Installer does not have their Gas Safe Registration ID Card, the Consumer is able to check the validity of the Gas Safe Registration of that Installer with Gas Safe.		MI		
15.2.5 Where the Energy Supplier operates a password scheme, the Installer will use the password when one has been requested by the Consumer.		ES, MI		
15.2.6 On occasions where more than one person attends the Installation Visit, e.g., with a mentor/trainee/auditor, all personnel are to present a valid identity card and each person's role is clearly explained to the Consumer;		MI		
15.2.7 A record is maintained of which Installer visited the Consumer;		MI		

15.3. Appointment success

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
15.3.1 Processes are maintained for managing abortive or no access Installation Visits, so that the Consumer can be made aware that the Installation Visit has failed, the reasons for the failure, what happens next, and what action(s) the Consumer can take;		ES, MI		
15.3.2 No aspect of the Smart Metering System installation is undertaken (at an occupied premises) on occasions when the Consumer is not in attendance, except for situations where work can be carried out without the Consumer being present, for example; the replacement of tampered meters or aspects of an Installation Visit carried out in Proactive Install and Leave instances;		MI		
15.3.3 Where meters are to be installed in sheltered housing (where it is known), approval should be gained from the warden, or other person in authority before making approaches to the residents;		ES, MI		
15.3.4 On occasions where the Consumer has requested or requires a carer or other adult who has legal responsibility over them to be present, and they are not, no aspect of the Smart Metering System installation is to be undertaken;		ES, MI		

15.4. **Description of Installation**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
15.4.1 The proposed work schedule and timescales should be agreed with the Consumer or responsible person.	AMI, ASP, MAM	ES, MI	DNO, MOA	C1, C2, C3, C4
15.4.2 Where known, the relevant Parties 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.	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4
15.4.3 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.	AMI, MAM			C1, C2, C3, C4
15.4.4 A site inspection is undertaken before commencing any work at the Installation Visit and the Consumer is advised that the inspection will take place;	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4
15.4.5 Ahead of any work starting, if the proposed meter location or configuration is different from existing, the Installer will discuss with the Consumer where the meter and communications module can be installed. Work is not to commence without the Consumer's agreement;		MI		
Note: If the Consumer requests to have the Smart Metering System installed in a different location, they may incur cost for the work. If the Consumer will incur cost for the work, they will be made aware of this, and the Energy Supplier will enter into a contract with the Consumer in respect of the		ES		

activity prior to the Installation Visit. Charging will not occur to recover costs directly associated with a standard installation.				

15.5. **Consumer ownership**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
15.5.1 Where known by the ASP, the ASP should ensure the Consumer is aware of any parts of the installation which the Consumer owns and may be affected. Where the Consumer is the owner of other equipment in the pulse chain, they are expected to ensure it remains accessible and properly maintained.	ASP			

15.6. **Vulnerability**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
15.6.1 In Domestic Premises, where potential cases of Vulnerable Consumers are identified during the Installation Visit, they are to be reported to the appropriate Energy Supplier personnel;	AMI, ASP, MAM	ES, MI	DNO, EMO	C1, C2, C3, C4
15.6.2 Where the Energy Consumer has been identified by the Energy Supplier as vulnerable, the MEM shall ensure that this information is passed to the AMI, EMO or MI. The AMI, EMO or MI 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.	AMI, MAM	ES, MI	MOA, EMO	C1, C2 C3, C4

15.6.3 When undertaking an installation for a Micro-Business Consumer that will impact the supply and the resident present has specific needs or, is identified as a Vulnerable Consumer, the Energy Supplier will take all reasonable steps to minimise the impact on the resident;		ES, MI		
15.6.4 The Energy Supplier [and MI] shall ensure that if the Consumer requires or has requested someone to be present at the Installation Visit in accordance with clause 10.1.5, for example, if the Consumer is known to be a Vulnerable Consumer or has specific needs, that person is included in the Smart Metering System demonstration; and		ES, MI		
15.6.5 The Energy Supplier and MI shall ensure that any information provided is available in a variety of media and in a format appropriate to or tailored for groups with specific needs such as visual impairment, hearing impairment, low levels of literacy, or other known characteristics of a Vulnerable Consumer.		ES, MI		

15.7. Prepayment Specifics

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
15.7.1 At the time of installation, the AMI shall draw the gas Consumer's attention to any warning notices and operation instructions for the meter.	AMI			C1, C2
15.7.2 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	AMI			C1, C2

unauthorised access when choosing the meter location.				
15.7.3 The AMI must not install a Prepayment Meter as a primary meter if there is a secondary meter used to render a charge to a Consumer on its downstream side.	AMI			C1, C2
15.7.4 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.	AMI			C1, C2
15.7.5 Where a Smart Metering System is to be operated in Prepayment mode, the Consumer is provided with a demonstration of the prepayment functionality, including, where appropriate, tariff detail, debt screens, releasing emergency credit and re-enabling supply, and guidance (with demonstrations where possible) on getting credit and the topping up process;		ES, MI		

15.8. System Operations

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
15.8.1 The Energy Supplier shall take appropriate steps to ensure the full Smart Metering System is operating correctly, including WAN, HAN and IHD (if provided).		ES, MI		
15.8.2 In the case of Domestic Consumers, each Energy Supplier shall ensure that an IHD is offered at the Installation Visit and if		ES, MI		

accepted, installed in an appropriate location, taking into account Consumers with specific needs e.g., mobility issues, and set up as far as practicable to meet the needs of the household e.g., tariff and payment type.				
15.8.3 In the case of Domestic Consumers, each Energy Supplier shall record instances where the Consumer has opted not to take an IHD.		ES		
15.8.4 An IHD does not have to be offered to Micro-Business Consumers. Where an IHD is provided to a Micro-Business Consumer, clause 15.10.1 shall apply.		ES		
15.8.5 Clause 15.8.2 does not apply where the Energy Supplier is derogated from the requirement to offer an IHD pursuant to and in accordance with an Alternative Display Direction.		ES		
15.8.6 Clause 15.8.3 does not apply where the Energy Supplier has provided an Alternative Display in accordance with an Alternative Display Direction.		ES		

15.9. **Fault Resolution**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
15.9.1 For an installation that cannot be commenced or completed during the Installation Visit, each Energy Supplier shall ensure that:		ES, MI		
(a) the Consumer is made aware of the reason(s) the installation could not be completed, for example if the site inspection highlighted areas for concern or in Reactive Install and		ES, MI		

Leave and Proactive Install and Leave instances;				
(b) the site is left in a safe state before departing; and		MI		
(c) it has processes in place for re-arranging the Installation Visit, if required and clearly and accurately communicating to the Consumer when the Smart Metering System installation is complete.		ES		
15.9.2 If a fault is identified with the Smart Metering System during the Installation Visit, the Consumer is made aware of the problem, what the resolution is likely to be, who will be resolving the fault, and the approximate timescales of the resolution;		MI		
(a) the Consumer is provided with contact details for additional information related to the Smart Metering System fault, for example should they wish to check progress;		ES, MI		
(b) it is made clear to the Consumer that they will not be charged for rectifying the Smart Metering System fault;		ES		
(c) information is provided as to who the Consumer is to contact if they identify a fault with the Smart Metering System; and		ES, MI		
(d) the Consumer is informed about their rights in relation to components of the Smart Metering System that are identified to be faulty.		ES, MI		

15.10. **Demonstration**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
15.10.1 Use of the Smart Metering System is demonstrated to the Consumer in a clear and accurate manner, which is easy to understand, including what information is available from the Smart Metering System, how this can be accessed, and use of the IHD (where provided);		ES, MI		
15.10.2 When demonstrating the Smart Metering System to a Consumer, the demonstration is informed by any specific needs such as visual impairment, hearing impairment, low levels of literacy, or other known characteristics of a Vulnerable Consumer;		ES, MI		

15.11. Energy Efficiency Guidance

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
15.11.1 Energy Efficiency Guidance is offered to the Domestic Consumer at the Installation Visit;		ES		
15.11.2Energy Efficiency Guidance is offered to a Micro-Business Consumer at a time appropriate to their needs, whether before, during, or after the Installation Visit. Energy Efficiency Guidance shall be offered to the Micro-Business Consumer, not to Vulnerable residents (where identified) at those sites;		ES		
15.11.3 The Energy Efficiency Guidance provides the Consumer with information and advice about their Smart Metering System and how they can use their Smart Metering System to improve their energy		ES		

efficiency. The Consumer is also directed to additional, impartial sources of information that might, for example, include generic information about the Energy Company Obligation (ECO);				
15.11.4 Energy Efficiency Guidance offered to the Consumer complements any Consumer engagement campaign coordinated by Smart Energy GB;		ES		
15.11.5 Energy Efficiency Guidance and materials are provided in a format that is suitable for the needs of the Consumer that has specific needs such as visual impairment, hearing impairment, low levels of literacy, or other known characteristics of a Vulnerable Consumer;		ES		
15.11.6 Where possible, when giving Energy Efficiency Guidance to a Vulnerable Consumer or a Consumer with specific needs, appropriate steps are taken to ensure a carer or the person with legal responsibility over the Consumer is present (if required or requested by the Consumer in accordance with clause 10.1.5);		ES, MI		
15.11.7 Where the Consumer requests energy efficiency information over and above the Energy Efficiency Guidance provided at the Installation Visit, the Consumer is given appropriate details of where and how they can obtain tailored or suitable advice; and		ES		
15.11.8 Where the Consumer requests Energy Efficiency Guidance to be given at a later date, the Energy Supplier records this and follows it up as appropriate.		ES		

15.12. Additional Guidance

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
15.12.1 Taking account of the circumstances of the installation, the Installer gives the Consumer guidance on electrical safety, for example not storing objects too close to the meter;		MI		
15.12.2 Taking account of the circumstances of the installation, for gas Smart Metering System Installation Visits, the Installer informs the Consumer about the dangers of carbon monoxide (CO) and the need to regularly have all gas appliances serviced and checked by a Gas Safe Registered engineer;		MI		
15.12.3 The Consumer is made aware of who to contact after the Installation Visit for further information in relation to the Smart Metering System for support, query resolution, or to provide feedback (verbally or in writing), and non-premium rate helpline numbers are provided; and		ES, MI		
15.12.4 The Consumer is made aware of any additional sources of help and information, including from independent and impartial sources, help-lines, websites and other appropriate organisations able to offer assistance. This could include any centrally coordinated Consumer engagement programme (related to smart metering or energy efficiency information, goods and services).		ES		
15.12.5 Instructions in a written or other suitable material format, on how to use the Smart Metering System and IHD (if provided), are left		ES		

with, or sent to the Consumer;				

15.13. **Marketing**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
15.13.1 Each Energy Supplier engaging in Marketing activity at the Installation Visit, shall ensure that:		ES		
(a) consent has been obtained from the Domestic Consumer prior to the Installation Visit (for chargeable goods and services only). Energy Suppliers may conduct Marketing to Micro-Business Consumers without obtaining prior consent. Consent can be secured by any appropriate, recordable method that allows a freely given and specific indication of the Domestic Consumer's wishes, e.g., by telephone, text, in writing, or electronically (web-form or email);		ES		
Note: The Energy Supplier must also inform the Consumer that they are under no obligation to receive Marketing.		ES		
(b) the Marketing discussion is ended immediately at the Consumer's request or if the Consumer indicates that it is inconvenient, unwelcome or inappropriate;		ES		
(c) when obtaining prior consent from a Domestic Consumer to engage in Marketing at the Installation Visit, the Energy Supplier must specify the type		ES		

of goods and services that may be discussed during such Marketing;				
(d) Marketing is conducted in a fair, transparent, appropriate and professional manner;		ES		
(e) the Consumer's inexperience, vulnerability, credulity or loyalties are not exploited;		ES		
(f) no high-pressure tactics are used;		ES		
(g) details of the goods or services offered are accurately presented and the benefits are not over stated, including any possible constraints on Interoperability;		ES		
(h) credible information is provided (drawn from relevant evidence) of performance of energy efficiency goods or services;		ES		
(i) Marketing support materials do not give false or misleading information;		ES		
(j) it is explained to the Consumer that only the goods and services available from (or through) the Energy Supplier are being offered, and that others are available; and		ES		
(k) for a Domestic Consumer that wants to know more about a Energy Supplier's propositions, but has not given prior consent for Marketing at the Installation Visit, the Energy Supplier can leave the Consumer with written information, so that they can initiate further contact with the Energy Supplier or agree that the Energy Supplier will contact the Consumer at a future date to follow-up the discussion; and		ES		

Note: Energy Suppliers must maintain an auditable record of instances where they have agreed to contact the Consumer at a future date to follow up the discussion.		ES		
(l) referrals should be followed up after a minimum period of two Working Days (unless the Consumer requests earlier action), allowing the Consumer time to explore alternatives and compare the prices they are being offered.		ES		

15.14. **Sales**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
15.14.1 For a Domestic Consumer, no Sales transactions are to be concluded at the Installation Visit.		ES, MI		
15.14.2 Energy Suppliers engaging in Sales transactions (Micro-Business Consumer only) at the Installation Visit, must ensure that:		ES, MI		
(a) the key terms and conditions of any agreement or contract are explained, including the Consumer's right to cancel the contract and the period within which this can be done without penalty;		ES, MI		
(b) Sales are conducted in a fair, transparent, appropriate and professional manner;		ES		
(c) a Consumer's inexperience, vulnerability, credulity or loyalties are not exploited;		ES		
(d) no high-pressure tactics are used;		ES, MI		
(e) the discussion is ended immediately at the Consumer's		ES		

request or if the Consumer clearly indicates that contact is inconvenient, unwelcome or inappropriate;				
(f) it is explained to the Consumer that only the goods and services available from (or through) the Energy Supplier are being offered, and that others are available;		ES		
(g) details of the goods or services offered are accurately presented and the benefits are not over stated, including any possible constraints on Interoperability;		ES		
(h) a credible written estimate is provided (drawn from relevant evidence) of performance of energy efficiency goods or services; and		ES		
(i) Sales support materials must not give false or misleading information.		ES		
(j) it is explained to the Consumer that only the goods and services available from (or through) the Energy Supplier are being offered, and that others are available;		ES		
(k) for a Domestic Consumer that wants to know more about a Energy Supplier's propositions, but has not given prior consent for Marketing at the Installation Visit, the Energy Supplier can leave the Consumer with written information, so that they can initiate further contact with the Energy Supplier or agree that the Energy Supplier will contact the Consumer at a future date to follow-up the discussion;		ES		
Note: Energy Suppliers must maintain an auditable record of instances		ES		

where they have agreed to contact the Consumer at a future date to follow up the discussion.				

16 Industry Notification

16.1. Point of Contact

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
16.1.1 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:	AMI			C1, C2 C3, C4
(a) site occupier	AMI			C1, C2 C3, C4
(b) Consumer	AMI			C1, C2 C3, C4
(c) relevant GT	AMI			C1, C2 C3, C4
(d) relevant electricity distributors	AMI			C1, C2 C3, C4
(e) other utilities.	AMI			C1, C2 C3, C4

16.2. Consultation

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
16.2.1 Any requirement for continuity of supply shall be established by the MAM in consultation with the GT, Gas Supplier or gas Consumer.	MAM			C1, C2 C3, C4
16.2.2 The AMI shall notify the gas Consumer and the MAM so that suitable arrangements can be made	AMI, MAM			C1, C2 C3, C4

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.				
16.2.3 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.	MAM			C1, C2 C3, C4
16.2.4 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.	AMI, MAM			C1, C2 C3, C4
16.2.5 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.	AMI			C4
Note: The GT approval may recommend the type of meter by-pass valve and method of sealing to be applied.	AMI			C4
16.2.6 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.	MAM			C1, C2 C3, C4

16.3. Installation Recording

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
16.3.1 Installation records must be maintained throughout the operational life of the complete installation.	AMI, ASP, MAM	ES, MI	DNO, MOA	C1, C2 C3, C4

16.3.2 Where an AMR Device is connected, removed or exchanged, to the ASP must record and communicate the information to the MAM with respect to this CoMCoP and where possible other parties in the pulse chain.	ASP			
16.3.3 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:	AMI, MAM			C1, C2, C3, C4
(a) HSE	AMI, MAM			C1, C2, C3, C4
(b) local authority	AMI, MAM			C1, C2, C3, C4
(c) relevant Gas Supplier	AMI, MAM			C1, C2, C3, C4
(d) relevant GT	AMI, MAM			C1, C2, C3, C4
(e) the site occupier	AMI, MAM			C1, C2, C3, C4
(f) Consumer	AMI, MAM			C1, C2, C3, C4
(g) other utilities.	AMI, MAM			C1, C2, C3, C4
16.3.4 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.	AMI, MAM			C1, C2, C3, C4
16.3.5 Where the AMI finds connected Ancillary Equipment during metering work, the AMI shall notify the MAM of the presence of such equipment.	AMI, MAM			C1, C2, C3, C4

16.3.6 When the AMI and MAM is replacing or installing Ancillary Equipment, the MAM and AMI shall ensure that following the fitting of Ancillary Equipment to the meter installation, all relevant information is communicated to the interested parties in the supply chain.	AMI, MAM			C1, C2, C3, C4
16.3.7 The MAM shall ensure that the correct details of the meter installation to be commissioned are provided to the AMI.	AMI, MAM			C1, C2, C3, C4
16.3.8 Test and Commissioning records shall be created and made available by the AMI, as required. The requirements of GM(C&D) Regs must be met (see Appendix 5)	AMI			C1, C2, C3, C4
16.3.9 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.	MAM			C1, C2, C3, C4
16.3.10 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.	AMI			C1, C2, C3, C4
16.3.11 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) Regs.	AMI, MAM			C1, C2, C3, C4
16.3.12 Operational liaison between the MAM and the DNO during commissioning of new Metering Equipment shall be covered by the Distribution Safety Rules.			DNO, EMO	

16.4. **Attribute Sharing**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
16.4.1 Where the AMI becomes aware of a 3rd party connection to the gas meter e.g., as a result of undertaking a survey, they shall notify the MAM of their findings	AMI			C1, C2 C3, C4
16.4.2 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.	AMI, MAM			C1, C2 C3, C4
16.4.3 In the event that a third-party requests permission to connect Ancillary Equipment to a meter installation, the MAM shall respond to the request in writing either granting permission or explaining why permission is withheld.	MAM			C1, C2 C3, C4
16.4.4 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.	AMI, MAM			C1, C2 C3, C4
16.4.5 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.	AMI, MAM			C1, C2 C3, C4
16.4.6 The DNO shall use reasonable endeavours to replace noncompliant transformers identified during a material change to the Distribution System within 10 Working Days, in			DNO, MOA	

accordance with the BSC and shall notify the MOA to enable its records to be updated.				

16.5. **Safety Reporting**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
16.5.1 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) Regs. 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.	AMI, MAM			C1, C2 C3, C4
16.5.2 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.	MAM			C1, C2 C3, C4
(a) 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.	AMI			C1, C2 C3, C4

16.5.3 In the event of serious problems arising on-Site, the EMO s Meter Operative may contact the DNO directly rather than reporting in the first place to the MOA.			DNO, MOA, EMO	
16.5.4 The EMO shall ensure that its Meter Operatives report immediately via their MOA so that the MOA may immediately notify any other MOA who has responsibility for Metering Equipment at the Site but which is not that MOA's Metering Equipment:			MOA, EMO	
(a) any Metering Equipment which they find to be defective such as to present the possibility of danger; or			MOA, EMO	
(b) any parts of the Metering Equipment or situations which are or which they reasonably believe may become hazardous.			MOA, EMO	

Post-Installation

17 System Capability

17.1. Data Integrity

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
17.1.1 Following the installation and commissioning of new AMR Technology it is required that signatories of this CoMCoP ensure that a subsequent physical read or suitable alternative method is used for the purposes of verifying the accuracy of the automated read. Signatories must keep adequate records (see sub-section 4.3) and have a disaster recovery procedure	ASP			

in place in respect of the data they hold.				
17.1.2 The ASP must be capable of delivering data in a format acceptable to gas supply industry parties, ensuring that;	ASP			
(a) details of each AMR Technology installation are correct and fully recorded (as defined in IGEM GM7 where appropriate), including location of meters and AMR Devices, the type of equipment and configuration;	ASP			
(b) valid data is being collected (i.e., from the correct metering installation; with the correct parameters and settings);	ASP			
(c) data must be collected, processed and delivered to all relevant parties with the quality and timeliness required that meets the performance criteria specified by contracting parties;	ASP			
(d) they are able to demonstrate adherence to a documented quality system;	ASP			
(e) data is backed-up and held in a secure environment, including maintaining an off-site copy of archived data.	ASP			
17.1.3 Subject to contractual terms and any mandatory Supplier license conditions, this CoMCoP recommends that Consumers should not be unreasonably restricted from access to relevant data.	ASP			
17.1.4 All signatories of this CoMCoP must ensure Customers and Consumers have access to information in accordance with their rights to the data, and must respect and abide by the rights of data subjects pursuant to the Data Protection Legislation in relation to	ASP			

that data.				

18 Duty of care

18.1. Beyond Meter Installation

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
18.1.1 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.	MAM			C1, C2 C3, C4
18.1.2 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.	MAM			C1, C2 C3, C4
18.1.3 The relevant Parties shall ensure meter installations do not cause a safety hazard to the public during the life cycle of the meter installation.	AMI, ASP, MAM	ES, MI	DNO, MOA	C1, C2 C3, C4
18.1.4 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	AMI			C1, C2 C3, C4

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.				
18.1.5 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.	AMI, MAM			C1, C2 C3, C4
18.1.6 MAMs and AMIs shall have procedures in place for complying with the industry standard on 'unsafe situations' procedures (IGEM/G/11)	AMI			C1, C2 C3, C4
18.1.7 Under the Electricity Safety, Quality and Continuity Regulations 2002 (as amended), the DNO will ensure accidents and dangerous occurrences are reported to the Health and Safety Executive. The DNO shall be responsible for reporting any problems on assets under its control – that is the cut-out, CT/VTs, associated wiring up to and including the test terminal block, associated metering panel and upstream distribution network. For the avoidance of doubt, the legal owner (Customer, MOA, DNO or anyone else) of the DNO Equipment or asset is irrelevant.			DNO	

19 Customer Notification

19.1. Meter Accuracy & Performance

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
19.1.1 In the event that a Consumer disputes the performance of the meter installation, the MEM shall determine whether the meter installation is functioning correctly, and it shall be demonstrated to the Consumer accordingly.	AMI, MAM		MOA	C1, C2 C3, C4
Note: This may entail demonstrating that the problem lies either with the Consumer's own plant or the supply network.	AMI, MAM		MOA	C1, C2 C3, C4
19.1.2 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 MEM.	AMI, MAM		MOA	C1, C2 C3, C4
19.1.3 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.	AMI, MAM			C1, C2 C3, C4
19.1.4 In the event that it is not possible to satisfy the accuracy concerns related to a meter installation; For Stamped Meters (in accordance with clauses 7.1.3 and 7.1.4) 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.	AMI, MAM			C1, C2 C3, C4

19.2. Complaints & Concerns

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
19.2.1 The relevant Parties shall ensure that their employees are competent to handle complaints from 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 Energy Supplier.	AMI, MAM		MOA, EMO	C1, C2 C3, C4
19.2.2 The Consumer should have clarity as to whom to go to if they have queries or problems and where they can get redress. Each Energy Supplier shall ensure that:		ES		
(a) complaint handling and redress systems with appropriately trained staff are in place;		ES		
(b) the Energy Supplier that receives any complaint related to the Installation Visit makes all reasonable endeavours to investigate the Consumer's concerns and takes appropriate steps to resolve the issue;		ES		
(c) suitable operational arrangements are in place to ensure that complaints are addressed in a timely manner; and		ES		
(d) requirements or obligations in relation to the reporting of the nature of complaints regarding the Installation Visit are complied with.		ES		
19.2.3 All Energy Suppliers will take ownership for managing their own Consumer's complaints arising from the Consumer surveys.		ES		

20 Audit & Survey

20.1. Audit

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
20.1.1 Having gained approval, the relevant Parties quality of work and adherence to this CoMCoP will be monitored through routine surveillance audits and reassessment in accordance with Schedule 15 of the REC. The relevant Parties 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.	AMI, MAM		MOA, EMO	C1, C2 C3, C4
20.1.2 The relevant Parties shall regularly undertake audits of all their activities covered by the scope of this CoMCoP. These include activities performed directly by the relevant Parties and those which have been delegated to others.	AMI, MAM		MOA, EMO	C1, C2 C3, C4
20.1.3 The relevant Parties shall have a documented audit procedure and a rationale regarding the levels of audit for particular work activities.	AMI, MAM		MOA, EMO	C1, C2 C3, C4
20.1.4 The audit procedure shall:	AMI, MAM		MOA, EMO	C1, C2 C3, C4
(a) check that the meter installation is constructed in compliance with the appropriate industry standards;	AMI, MAM		MOA, EMO	C1, C2 C3, C4
(b) check that the works are conducted in compliance with the appropriate industry standards	AMI, MAM		MOA, EMO	C1, C2 C3, C4
(c) ensure that audits are periodically carried out by a technically competent person;	AMI, MAM		MOA, EMO	C1, C2 C3, C4

(d) 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;	AMI, MAM		MOA, EMO	C1, C2 C3, C4
(e) ensure that identified deficiencies are closed-out within reasonable time periods; and,	AMI, MAM		MOA, EMO	C1, C2 C3, C4
(f) record and retain audit reports detailing findings and any corrective actions.	AMI, MAM		MOA, EMO	C1, C2 C3, C4
20.1.5 Reports of internal technical audits shall be made available on request to the Registration Body.	AMI, MAM		MOA, EMO	C1, C2 C3, C4
20.1.6 Unless previously subject to an audit of compliance under this CoMCoP (or the Smart Meter Installation Schedule or Smart Meter Installation Code of Practice), each Energy Supplier with over 10,000 electricity and/or gas Consumers who are either Domestic Consumers or Micro-Business Consumers shall undergo a compliance audit, to provide assurance that processes are in place to enable compliance with all relevant aspects of this CoMCoP.		ES		
20.1.7 RECCo shall contract with one or more service providers for provision of the independent audit of compliance. RECCo shall ensure that such contract is consistent with the description set out in the Smart Meter Installation Auditor Definition. Where necessary, RECCo shall exercise its rights under the service provider contract to ensure that the contract remains consistent with the requirements of this Code.		ES, MI		
20.1.8 Costs for the independent audit of compliance will be borne	AMI, MAM		MOA, EMO	C1, C2 C3, C4

directly by the individual party being audited.				

20.2. **Audit Initiation**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
20.2.1 An Energy Supplier shall use reasonable endeavours to send a notification to the Code Manager up to six months in advance of when it expects to be ready to be audited.		ES		
20.2.2 An Energy Supplier shall notify the Code Manager when it is ready to be audited and shall take all reasonable steps to ensure that its audit is completed within six months of installing 1,500 Smart Metering Systems.		ES		
20.2.3 Within 5 Working Days of the notice described in clause 20.2.2, the Code Manager shall issue the Smart Meter Installation Auditor with an application for audit, containing the Energy Supplier's contact details, and a date by which the audit is to be carried out. The Code Manager shall also confirm, to the respective Energy Supplier, the receipt of the notification and that the application has been forwarded to the Smart Meter Installation Auditor, who shall subsequently contact the Energy Supplier.		ES		
20.2.4 Within 10 Working Days of receipt of an application described in clause 20.2.3, the Smart Meter Installation Auditor shall:		ES, MI		
(a) acknowledge receipt of the application to the Code Manager;		ES, MI		

(b) agree the audit dates with the Energy Supplier, including when the initial findings report will be provided; and		ES		
(c) confirm an estimate of the applicable charges.		ES		
20.2.5 The audit activities shall commence within 60 Working Days of receipt of the application, unless otherwise agreed with the Code Manager.		ES		
20.2.6 The audit activities shall not commence within 20 Working Days of initial contact from the Smart Meter Installation Auditor, unless otherwise agreed with the Energy Supplier.		ES		
20.2.7 Where an Energy Supplier fails to confirm the audit dates with the Smart Meter Installation Auditor, within 20 Working Days of initial contact by the Smart Meter Installation Auditor, the Smart Meter Installation Auditor will advise the Code Manager. The Code Manager will advise the REC Performance Assurance Board of this failure at the next convened meeting.		ES, MI		

20.3. **Audit Completion**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
20.3.1 In respect of the audit, the Energy Supplier shall ensure appropriate staff are available and be ready to provide demonstrable evidence of compliance with this CoMCoP.		ES, MI		
20.3.2 Following completion of an audit, the Smart Meter Installation Auditor will bilaterally meet with		ES		

the Energy Supplier to share initial findings. This will include:				
(a) setting out how they have assessed evidence of compliance against each relevant clause of this CoMCoP;		ES		
(b) discussing with the Energy Supplier where non-compliances have been identified; and		ES		
(c) discussing with the Energy Supplier where observations have been identified.		ES		

20.4. **Audit Reporting**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
20.4.1 An initial findings report will be issued to the Energy Supplier by the Smart Meter Installation Auditor within 10 Working Days of the initial findings being shared with the Energy Supplier, as defined in clause 20.3.2. This report will detail whether the Energy Supplier is compliant with each relevant requirement and if not, its rationale for stating that the Energy Supplier is not compliant.		ES, MI		
20.4.2 The Energy Supplier shall have no more than 20 Working Days from receipt of the initial findings report to provide any response to the Smart Meter Installation Auditor. Where non-compliances have been identified, the Energy Supplier's response should detail whether it agrees that it is not compliant (and if not, provide further evidence / rationale to support its view). Where		ES, MI		

the Energy Supplier agrees that it is non-compliant, it shall resolve the non-compliance or provide a rectification plan setting out how the non-compliance will be resolved. The Energy Supplier's comments and proposed rectification plans should be provided within this 20 Working Day period as there will be no further opportunities to provide comments to the Smart Meter Installation Auditor.				
20.4.3 Within 5 Working Days from the end of the Energy Supplier's initial findings response period, detailed within clause 20.4.2, or receipt of a response from the Energy Supplier, the Smart Meter Installation Auditor shall produce a final audit report.		ES, MI		
20.4.4 For each relevant requirement in this REC Schedule, the final audit report shall state:		ES		
(a) whether the Energy Supplier was compliant;		ES		
(b) if the Energy Supplier was compliant, whether any observations were identified in order for the Energy Supplier to improve its processes; and		ES		
(c) if the Energy Supplier was not compliant, the Energy Supplier's response to the initial findings report, whether the non-compliance has been rectified or whether a suitable rectification plan has been provided		ES		
20.4.5 The final audit report shall be issued to the respective Energy Supplier and the Code Manager.		ES		
20.4.6 The Code Manager shall send a copy of each final audit report to the REC Performance Assurance Board within 5 Working Days of		ES		

receipt (and at the same time to the Authority, until such time as the Authority confirms in writing that it does not require copies of such reports).				
20.4.7 The Smart Meter Installation Auditor shall also provide the Code Manager with monthly reports, detailing the activity and status of the audit process. The Code Manager shall provide these reports to the REC Performance Assurance Board for review at its next scheduled meeting.		ES		
20.4.8 The information contained within the report to the REC Performance Assurance Board will include:		ES		
(a) number of completed audits during the reporting period;		ES		
(b) percentage of compliant and non-compliant audit outcomes during the reporting period;		ES		
(c) number of audits currently ongoing or scheduled;		ES		
(d) number of outstanding non-compliances; and		ES		
(e) for non-compliant audits the report will summarise actions taken and progress towards rectification.		ES		

20.5. **Competency Review**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
20.5.1 Where the MAM instructs a 'member of a class of persons' (as specified in GS(I&U) Regs), who is not an AMI, to install, replace or modify a Meter installation, the MAM shall ensure that the works	MAM			C1, C2, C3, C4

are inspected by an AMI within 20 Working Days.				
20.5.2 The relevant Parties shall review the competency of its staff and sub-contractors on a periodic basis in accordance with a documented procedure:	AMI, MAM		MOA	C1, C2, C3, C4
20.5.3 The review of the competency shall be led by an Engineer or Manager who shall possess the appropriate level of relevant operational experience and 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.	AMI, MAM		MOA, EMO	C1, C2, C3, C4
20.5.4 Where the Engineer or Manager who leads the competency review does not hold the required registration/ qualification, they shall be supported by another person from within the company or an external consultancy which is appropriately accredited.	AMI, MAM		MOA, EMO	C1, C2, C3, C4
20.5.5 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.	AMI, MAM			C1, C2, C3, C4
20.5.6 The supporting person/consultant is to possess the appropriate level of operational experience and within the gas industry hold membership of an	AMI, MAM		MOA, EMO	C1, C2, C3, C4

appropriate professional institution to at least Eng Tech level or I Eng as appropriate.				

20.6. **Consumer Feedback**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
20.6.1 Each Energy Supplier shall ensure that the Consumer has the means available for providing feedback on their experience of the Installation Visit (for example, in the form of an addressed and franked feedback card, via a website, or verbally to a representative of the Energy Supplier); and		ES, MI		
20.6.2 Each Energy Supplier shall ensure that this information is taken into account for future Installation Visits and, where appropriate, adjustments are made to Energy Supplier policies and processes.		ES, MI		

20.7. **Inspection & Corrective actions**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
20.7.1 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	AMI, MAM			C1, C2, C3, C4

requirements of legislation, licence conditions and the MAM's own asset management policies.				
Note: The completed meter installation may be subjected to inspection and acceptance by the GT.	AMI, MAM			C1, C2, C3, C4
20.7.2 Each Energy Supplier is responsible for implementing any corrective actions agreed as part of the audit process and arranging for the Smart Meter Installation Auditor to carry out an assessment on these corrective actions.		ES		
20.7.3 Upon receipt of the notification of a Energy Supplier's corrective actions, the Smart Meter Installation Auditor shall agree with the Energy Supplier the extent of further assessment and determine whether an additional site visit is necessary.		ES		
20.7.4 The Smart Meter Installation Auditor shall agree with the Energy Supplier		ES		
(a) the length and scope of corrective action assessment;		ES		
(b) key dates;		ES		
(c) terms and contract; and		ES		
(d) estimate of additional charges.		ES		
20.7.5 On agreement, a corrective action assessment schedule will be developed and provided to the Energy Supplier and the Code Manager.		ES		
20.7.6 The Smart Meter Installation Auditor will carry out an assessment against non-compliances identified within the final audit report.		ES, MI		
20.7.7 On completion of the corrective action assessment, the process defined in clauses 20.4.1 to 20.4.6 will be		ES, MI		

followed for the areas of non-compliance.				

20.8. **Survey**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
20.8.1 Subject to the minimum sample thresholds set out in Appendix 20. Consumers will be surveyed by a suitably qualified independent Smart Meter Installation Survey Organisation to monitor individual Energy Supplier's compliance against this REC Schedule.		ES, MI		
20.8.2 Each Energy Supplier shall procure its own Smart Meter Installation Survey Organisation and provide Consumer data (for all completed installations except for those installations which include the provision, by the Energy Supplier to the Consumer, of an Alternative Display) to the independent Smart Meter Installation Survey Organisation.		ES, MI		
20.8.3 The independent Smart Meter Installation Survey Organisation shall sample the data and survey the Consumers using the Smart Meter Installation Consumer Survey Specification (see Appendix 20).		ES, MI		
20.8.4 Each Energy Supplier shall ensure that its survey results are made available to:		ES		
(a) the Code Manager;		ES		
(b) the Energy Supplier's internal resources to facilitate issue resolution; and		ES		

(c) the Authority and the Smart Metering Implementation Programme (until such time as either or both of them confirm in writing that they do not require copies of the results).		ES		
20.8.5 The Code Manager shall provide the results of the Consumer surveys to the REC Performance Assurance Board on an aggregated, anonymised basis. On request by the REC Performance Assurance Board, the Code Manager shall provide unanonymised survey results to the REC Performance Assurance Board.		ES		
20.8.6 The Code Manager shall publish on the REC Portal the results of the first Domestic Consumer Survey Report, setting out survey results from 1 April to 30 June 2021, by the end of September 2021. Thereafter, reports will be published within 3 months of the end of the calendar quarter to which it relates.		ES		
20.8.7 Each Domestic Consumer Survey Reports will cover a maximum of 12 months on a rolling basis.		ES		
20.8.8 The Domestic Consumer Survey Reports published by the Code Manager shall contain aggregated data across all Energy Suppliers, and shall:		ES		
(a) contain the results reported by each Energy Supplier against survey questions 1, 2, 3, 4, 4a, 4b, 5, 5a, 6a and 6b (see the Smart Meter Installation Consumer Survey Specification) except where the sample size for an individual question is 30 or fewer responses;		ES		

(b) exclude free text comments from Consumer and demographic data;		ES		
(c) provide a descriptive explanatory narrative;		ES		
(d) for Energy Suppliers reporting on a quarterly cycle, contain a time series of data reported in the current and previous three quarters; and		ES		
(e) for Energy Suppliers reporting on an annual cycle, contain the most recent data reported.		ES		

20.9. **Survey Methodology**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
20.9.1 Interviewing will be conducted via telephone (Computer Assisted Telephone Interviewing (CATI)) and/or online, taking into account Consumer preference and accessibility to telephone and online surveys.		ES		
20.9.2 Minimum sample size per Energy Supplier is included in Appendix 20. Energy Suppliers should ensure that they chose a methodology with a sufficient response rate to meet the minimum sample size, noting that the response rates will vary, with online surveys generally having a lower response rate than telephone surveys. Samples should be drawn from all installations carried out by the Energy Supplier in the relevant period.		ES		
20.9.3 If an Energy Supplier fails to meet the minimum sample size then the results should still be submitted		ES		

to the Code Manager, together with an explanation e.g., low response rate, fewer installations carried out than expected. The Code Manager will inform the REC PAB of the size of the sample and the REC PAB will determine whether there are sufficient results for a robust comparison.				
20.9.4 Each Energy Supplier shall take all reasonable steps to ensure that the interviews are completed within 10 Working Days of installation, up to a maximum of 15 Working Days after installation.		ES		
20.9.5 Interviews will be spread over the quarter and not a snapshot in time.		ES		
20.9.6 Energy Suppliers will provide a complete list of completed installations to their chosen agency each week.		ES		
20.9.7 The selection of which days and times to interview the Consumer can be made by the research agency to ensure the Market Research Society Code of Conduct is adhered to.		ES		
20.9.8 The selection of jobs to survey will be made by the Energy Supplier's chosen agency.		ES		
20.9.9 Each Energy Supplier shall provide to the Code Manager a one-off, short (approximately one page) summary of the methodology employed by the Energy Supplier's survey organisation for the survey. This shall be provided alongside the first set of results to be submitted under this CoMCoP, unless previously submitted under the Smart Meter Installation Schedule or Smart Metering Installation Code of Practice. This methodology summary need only be submitted once, unless		ES		

there is a substantive change to the methodology used, in which case, an updated methodology summary should be submitted. The summary should include:				
(a) a summary of how Consumers were sampled:		ES		
i) how the Energy Supplier proposes to meet the minimum sample criteria;		ES		
ii) whether any Consumers are excluded from the research (e.g., because they have opted out);		ES		
iii) how differences in communication preference (e.g., online/telephone) were accounted for;		ES		
(b) the Energy Supplier's survey recruitment process, including;		ES		
i) how non-responders are followed up; and		ES		
ii) any incentives offered; and		ES		
(c) how the survey was administrated, including:		ES		
i) software used to support online/telephone data collection;		ES		
ii) introductory or explanatory text used;		ES		
iii) data privacy notices provided to Consumers; and		ES		
iv) whether the compliance questions included as part of a wider survey conducted by the Energy Supplier.		ES		
20.9.10 The methodology statements will be provided by the Code Manager on request to the Authority and/or the Smart		ES		

Metering Implementation Programme.				
20.9.11 If an Energy Supplier is planning between 5k-20k installations in respect of Domestic Premises within the calendar year, a total of 500 surveys will need to be completed to cover the 12-month period. The Energy Supplier will advise the Code Manager before the of the first Calendar quarter (January-March) if they are on installing between 5k-20k installations in respect of Domestic Premises within that calendar year. Results from surveys will be submitted in full by the end of the calendar year, and could be passed to (or requested by) the Authority and be used for compliance purposes.		ES		
20.9.12 If an Energy Supplier is planning more than 20k installations in respect of Domestic Premises within the calendar year, a minimum of 500 surveys will need to be completed each calendar quarter where 5k and above installations have taken place. Results from these surveys could be passed to (or requested by) the Authority, and used for compliance purposes.		ES		
20.9.13 If an Energy Supplier is planning fewer than 5k installations in respect of premises of Micro-Business Consumer in the next 12 months, then reasonable endeavours should be used to gather as many survey returns as possible. Results from these surveys should be submitted on an annual basis.		ES		
20.9.14 Interim results from these surveys could be passed to (or requested by) the Authority, but only the annual results would be used for		ES		

compliance purposes.				
20.9.15 If an Energy Supplier is planning more than 5k installations in respect of premises of Micro-Business Consumers in the next 12 months, reasonable endeavours should be taken to carry out 500 surveys each calendar quarter. Regardless of whether the 500 survey target is met, results from these surveys should be submitted on a quarterly basis. Results from these surveys could be passed to (or requested by) the Authority, and used for compliance purposes.		ES		
20.9.16 Each MOA must review the validity and accuracy of the information it issues to each DNO at least annually or following an organisational or policy change.			DNO, MOA	
20.9.17 The relevant Parties shall maintain an internal site safety audits procedure to ensure compliance with the their obligations prescribed within this Code. The results of the internal site safety audits will be made available upon request to the Code Manager.	AMI, MAM		DNO, EMO	C1, C2, C3, C4

20.10. Survey Reporting

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
20.10.1 The surveys are to be carried out on a 12-month period of a calendar year. If an Energy Supplier starts their survey during the year, then they will be required to provide results on a pro-rata basis for that calendar year beginning in the quarter that they begin to carry out		ES		

surveys.				
20.10.2 Reporting frequency is in line with this specification.		ES		
20.10.3 A standardised reporting format will be provided to Energy Suppliers by the Code Manager, and Energy Suppliers will send data securely to the Code Manager via the REC Portal. All Energy Suppliers are to take the surveys and report within agreed prescribed periods.		ES		
20.10.4 Energy Suppliers are to submit a completed report to the Code Manager in line with the reporting timetable following the end of each relevant reporting period. This window of submission is to allow Energy Suppliers to conduct surveys for installations that take place up to and including the final working day of any given quarter.		ES		
20.10.5 Only the results of surveys for installations completed within the calendar quarter for any given report are to be included in that report, notwithstanding that surveys can be conducted up to a maximum of 15 Working Days post installation.		ES, MI		
20.10.6 No Energy Supplier will be entitled to see other Energy Suppliers' results. The Code Manager shall keep them confidential and not disclose an Energy Supplier's report to any other Energy Supplier until such time as the Domestic Consumer Survey Reports is published.		ES		
20.10.7 When reporting the Domestic Consumer Survey results, Energy Suppliers should also provide the following information from their internal systems to address the demographic questions:		ES		

(a) Does the Consumer have a Priority Services Register (PSR) flag (Yes/No)?		ES		
(b) Is the meter mode set to credit/pre-payment?		ES		
(c) Does the Consumer pay by Direct Debit/other payment method?		ES		
(d) In which Grid Supply Point (GSP Group) is the Consumer?		ES		
20.10.8 Where the Consumer is a gas only Consumer and the registration data held by the Energy Supplier does not allow the GSP Group to be identified, the GSP Group should be reported as "n/a" in the survey results.		ES		
20.10.9 For additional details on the format in which this data is to be submitted, see Appendix 21 'Reporting File Structure'.		ES		
20.10.10 Energy Suppliers shall ensure that they do not provide the Code Manager with the personal data of any individual within the free text response.		ES		

20.11. Investigation

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
20.11.1 The processes for investigating alleged breaches of this CoMCoP, for determining disputes in relation to compliance with this CoMCoP, and for suspending or withdrawing approval in respect of this CoMCoP are set out in Schedule 15 of the REC. The relevant Party approval may be withdrawn by the PAB in accordance with Schedule 6.	AMI, MAM		MOA, EMO	C1, C2, C3, C4

21 Industry Notification

21.1. Identifiers

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
21.1.1 An industry data hub will contain details of all Embedded Meters, AMR Devices attached to meter and Converters on site. Inclusive in the data set will be reference to the CoP accredited ASP providing the AMR service. Each ASP will be recognised by a unique 3-letter identity tag.	ASP			
21.1.2 The REC Code Manager will, upon application, ensure the allocation and maintenance of a catalogue of unique Meter Product Data identifiers.	AMI, ASP, MAM	ES, MI	DNO, MOA	C1, C2, C3, C4
21.1.3 Where the MEM implements an exchange policy for safety reasons, the MEM 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.	MAM		MOA	C1, C2, C3, C4
21.1.4 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 MEMs in question). This list is not exhaustive, and MEMs can agree additional information to be provided. Where some or all of this information is not available to the outgoing MEM, this lack of availability should be taken into account in deciding whether to agree a transfer, and where so	MAM		MOA	C1, C2, C3, C4

agreed the outgoing MEM need not provide the relevant information.				
(a) Site Details	MAM		MOA	C1, C2, C3, C4
i) co-ordinates (using X (Eastings), Y (Northings))	MAM			C1, C2, C3, C4
ii) details for gaining access to the installation	MAM		MOA	C1, C2, C3, C4
iii) contact details of the person responsible for the site	MAM		MOA	C1, C2, C3, C4
iv) any specific access details (for example location of keys to housing)	MAM		MOA	C1, C2, C3, C4
(b) Design Specification Information	AMI, MAM			C1, C2, C3, C4
i) design and quotation technical project records, drawings, initial request for customer information, customer pressure and flow information, and manufacturer's design parameters	AMI, MAM			C1, C2, C3, C4
ii) GT/1 information (for example inlet pressure tier, etc).	AMI, MAM			C1, C2, C3, C4
iii) Ancillary pressure agreement	AMI, MAM			C1, C2, C3, C4
(c) Details of the Meter and/or meter installation Component	MAM			C1, C2, C3, C4
i) details of meter diagnostic flags	MAM			C1, C2, C3, C4
ii) Meter module serial number	MAM			C1, C2, C3, C4
iii) maximum capacity of meter module	MAM			C1, C2, C3, C4
iv) whether the installation is a single or multiple streamed installation	MAM			C1, C2, C3, C4
v) type of any multi stream installation (for	MAM			C1, C2, C3, C4

capacity/for continuity)				
vi) regulator and protection system details	MAM			C1, C2, C3, C4
vii) converter details	MAM			C1, C2, C3, C4
viii) flow computer details	MAM			C1, C2, C3, C4
ix) data logger/AMR details	MAM			C1, C2, C3, C4
x) Meter Pulse Utilisation (MPU) Agreement	MAM			C1, C2, C3, C4
xi) component details (make, model, serial number of all significant components)	MAM			C1, C2, C3, C4
xii) most recent available photographs of items being transferred	MAM			C1, C2, C3, C4
xiii) set points, regulators, safety devices and creep reliefs	MAM			C1, C2, C3, C4
xiv) cathodic protection (CP) installed	MAM			C1, C2, C3, C4
xv) non-return valve (NRV) installed (details)	MAM			C1, C2, C3, C4
xvi) warranty details	MAM			C1, C2, C3, C4
(d) Approvals and Authorisations	MAM			C1, C2, C3, C4
i) DSEAR certification record	MAM			C1, C2, C3, C4
ii) pressure test certificates	MAM			C1, C2, C3, C4
iii) GT/2 authorisation application form	MAM			C1, C2, C3, C4
iv) GT/2 Consumer warrant	MAM			C1, C2, C3, C4
(e) Housing Details	MAM			C1, C2, C3, C4
i) meter housing details (type, size etc)	MAM			C1, C2, C3, C4

ii) hazardous area classification and drawing	MAM			C1, C2, C3, C4
iii) records of any outstanding issues with housing/Consumer equipment.	MAM			C1, C2, C3, C4
iv) declaration to the GT concerning suitability of the housing	MAM			C1, C2, C3, C4
v) details of status of the ownership of the housing and responsibility for maintenance	MAM			C1, C2, C3, C4
vi) agreements relating to housing.	MAM			C1, C2, C3, C4
(f) Maintenance Records	MAM		MOA	C1, C2, C3, C4
i) record of any Consumer complaints (excluding personal data)	MAM		MOA	C1, C2, C3, C4
ii) description of any technical complaint	MAM		MOA	C1, C2, C3, C4
iii) record of all maintenance visits (date, type of visit, outcome).	MAM		MOA	C1, C2, C3, C4
iv) record of rectification work undertaken.	MAM		MOA	C1, C2, C3, C4
v) maintenance results sheets.	MAM		MOA	C1, C2, C3, C4
vi) record of results of functional checks.	MAM		MOA	C1, C2, C3, C4
vii) site husbandry form(s).	MAM			C1, C2, C3, C4
viii) details of any planned rectification works which are outstanding or confirmation that no rectification works are outstanding.	MAM		MOA	C1, C2, C3, C4
(g) Pressure Systems Safety Regulations (PSSR) Records	MAM			C4

i) written schemes of examination.	MAM			C4
ii) PSSR Drawing.	MAM			C4
iii) record of any PSSR visits (date, type of visit, outcome).	MAM			C4
iv) PSSR inspection sheets	MAM			C4
v) record of all PSSR failings, and status.	MAM			C4
vi) all Information held by PSSR competent body.	MAM			C4
vii) VS02 inspection reports.	MAM			C4
(h) Modifications and Repairs	MAM			C4
i) records of all modifications and repairs, including all GL/5 paperwork.	MAM			C4

21.2. **Commercial Data**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
21.2.1 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.	MAM			C3, C4
21.2.2 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. From 8 November	MAM			C1, C2, C3, C4

2021, the MAM is required to notify the CDSP of an update to the Meter Technical Details and/or the MAP Identity (MAP ID) of a Metering Asset. This data is to be communicated to the CDSP, via either recognised RGMA format files or the Non-RGMA CDSP Meter Technical Details File within 2 Working Days of the event.				
21.2.3 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:	MAM			C1, C2, C3, C4
(a) Providing information on how to isolate the MAM's meter installation is left at the meter installation	MAM			C1, C2, C3, C4
(b) If changes are made that affect the method of isolation, the information at the meter installation shall be updated	MAM			C1, C2, C3, C4
(c) Sharing safety related information with the appropriate parties (for example safety related defects with meters and/or meter installation components).	MAM			C1, C2, C3, C4
(d) Sharing information on faults or Meter performance with the appropriate parties (for example Ofgem, BEIS, Citizens Advice)	MAM			C1, C2, C3, C4
(e) Sharing information on identified methods of theft of Gas with other Metering Agents and the relevant Parties	MAM			C1, C2, C3, C4
(f) Informing appropriate parties of any procedure or equipment required to reinstate a Gas Supply following interruption	MAM			C1, C2, C3, C4
(g) Liaising with the GT or emergency service provider	MAM			C1, C2, C3, C4

(ESP) on instances of over or under pressurisation, gas escapes, water ingress, loss of supply, etc.				
(h) Co-operating with the Meter reading agencies.	MAM			C1, C2, C3, C4
21.2.4 Whenever a meter by-pass is put into operation, the appropriate parties shall be informed in accordance with Network Code requirements.	AMI, MAM			C1, C2, C3, C4
21.2.5 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 14.	AMI, MAM			C1, C2, C3, C4

21.3. **Notices**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
21.3.1 Unless otherwise expressly provided, any document, notice or other communication to be given to or made by any person pursuant to or in accordance with the provisions of this CoMCoP must be in writing.	ASP			
21.3.2 Any document (including, but without limitation, any representation, objection or report), notice or other communication may be delivered to the relevant person or sent by first class pre-paid letter, facsimile transmission or electronic mail to the address, facsimile transmission number or electronic mail address of that person specified by that person for the time being as being that person's address or facsimile transmission number and must be	ASP			

effectual notwithstanding any change of address or facsimile transmission number which is not notified by that person.				
21.3.3 Each such document, notice or other communication must be treated as having been given or made and delivered, if by letter two (2) Working Days immediately following posting, if by delivery when left at the relevant address, and if by facsimile transmission or electronic mail, upon receipt by the addressee of the complete text of the document, notice or other communication in a legible form.	ASP			
21.3.4 No accidental omission in sending any document or notice or other communication to, or non-receipt of any document or notice or other communication by, any person pursuant will be capable of invalidating any act or thing done pursuant thereto.	ASP			
21.3.5 The relevant Parties shall provide a relevant contact email address to REC and shall notify REC within 10 Working Days if this information is amended.	AMI, MAM		MOA, EMO	C1, C2, C3, C4
21.3.6 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.	AMI, MAM			C1, C2, C3, C4
21.3.7 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	MAM			C1, C2, C3, C4

information is amended				
21.3.8 The DNO may make a modification to its Distribution System whether at or remote from the interface point without the consent of the MOA. The DNO must provide all relevant details to the MOA for planned work at least 15 Working Days before the work is carried out. For unplanned work as soon as possible before or after the work is carried out. The MOA shall use such notifications to determine, if the Metering Equipment will require re-commissioning, and where so determined shall initiate re-commissioning.			DNO, MOA	
21.3.9 Provided there is no impact on the Distribution System, the EMO may modify if instructed by the MOA metering equipment without the consent of the DNO. If the modification changes the details registered with the DNO (Appendix 2, Part 3), the MOA must provide the DNO with the updated details via industry data flows within five Working Days after making the modification.			DNO, MOA, EMO	
21.3.10 Where the MOA wishes to make a modification to its Metering Equipment that will require modification to the Distribution System, the MOA shall complete and submit to the DNO an application prior to commencing any such modification and shall not carry out any such modification unless and until it has agreed the modification with the DNO.			DNO, MOA	

21.4. Unmetered Units & Tamper Checks

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
21.4.1 The AMI shall provide all available evidence to the MAM.	AMI, MAM			C1, C2, C3, C4
21.4.2 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.	MAM			C1, C2, C3, C4
21.4.3 The estimation of any units 'lost' (i.e., not metered) during the course of works where meters may be disconnected for a period will be carried out by data collection agents according to appropriate BSC Procedure(s).			DNO, MOA	

21.5. **Recovery of Costs**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
21.5.1 The general principle used to determine whether costs incurred by a relevant Parties in its capacity as MOA and/or DNO under these requirements are recoverable shall be that the DNO shall, so far as practicable, treat all MOAs (including its own MOA/EMO business) in the same manner as regards costs charged by it.			DNO, MOA, EMO	
21.5.2 A DNO may make a charge for any specialist advice provided by it (see for instance clause 11.2.7, or for providing information additional to that in Appendix 13, Part 2 at the request of a MOA. A MOA may seek to recover the costs of delays due to inadequate or inaccurate information provided by the DNO (see clause 21.6.11). A MOA may also come to			DNO, EMO	

some commercial arrangement with a DNO as regards dealing with equipment on Site (see clause 11.2.3 above).				
21.5.3 There may be other cases where one Party feels that its costs should be recoverable from another. Disputes as to cost recovery in cases relating to the requirements shall be referred to the Code Manager.			DNO, EMO	
21.5.4 As regards access to substations, the DNO may choose to authorise a specific EMO's Meter Operative to enter its substations (see paragraph 11.2.6(a) above), and, where a double locking or special locking system is used, the EMO will bear the additional costs of such arrangements. As regards the authorisation itself, the EMO will bear the costs of suitable training, where necessary, for his Meter Operative (see clauses 6.1.4, 6.3.2 and 8.1.5 above). The DNO will bear the costs of interview and appointment and will seek to minimise such costs by taking due account of training received by the Meter Operative and whether he has authority to enter the substations of other DNOs.			DNO, EMO	
21.5.5 The DNO may choose to authorise the EMO under the terms of paragraph 11.2.6(b) above, in which case the EMO will still bear the training and additional locking costs as above.			DNO, EMO	
21.5.6 In the case of accompanied working (as described in paragraph 11.2.6(c) above), if the DNO chooses this option rather than authorising the Meter Operative, then it will bear the associated costs. Where a EMO requests on-Site supervision by a representative of the DNO as an			DNO, EMO	

alternative to training and obtaining authorisation for its Meter Operatives, then it shall bear the DNO's costs.				
21.5.7 These cost recovery principles do not cover situations where "top up" training is required for those DNOs who require it, or who insist on the duplication of general training. The arrangements for additional training should be dealt with at a local level by discussion between the EMO and the DNO.			DNO, EMO	
21.5.8 Any costs and expenses incurred by a EMO as a result of modifications to the Distribution System, where such modifications are not consequent directly upon the requirements of the Customer or the EMO, may be reimbursed by the DNO.			DNO, EMO	

21.6. **Escalation**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
21.6.1 The escalation process set out in this Paragraph will be triggered and followed where:		ES		
(a) an Energy Supplier has failed or is failing to complete such documents or provide such information to the Code Manager as it is required to complete and/or provide under and in accordance with this CoMCoP; or		ES		
(b) an Energy Supplier has failed or is failing to undertake any tasks required to be undertaken by it under this REC Schedule in the manner required by this CoMCoP.		ES		

21.6.2 The Code Manager shall:		ES		
(a) make contact with the relevant Operational Contact at the Energy Supplier reminding them of the relevant obligation referred to in clause 21.6.1, explaining that it has not been fulfilled by the Energy Supplier, and inviting them to engage with the Code Manager within 15 Working Days of the communication being sent; and		ES		
(b) where applicable, the Code Manager shall provide the documents and/or details of the information that the Energy Supplier should complete and/or send to the Code Manager.		ES		
21.6.3 Where the Energy Supplier fails to engage with the Code Manager within the 15 Working Days referred to in clause 21.6.2, the Code Manager shall follow up with a call, to the relevant Operational Contact at the Energy Supplier to remind them of the relevant obligation and the steps that the Energy Supplier is advised to take within 10 Working Days of the call.		ES		
Note: This communication will be made via email where known and if not, then a letter will be sent to the Energy Supplier's registered address. If the call cannot be connected or is not responded to then the process will move to the next escalation step.		ES		
21.6.4 Where the Energy Supplier fails to engage with the Code Manager and/or fails to fulfil the relevant obligation within the		ES		

10 Working Days referred to in clause 21.6.3, the Code Manager shall:				
(a) send a letter to the directors of the Energy Supplier reminding them of the relevant obligation, explaining that it has not been fulfilled by the Energy Supplier and inviting them to engage with the Code Manager within 15 Working Days of the letter being sent;		ES		
(b) where applicable, send the documents and/or details of the information that the Energy Supplier should complete and/or send to the Code Manager.		ES		
21.6.5 The letter referred to in clause 21.6.4 shall also be copied to the Energy Supplier's Contract Manager and to the Authority.		ES		
21.6.6 Where the Energy Supplier fails to engage with the Code Manager and/or fails to fulfil the relevant obligation within the 15 Working Days referred to in Paragraph 21.6.4, the Code Manager shall:		ES		
(a) at the next scheduled meeting of the REC Performance Assurance Board, notify the REC Performance Assurance Board that the Energy Supplier has failed to engage with the Code Manager and fulfil its relevant obligations; and		ES		
(b) notify the Energy Supplier's failure to fulfil the relevant obligation to the Authority .		ES		
21.6.7 Where requested to do so by the Authority, and from the date specified by the Authority, the REC Performance Assurance Board shall		ES		

take full responsibility for oversight and assurance of some or all the Energy Supplier obligations set out in this CoMCoP (as specified by the Authority).				
21.6.8 Each DNO must review the validity and accuracy of the information it issues to each relevant Party, in accordance with paragraphs 8.2 above and Appendix 13, at least annually or following an organisational or policy change. Following any such review, the DNO must send the current version of its information to the Code Manager for distribution to all relevant Parties as soon as practicable.			DNO, MOA, EMO	
21.6.9 In addition, when notification is received of a new relevant Party acceding to this Code, the DNO will provide this information to the new relevant Party as soon as reasonably practicable. This review will include any operational restrictions specified in sub-section 8.2 above.			DNO, MOA, EMO	
21.6.10 In the event of a dispute, the copy of DNO information held by the Code Manager will be deemed to be the current version.			DNO, MOA, EMO	
21.6.11 General information regarding typical equipment and practices of the DNO will be provided by the DNO to the relevant Parties under the terms of the exchange of information agreed by the DNO in clause 8.1.2 above. The DNO will also provide the appropriate Site-specific information listed in Appendix 13, Parts 1 and 2. Certain information required under Appendix 13, Part 2 may be obtained directly from a label provided by the DNO in accordance with Appendix 13, Part 3.			DNO, MOA, EMO	

21.6.12 Any complaint regarding the adequacy or accuracy of this information, or commercial implications arising from it which are considered unfair by the relevant parties may be referred to the Code Manager.			DNO, MOA, EMO	
21.6.13 The particular option exercised will be confirmed between the relevant Parties and the DNO within 5 Working Days following receipt of the general information provided by the DNO (see Appendix 13, Part 1).			DNO, MOA, EMO	

22 Equipment transfer, Return & Disposal

22.1. Removal & Disposal

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
22.1.1 The ASP (to the extent they are not also the MAM) should notify both the MAM with respect to CoMCoP, Consumer and the Customer where the ASP removes the AMR Device.	ASP			
22.1.2 At the end of the operational life of a meter installation, AMR Device, ancillary equipment or any meter installation component appropriate disposal is necessary to complete the cycle of whole life management.	AMI, ASP, MAM			C1, C2, C3, C4
22.1.3 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 CoMCoP there are RGMA data requirements which relate to removing metering and meter installation components. These include notifying the Gas Act	AMI, MAM			C1, C2, C3, C4

Owner and/or MAM and MAP (Title Owner) of the removal and collection details.				
22.1.4 Care should be taken to consider environmental impact when disposing of Meters, meter installation components, AMR Devices and any ancillary equipment. In particular, the following factors apply:	AMI, ASP, MAM			C1, C2, C3, C4
(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,	AMI, ASP, MAM			C1, C2, C3, C4
(b) where appropriate the Meter/Meter Installation shall be purged prior to scrapping,	AMI, ASP, MAM			C1, C2, C3, C4
(c) all meter batteries must be removed and disposed of in accordance with current environmental and waste disposal legislation,	AMI, ASP, MAM			C1, C2, C3, C4
(d) electronics and instrumentation, e.g., loggers, conversion devices, communications hubs, electronic indexes, must be disposed of in accordance with WEEE regulations,	AMI, ASP, MAM			C1, C2, C3, C4
(e) any oil should be drained from the meter and must be disposed of in accordance with current environmental and waste disposal legislation,	AMI, MAM			C1, C2, C3, C4
(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 or AMR device or equipment 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	AMI, ASP, MAM			C1, C2, C3, C4

legislation, legislation i.e., Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 as amended.				
(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).	AMI, MAM			C1, C2, C3, C4
22.1.5 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.	AMI, MAM			C1, C2, C3, C4

22.2. **Removal & Returns**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
22.2.1 Within 30 days after removing a meter and/or meter installation component, the incoming MAM shall (save where clause 22.2.2 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.	AMI, MAM			C1, C2, C3, C4
22.2.2 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.	MAM			C1, C2, C3, C4

22.2.3 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.	MAM			C1, C2, C3, C4
22.2.4 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 clause 22.2.3, for at least 30 days from the date the e-mail was sent).	AMI, MAM			C1, C2, C3, C4
22.2.5 If any meter and/or meter installation component has not been collected within the 30-day period set out in clause 22.2.4 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 22.3.	AMI, MAM			C1, C2, C3, C4
22.2.6 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.	AMI, MAM			C1, C2, C3, C4
22.2.7 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 clause 22.2.3,	MAM			C1, C2, C3, C4

the MAM has not identified the owner).				
22.2.8 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.	AMI, MAM			C1, C2, C3, C4
22.2.9 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.	AMI			C1, C2, C3, C4
22.2.10 MAMs and AMIs shall handle all Meters and other meter installation components with care and store them in a secure manner at all times.	AMI, MAM			C1, C2, C3, C4
22.2.11 The meter asset provider shall be informed of the Metering Equipment removal within 10 Working Days using Data Catalogue flow D0303 (REC Market Message: MM00240) where applicable. Metering Equipment which has been removed shall be kept in waterproof and secure storage pending its return to its meter asset provider (or as agreed with the meter asset provider).			DNO, MOA,	

22.2.12 Metering Equipment must be returned to the meter asset provider (unless subject to alternative commercial arrangements). If the removed Metering Equipment is faulty, damaged, subject to targeted removal (e.g., product recall) or removed as part of an investigation (e.g., safety or revenue protection), then the Metering Equipment should be clearly labelled with the reason of the removal. To minimise the opportunity for revenue protection issues, removed Metering Equipment must not be left at the Customer Premises (except in the event that the Metering Equipment is owned by the Customer).			DNO, MOA, EMO	
22.2.13 Return addresses for DNOs are required to be included within DNO Information (see Appendix 13, Part 1).			DNO, MOA, EMO	

22.3. Transfer of Asset

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
22.3.1 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”.	MAM			C1, C2, C3, C4
22.3.2 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	MAM			C1, C2, C3, C4
22.3.3 The requirements of this section cover the disclosure of relevant information on transfer of a meter	MAM			C1, C2, C3, C4

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.				
22.3.4 The following information shall be transferred by data flow or agreed alternative method by the MAM:	MAM			
(a) Site Details	MAM			C1, C2, C3, C4
i) MPRN	MAM			C1, C2, C3, C4
ii) meter installation address	MAM			C1, C2, C3, C4
(b) Details of the Meter and/or meter installation Component	MAM			C1, C2, C3, C4
i) pressure tier at which the meter and/or meter installation component is connected	MAM			C1, C2, C3, C4
ii) meter type (for example, diaphragm)	MAM			C1, C2, C3, C4
iii) manufacturer	MAM			C1, C2, C3, C4
iv) year of manufacture meter model (for example G4)	MAM			C1, C2, C3, C4
v) meter serial number or meter module number	MAM			C1, C2, C3, C4
vi) maximum stamped (badged) capacity (Qmax)	MAM			C1, C2, C3, C4
vii) number of dials or drums for billing purposes	MAM			C1, C2, C3, C4
viii) index scaling (for example x1, x10, x100)	MAM			C1, C2, C3, C4
ix) registration units (for example m3)	MAM			C1, C2, C3, C4

x) payment type (for example SMART, credit or pre-payment)	MAM			C1, C2, C3, C4
xi) whether a by-pass is fitted	MAM			C1, C2, C3, C4
xii) whether any by-pass which is fitted is open or closed	MAM			C1, C2, C3, C4
xiii) whether a security collar is fitted	MAM			C1, C2, C3, C4
xiv) converter details (including pressure transducer, temperature probe and cabling)	MAM			C1, C2, C3, C4
(c) Billing Information	MAM			C1, C2, C3, C4
i) contracted metering pressure	MAM			C1, C2, C3, C4
ii) meter height above sea level	MAM			C1, C2, C3, C4
iii) conversion factor as defined under GTER	MAM			C1, C2, C3, C4
(d) Location Information	MAM			C1, C2, C3, C4
i) meter location in the premises	MAM			C1, C2, C3, C4
ii) location code	MAM			C1, C2, C3, C4
22.3.5 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.	MAM			C1, C2, C3, C4

23 Ongoing Maintenance

23.1. Maintenance

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
23.1.1 The MAM shall manage its meter installations throughout their complete lifecycle.	AMI, MAM			C1, C2, C3, C4
23.1.2 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:	AMI, MAM			C1, C2, C3, C4
(a) planned preventative maintenance	AMI, MAM			C1, C2, C3, C4
(b) fault maintenance or repair	AMI, MAM			C1, C2, C3, C4
(c) planned replacement of meter installation components.	AMI, MAM			C1, C2, C3, C4
23.1.3 The MAM should undertake a maintenance review every three years or upon a major change of circumstance, if sooner.	AMI, MAM			C1, C2, C3, C4

23.2. **Records**

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
23.2.1 Maintenance records shall be kept by the relevant MAM for the life of any meter installation component. Records shall include:	MAM			C1, C2, C3, C4
(a) the type of the maintenance (for example planned, fault or planned replacement),	MAM			C1, C2, C3, C4
(b) a description of the work carried out	MAM			C1, C2, C3, C4
(c) the meter serial numbers and (where appropriate) readings at the start and	MAM			C1, C2, C3, C4

end of the maintenance activity,				
(d) the name of the person(s) who undertook the work,	MAM			C1, C2, C3, C4
(e) the date(s) the maintenance work was carried out,	MAM			C1, C2, C3, C4
(f) a description of any other work identified as being necessary and the date by which it should be completed,	MAM			C1, C2, C3, C4
(g) any by-pass operation details and times, in accordance with Network Code,	MAM			C1, C2, C3, C4
(h) the settings of pressure protection devices,	MAM			C1, C2, C3, C4
(i) Any ancillary equipment operated by the MAM.	MAM			C1, C2, C3, C4
23.2.2 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).	MAM			C1, C2, C3, C4
23.2.3 An appropriate inspection and testing regime shall be applied to portable equipment and tools e.g., Portable Appliance Testing.	AMI, MAM			C1, C2, C3, C4
23.2.4 Meter installation records shall be maintained by the MAM throughout the operational life of the meter installation.	MAM			C1, C2, C3, C4
23.2.5 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) Regs.	AMI, MAM			C1, C2, C3, C4
23.2.6 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	MAM			C1, C2, C3, C4

provided in Appendix 22.				
23.2.7 Appropriate details of other meter installation components that contribute to safety and accuracy of the meter installation should also be recorded.	MAM			C1, C2, C3, C4
23.2.8 There are other details that the MAM should record. The following list highlights the main records that should be held where appropriate:	MAM			
(a) regulator settings and details	MAM			
(b) protection system settings and details	MAM			
(c) hazardous area classification	MAM			
(d) pressure system certificates relating to Pressure Equipment Regulations (PER) and PSSR	MAM			
(e) Records of safety inspection, maintenance and test visits	MAM			
Note: Further details are available in BS 6400 - 1, BS 6400 - 2, IGEM/GM/6, IGEM/GM/8, IGEM/GM/5 and IGEM/GM/7A.	MAM			

23.3. In-service testing

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
23.3.1 The MAM shall co-operate with GTs, Gas Suppliers or gas Consumers that request the submission of Meters for In-service Testing.	MAM			C1, C2, C3, C4
23.3.2 The MAM shall verify the accuracy of meter installations under its management;	MAM		MOA	C1, C2, C3, C4
(a) In the case of maintainable Industrial & Commercial meters such as Rotary Positive Displacement (RPD) or Turbine meters the MAM may	MAM			C1, C2, C3, C4

achieve this by appropriate maintenance regimes as described in Section 23				
(b) For domestic Meters and larger diaphragm Meters, the MAM may establish a process for meter populations; this may be done by sample testing.	MAM			C1, C2, C3, C4
23.3.3 For non-half hourly Metering Equipment, there is a requirement that the meter performs within statutory maximum permissible errors throughout its in-service life.			MOA	
23.3.4 If sampling of meters is employed, it shall be undertaken periodically and should be on the basis of the following characteristics;	MAM			C1, C2, C3, C4
(a) Manufacturer	MAM			C1, C2, C3, C4
(b) Meter designation	MAM			C1, C2, C3, C4
(c) Version number of software if appropriate	MAM			C1, C2, C3, C4
(d) Badged capacity; and	MAM			C1, C2, C3, C4
(e) Year of Manufacturer.	MAM			C1, C2, C3, C4
23.3.5 For domestic size meters, sample sizes shall be statistically robust with respect to determining the in-service accuracy requirements specified in legislation or the appropriate Standard.	MAM			C1, C2
23.3.6 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.	MAM			C3, C4

23.4. Fault & Accuracy

	Gas Responsibility	Smart Responsibility	Electricity Responsibility	Work Category
23.4.1 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.	MAM			C1, C2, C3, C4
Note: BEIS's Office of Product Safety and standards (OPSS) manages a process for sample testing of meters referred to as In-Service Testing. Gas Suppliers are obliged to co-operate with OPSS.	MAM			
23.4.2 The Energy Supplier shall ensure that if the IHD, if provided, is found to be faulty within 12 months of installation, the IHD is either repaired or replaced; and		ES		
Note: The licensee need only do this where in its reasonable opinion it is satisfied that the fault in the IHD or Smart Metering System is not due to a failure by the Domestic Consumer to take all reasonable steps to keep the IHD or Smart Metering System in good working order.		ES		
23.4.3 Where any relevant person has reason to believe that the Metering Equipment for which a MEM is responsible is not performing within statutory limits of accuracy, it may exercise its rights under Schedule 7 of the Electricity Act to refer the matter for determination by a meter examiner. The requirements of paragraph 8 and the procedures of paragraph 7 of that Schedule shall then apply. The latter paragraph contains a provision relating to the responsibility for the payment of any determination fees.		MI		

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Appendix

Appendix 1: Work Category Table

Work Category	Installation Details	Required Standard	Main Legislation	GT Approval
Category 1	Q_{max} < 6 m^3 h^{-1}	BS 6400 - 1	GS(I&U)R	Generic C1
	MOPu < 75 mbar	IGEM/GM/7A (Electrical connections to meter)	DSEAR[1]	
	Pm = 21mbar	IGEM/GM/7B[1](Hazardous Area Zoning)	Gas (Calculation of Thermal Energy) Regs.	
	Standard Installation	IGEM/UP/1b (Testing and Purging)		
	Generic fixed factor volume conversion			
Category 2	Q_{max} < 6 m^3h^{-1}	BS 6400 - 2	GS(I&U)R	Generic C2
	75 mbar < MOPu < 2 bar	IGEM/GM/7A (Electrical connections to meter)	DSEAR[1]	
	Pm = 21mbar	IGEM/GM/7B1 (Hazardous Area Zoning)	Gas (Calculation of Thermal Energy) Regs PSSR[2]	
	Standard Installation	IGEM/UP/1B (Testing and Purging)		
	Generic fixed factor volume conversion			

Category 3A	6 m^3 h^{-1} < Q_{max} < 40 m^3 h^{-1}	IGEM/GM/6	GS(I&U)R		Generic C3A[10]	
	MOPu < 75 mbar	IGEM/GM/7A (Electrical connections to meter)	DSEAR[1]			
	Pm = 21mbar	IGEM/GM/7B[1] (Hazardous Area Zoning)	Gas (Calculation of Thermal Energy) Regs			
	Standard installation (Diaphragm or RPD meter)	IGEM/UP/1b (Testing and Purging)[3]				
	No flanged pipework	IGEM/UP/1a (Testing and Purging)[5]				
	Fixed factor volume conversion[4]	IGEM/UP/1c (Testing and Purging)[7]				
Category 3B	40 m^3 h^{-1}< Qmax < 1076 m^3 h^{-1}	IGEM/GM/6	GS(I&U)R		Generic C3A[10]	
	MOPu < 75 mbar	IGEM/GM/5 (Volume conversion)	DSEAR			
	Pm = 21mbar	IGEM/GM/7A (Electrical connections to meter)	Gas (Calculation of Thermal Energy) Regs		Generic C3B[11]	
	Standard Installation	IGEM/GM/7B (Hazardous Area Zoning)				
	Fixed factor volume conversion or	IGEM/UP/1a (Testing and Purging)5				
	electronic PTZ	IGEM/UP/1c (Testing and				

	volume converter[4]	Purging)				
Category 4A	Q_{max} > 6 m^3 h^{-1}	IGEM/GM/8	GS(I&U)R		Site Specific C4A	
	MOPu < 38 bar	IGEM/GM/5 (Volume conversion)	DSEAR[1]			
	Pm = 21mbar	IGEM/GM/7A (Electrical connections to meter)	Gas (Calculation of Thermal Energy) Regs PSSR[2]		By-pass approval (Where relevant)	
	Non-standard Installation	IGEM/GM/7B (Hazardous Area Zoning)				
		IGEM/UP/1a (Testing and Purging)[6]				
		IGEM/UP/1 (Testing and Purging)[5]				
		IGEM/UP/1c (Testing and Purging)[8]				
Category 4B1	Q_{max} > 6 m^3 h^{-1}	IGEM/GM/8	GS(I&U)R		Site Specific C4B	
	MOPu < 38 bar	IGEM/GM/5 (Volume conversion)	DSEAR[1]			
	Pm > 21mbar	IGEM/GM/7A (Electrical connections to meter)	Gas (Calculation of Thermal Energy) Regs PSSR[2]		By-pass approval (Where relevant)	
	Non-standard Installation	IGEM/GM/7B (Hazardous Area Zoning)				
		IGEM/UP/1a (Testing and Purging)[6]				

		IGEM/UP/1 (Testing and Purging)[5]				
		IGEM/UP/1c (Testing and Purging)[8]				
Category 4B2	Q_{max} > 6 m^3 h^{-1}	IGEM/GM/4	GS(I&U)R		Site Specific C4B	
	38 bar < MOPu < 85 bar	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)	DSEAR			
	Pm > 21mbar	IGEM/GM/5 (Volume conversion)	Gas (Calculation of Thermal Energy) Regs PSSR[2]		By-pass approval (Where relevant)	
	Non-standard Installation	IGEM/GM/7A (Electrical connections to meter)				
		IGEM/GM/7B (Hazardous Area Zoning)[9]				
		IGEM/SR/25 (Hazardous Area Zoning)				

NOTES to the table

[1] The DSEAR and ATEX Regulations apply to NON DOMESTIC premises irrespective of the type and size of meter, they do not apply to DOMESTIC Premises.

[2] 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 16m3/h, other restrictions also apply.

[4] 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.

[5] 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 1m3/h.

[7] IGEM/UP/1c is not applicable to installations within the scope of IGEM/UP/1b.

[8] IGEM/UP/1c applies to installations with an MOPu not exceeding 7Bar.

[9] IGEM/GM/7B scope is limited to installations with MOPu not exceeding 75Bar

[10] The Generic C3A GT2 approval covers meter installations with capacity not exceeding 40m3/h irrespective of meter technology.

[11] The Generic C3B GT2 approval covers meter installations with capacity exceeding 40m3/h irrespective of meter technology.

Note 1: Under GDN/PM/GT/2 when a meter is not to be installed within the premises or a pre-fabricated enclosure manufactured to a relevant standard or specification, GT approval is required.

Note 2: 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, CoMCoP requires that their requirements be applied to such installations where relevant.

Appendix 2: Model form of document relating to competency

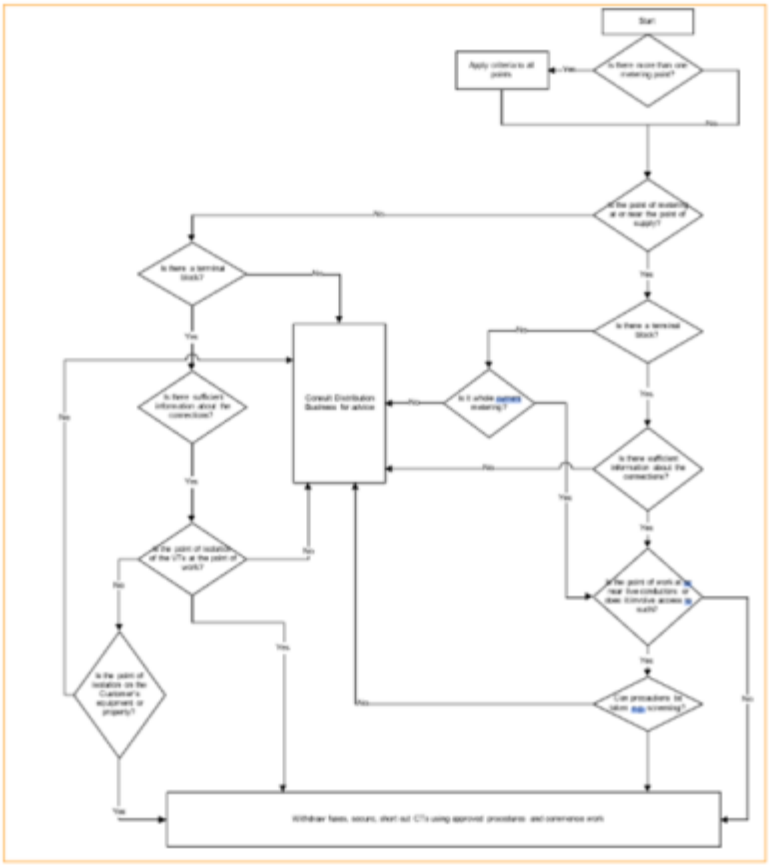
CERTIFICATE NO.		
Name and address of company providing certificate of competency		
Blank		
CATEGORY OF COMPETENCY		
(Delete whichever of the following items are not applicable)		
Category 1 Connection of LV whole-current meters with unrestricted access to the Site of work and the competence to make the point of work safe.		
Category 2 Connection of a CT-operated meter remote from the point of supply to a terminal block with access to voltage fuses which are not in the vicinity of live conductors.		
Category 3 As Category 2, but where voltage fuses are in the vicinity of live conductors.		
Category 4 Connection of a CT-operated meter at the point of supply on or near live conductors.		
Name of Competent Person (BLOCK LETTERS)		
Name and Address of Employer		
Approved by	Position	Date
Received		Date
This certificate is valid until:		Date
A copy of this certificate shall be held by the Competent Person named above. All Competent Persons shall observe the relevant provisions of this Meter Operation Code of Practice.		
NOTE: The CoMCoP term and/or logo is not to be used on this Certificate.		

Appendix 3: Technical Publications

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

Appendix 4: Decision chart for risk assessment of on-Site works

NOTE: This diagram is for guidance only and assumes that Meter Operatives have the requisite authority to proceed through any stage e.g. to withdraw fuses in the case of whole current metering.



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Appendix 5: Connection and Disconnection Notification – Information Requirements

RGMA Processes and Data provides standards for information to be passed to relevant Market Participants to meet the GM(C&D) Regs. 312484The 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 Prepayment 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.

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Appendix 6: 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
CPA	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 Supply 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
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
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	Non-domestic meter installations. Flow rate exceeding 6 m3 h-1 and inlet pressure not exceeding 38 bar
Parts 1 to 5	
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

Appendix 7: Example of a Data Protection Policy

1. This is a statement of the data protection policy adopted by us, CoMCoP signatories. Responsibility for the updating and dissemination of the policy rests with our Information Protection Advisor. The policy is subject to regular review to reflect, for example, changes to legislation or to our structure or policies. All staff are expected to apply the policy and to seek advice when required.

2. We need to collect and use certain types of information about people, addresses and metering assets with which we deal in order to operate. These may include current, past and prospective people, addresses and metering assets, our employees, suppliers (such as AMR manufacturers) and others with whom we conduct business. In addition, we may be required by law and various government departments to collect, use and disclose certain information. This personal information must be dealt with properly however it is collected, recorded and used – whether on paper, electronically, or other means - and there are safeguards to ensure this in the General Data Protection Regulation (GDPR) and related legislation.

3. We regard the lawful and correct treatment of personal information as important to the achievement of our objectives and to the success of our operations, and to maintaining confidence between those with whom we deal and ourselves. We therefore need to ensure that our organisation treats personal information lawfully and correctly and in accordance with all relevant applicable legislation.

4. To this end, we fully endorse and must adhere at all times to the General Data Protection Regulation (GDPR) and with related legislation. In particular, we must observe at all times the principles of good information handling set out in the General Data Protection Regulation (GDPR) and in particular ensure that personal data must be:

(a) processed lawfully, fairly and in a transparent manner in relation to individuals;

(b) collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes; further processing for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes will not be considered to be incompatible with the initial purposes;

(c) adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed;

(d) accurate and, where necessary, kept up to date; every reasonable step must be taken to ensure that personal data that are inaccurate, having regard to the purposes for which they are processed, are erased or rectified without delay;

(e) kept in a form which permits identification of data subjects for no longer than is

necessary for the purposes for which the personal data are processed; personal data may be stored for longer periods insofar as the personal data will be processed solely for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes subject to implementation of the appropriate technical and organisational measures required by the GDPR in order to safeguard the rights and freedoms of individuals;

(f) processed in a manner that ensures appropriate security of the personal data, including protection against unauthorised or unlawful processing and against accidental loss, destruction or damage, using appropriate technical or organisational measures.

5. To assist in achieving compliance with the principles, we must:

(a) appoint an Information Protection Advisor at a senior level with specific responsibility for data protection; and

(b) document data protection procedures.

Appendix 8: 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	Applicant to confirm details in	

criminal record.	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 Qualification & Training Section of the CoMCoP.	

Appendix 9: Guidelines for the assessment of competency of EMO Meter Operatives

General definition

1. There is no accepted definition of a competent person. Regulation 16 of the Electricity at Work Regulations (as amended), states:

No person shall be engaged in any work activity where technical knowledge or experience is necessary to prevent danger or, where appropriate, injury, unless he possesses such knowledge or experience, or is under such degree of supervision as may be appropriate having regard to the nature of the work.

Components

2. The Memorandum of Guidance on the Electricity at Work Regulations indicates elements of "technical knowledge or experience" referred to in Regulation 16. The following is based upon this, but reference should be made to the exact wording in the Memorandum:

a. Understanding of the general requirements of safety legislation and how these translate into personal duties and obligations;	This may include the need to report incidents or equipment found faulty;
b. Adequate knowledge of electricity and experience of general electrical work;	This could imply electrical apprenticeship followed by work experience in a field related to meter installation, or "time-serving" in such field;
c. Knowledge and experience of the specific work method;	This may have safety implications in that incorrectly performed work may cause danger, e.g., incorrect polarity, overheating caused by unsatisfactory connection;
d. Understanding of the system to be worked on and of surrounding hazards and the safety precautions which must be taken to prevent or avoid danger;	These may include non-electrical hazards, e.g., CO2 installations;
e. Ability to recognise conditions under which work must not be commenced or its progress curtailed or ceased;	This may include recognition of the Meter Operative's own shortcomings, lack of experience or training including the need for assistance, supervision or

	more information.

Specific technical criteria

3. The following gives examples of the range of technical knowledge, acquired through training and/or by experience, which may be appropriate depending upon the work that the Meter Operative is required to carry out:

(a) Current transformers

(i) Knowledge of principles of construction and operation.

(ii) Appreciation of ratio and polarity.

(iii) Understanding of the relationship between burden, ratio and phase angle errors.

(iv) Appreciation of the methods of connection and effects of open circuiting the secondary.

(b) Voltage transformers

(i) Knowledge of principles of construction.

(ii) Understanding of the relationship between burden, ratio and phase angle errors.

(c) Secondary wiring

(i) Familiarity with wiring installation practices with special reference to the identification requirements of the Energy Networks Association's Technical Specification 50-19, or any other equivalent or replacement standards from time to time.

(ii) Methods of testing insulation resistance and continuity.

(d) Wiring diagrams

(i) Familiarity with wiring diagrams and their interpretation.

(e) Meters

(i) Understanding of the principles of measurement of kWh, kVAh and kVArh and the use of two and three-element polyphase meters.

(f) Sealing

(i) Knowledge of requirements of the BSC Procedure or Market Procedure (as appropriate) and relevant directions as to the sealing of Metering Equipment .

(g) Testing and test equipment

(i) Familiarity with the use of equipment for measurement of voltage and current, polarity and phase rotation, and active and reactive energy.

(ii) Awareness of the accuracy limits of equipment and the requirement for regular calibration checks.

Safety criteria

4. The following gives examples of the range of safety knowledge, acquired through training or by experience, which may be appropriate depending upon the work that the Meter Operative is required to carry out:

(h) Inspection and reporting

(i) Knowledge of the procedures for reporting of dangerous incidents, dangerous situations, defects or asset condition information.

(ii) Understanding of the need visually to inspect prior to work and to report any deficiencies to the appropriate parties.

(iii) Understanding the content of the CoMCoP Guidance for Service Termination Issue Reporting document.

(i) Connection of meters to test/isolating facilities

(i) Understanding of the procedures to interrupt the voltage supply by withdrawal of fuses and short out current transformers by means of suitable links.

(ii) Familiarity with the practical methods of carrying out these precautions and the steps to ensure that no unauthorised interference negates them.

(j) Work in proximity to service terminations

(i) Knowledge of the dangers arising from damage to service terminations.

(ii) Familiarity with the use of correct tools and equipment and the need to apply mechanical protection where necessary.

(iii) Use of appropriate personal Protective equipment.

(k) Removal of covers

(i) Awareness of dangers such as bare live conductors and/or terminals which may be exposed following removal of a cover.

(ii) Knowledge of the precautions to be taken to screen or otherwise prevent injury.

(iii) Understanding that the work area should not be left unattended whilst covers are removed.

(l) Work in the vicinity of live LV conductors

(i) Knowledge of materials and techniques adequately to screen the work area from danger, taking account of both electrical and mechanical considerations.

(m) Removal of cut-out fuses

(i) Awareness of the need visually to inspect the cut-out prior to removal of covers and prior to removal of fuses.

(ii) Understanding of the dangers which such inspection may reveal and the steps which may then need to be taken.

(iii) Familiarity with the removal and replacement of fuses in a safe manner including insertion techniques and the use of protective equipment where necessary e.g., insulating gloves, fuse pullers, insulating sheet, additional phase barriers, terminal shrouds, eye protection etc.

(iv) Understanding of additional precautions to ensure continuing safety such as the use of caution notices and safekeeping of removed fuses.

(v) Knowledge of the use of voltage testing devices to prove 'not live' before work commences and to check restoration on completion of the work.

(n) Access to DNO substations

(i) Understanding of the need for adequate authority to enter and of the conditions under which access is allowed, which may include requirements to notify the DNO control engineer and make suitable entries in any logbook.

(ii) Knowledge of basic precautions to be taken prior to and during entry, such as visual checks of surroundings and the equipment and tests for the presence of gas, including ensuring continuing safe egress.

(iii) Awareness of the dangers that might be inherent in equipment within the substation and of the need to avoid actions which might lead to the inadvertent operation of switches or protective devices.

(o) Access to fire protected zones

(i) Ability to recognise substations or other locations where fire protection is installed.

(ii) Knowledge of the procedures for rendering and keeping safe whilst entry is affected where these have been indicated by the DNO, and for proper restoration of the protection.

(iii) Knowledge of actions to be taken in the event of a fire protection system operating whilst the Meter Operative is still in the substation.

(p) Safety documentation

(i) Familiarity with any relevant safety document which may be required and with the procedures for issue and cancellation.

(q) Access/operational restrictions

(i) Awareness of the procedures which the DNO adopts for notification of access/operational restrictions and the need to check whether any such restriction is in effect at the specific Site.

Appendix 10: 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.

Appendix 11: Generic operational and safety considerations at the DNO/EMO interface

1. This Appendix describes the operational and safety requirements that apply to work activities on or near those parts of a Distribution System where a EMO is likely to be working.

2. The requirements are specified to enable DNOs to minimise to an acceptable level the "duty of care" that DNOs, as owners of the Distribution System apparatus, have to a EMO who wishes to install, operate and maintain meters in accordance with this CoMCoP.

3. A DNO shall expand upon this Appendix by specifying any additional statements that it considers necessary to take account of any special hazard or operational requirement, particularly where this relates to a local non-standard arrangement.

4. The EMO will have to ensure that the competence of the person carrying out work on Site includes knowledge and understanding appropriate for the work undertaken and in particular as to work "in proximity to service terminations" and "removal of covers" as described below.

5. The EMO has the option to train his employees or contractors to meet the competency requirements appropriate for operation of Low Voltage fuses and/or entrance to DNO substations (see Paragraph 5.1) or to contract with the DNO to provide a competent person to accompany his operative(s). For example, depending on previous DNO policies, the EMO may decide to rely on the DNO to provide accompanied access on the rare occasions that access is required to a particular DNO's substation.

Inspection and reporting of unsatisfactory apparatus

6. Whilst DNOs endeavour to maintain all their apparatus in a satisfactory condition, circumstances will arise where apparatus has been damaged or has faulted without the DNO being immediately aware.

7. It is important that the person responsible for work on or near any Distribution System apparatus makes a visual inspection of the apparatus, noting also whether there are any smells of burnt insulation, signs of melted compound or noises indicating electrical discharge. If any apparatus is found to be in an unsatisfactory condition, the appropriate DNO must be contacted. If the apparatus is unsafe the work shall be suspended until the DNO can attend and rectify the problem.

Work in proximity to service terminations

8. DNO service termination apparatus is usually designed to withstand inadvertent contact by persons who are working near to it. If, however, sharp tools such as electric drills etc. are being used in close proximity, a risk assessment may deem necessary the placement of

temporary additional mechanical protection between the point of work and the apparatus to prevent the sharp tool from piercing the insulation/screening of the apparatus.

9. If, upon assessing the risks that might arise from conducting works, the relevant Party considers that there is an unacceptable risk of disturbance of Customer equipment (and/or terminations) then the relevant Party must consider what preventative measures (e.g., cable clips) or reactive measures (e.g., retightening terminations) would be necessary to reduce risks arising from their intended works, but leave open the option to not conduct the works until further advice is sought from the Customer.

10. Reactive measures (e.g., retightening terminations) would be necessary to reduce risks arising from intended works on DNO and/or Metering Equipment but leave open the option to not conduct the works until further advice is sought from the DNO or EMO as appropriate.

Removal of covers

11. Persons responsible for Site safety should be aware that access covers, doors etc. on Distribution System apparatus may not be specifically marked with notices warning that removal of the cover, door etc. may allow access to bare live conductors. Any person who removes any cover, door etc. must treat all exposed conductors as live until proved not live. Before any work takes place all appropriate precautions must be taken to prevent danger of shock and injury, from arc energy associated with a short circuit.

12. Any covers which are removed shall be properly replaced on completion of the work. The work area must not be left unattended whilst any covers are removed.

Removal and replacement of cut-out fuses

13. A DNO may require, as part of its Low Voltage system control procedure, that permission to remove/replace cut-out fuses is obtained and reported in accordance with its normal operating procedure. Alternatively, the DNO Low Voltage system control procedure may allow the removal or replacement of LV cut-out fuses to take place without reference to control other than the requirement for any incident/accident to be immediately reported (see below).

14. Persons removing or replacing cut-out fuses must be competent to recognise which LV fusegear can be safely operated using the correct protective personal equipment. Persons must also be competent to recognise if an incorrect type of fuse is in place or if any interphase insulating barriers are missing. It is expected that the DNO will attend in these circumstances in the manner described in paragraph 7 above.

15. Where work is to be carried out at a location remote from an appropriate point of isolation a "caution notice" (in the form agreed with the DNO) shall be placed at the point of isolation whilst the fuses are removed, and work/testing is being carried out.

16. After the LV fuses have been replaced, a check shall be made that supply has been properly re-established, i.e., a fuse has not failed through being mechanically disturbed (e.g. if dropped on the floor). A DNO may agree to provide a EMO with spare fuses and fuse holders.

17. Cut-out fuses shall be properly tightened and covers/seals correctly re-applied.

Access to DNO substations

18. In the case of a joint access DNO/Customer substation, the Customer will provide access to the substation for the EMO.

19. Where joint access to a DNO substation is required, suitable dual locking may be agreed between the DNO and the EMO.

20. The EMO shall be advised by the DNO of the normal requirements that apply to access to and/or work in all relevant substation(s). These requirements may for example include the need to make appropriate entries in the substation logbook or to report to a DNO control point. The EMO will need to establish procedures so that any person to whom it permits access to the substation will comply with these requirements, as well as the safety precautions stated in paragraph 10 above.

21. Any person with authority to enter a DNO substation shall do so with caution and shall:

(a) look out, particularly at night, for temporary obstructions and excavations due to work in progress and also for any reduced electrical clearances due to damaged or broken conductors;

(b) note the emergency exits;

(c) examine the exterior of any apparatus being worked on and associated buildings for any signs of damage by vandalism, fire, explosion or electrical breakdown and report the existence of the same to the DNO control point;

(d) listen for any unusual noise coming from transformers, switchgear, cable terminations, overhead connections or any other apparatus;

(e) make a point of sniffing the air inside the substation building for any smell of damaged insulation, overheating vapour or gas or other evidence of damage to apparatus or danger;

(f) refrain from switching on lights, operating any electrical equipment, using the telephone, smoking or causing any form of ignition until satisfied that no gas or flammable vapour is present; and

(g) if the presence of gas or other flammable vapour is suspected, ventilate the substation by opening as many doors as possible without entering the building. The DNO control point shall be notified.

Access to fire protected zones

22. Unless alternative (local DNO) procedures apply, the following action shall be taken before access to work, or other activities are carried out in any enclosure protected by automatic fire extinguishing equipment:

(a) precautions shall be taken to render the automatic control inoperative. The equipment shall be left on hand control and a caution notice (in the form agreed with the DNO) fitted. The conditions under which automatic control may be restored shall be noted on any written work instructions used; and

(b) the automatic control shall be restored immediately after the persons engaged on the work or other activity have withdrawn from the protected enclosure.

NOTE: Appropriate warning notices should be provided by the Site owner on all fire protected areas, but they may have been removed/obscured by vandalism.

Work where exposed live Low Voltage conductors are present

23. If work or other activity is to be carried out in the vicinity of exposed LV conductors, suitable screening to prevent danger shall be installed by the EMO between the work area and the exposed LV conductors. The screening/barrier will need to be adequate to prevent mechanical as well as electrical contact.

Reporting of incidents/accidents/specified events

24. If work being carried out by a EMO affects Distribution System apparatus such that the safe and secure operation of the Distribution System is or may be put at risk, the appropriate DNO contact/control point shall be immediately notified.

Access/operational restrictions

25. If a DNO has to place an access/operational restriction on any of its Distribution System apparatus or premises, such that it affects a EMO, the DNO shall notify the MEM in accordance with Appendix 13.

Appendix 12: References

This list only contains documents referred to in this CoMCoP; it is not meant as an exhaustive list of documents relevant to meter operation.

Legislation

Electricity Act 1989

Health and Safety at Work etc. Act 1974

SI 1998 No.1566:	The Meters (Certification) Regulations 1998
SI 1998 No.1565:	The Meters (Approval of Pattern and Construction and Method of Installation) Regulations 1998 (as amended 2002)
SI 1989 No.635:	The Electricity at Work Regulations 1989 (as amended by SI 1997 No. 1993: Offshore Electricity and Noise Regulations 1997)
SI 1999 No. 3242:	The Management of Health and Safety at Work Regulations 1999 (as amended by SI 2003 No.2457: The Management of Health and Safety at Work and Fire Precautions (Workplace) (Amendment) Regulations 2003, SI 2006 No. 438: The Management of Health and Safety at Work (Amendment) Regulations 2006)
SI 2002 No. 2665	The Electricity Safety, Quality and Continuity Regulations 2002 (as amended)

Other

- Connection Agreements (and Standard Connection Agreements, where applicable)

Appendix 13: Exchange of Information Between DNOs, MOA and EMO s

1. The MOA and or EMO shall provide information of three types to the DNOs:

(a) MOA information relating to contact details of the department/person for the specific issues as detailed in Appendix 13, Part 4. The information is to be provided on the REC Portal Website (and updated to reflect changes from time to time). This may be achieved by providing a link to the appropriate page of the MOA or Meter Operatives own website. Changes to such information will be communicated by the Code Manager to all DNOs.

(b) Site-specific information relating to the MOA appointment for a Site and will request information from the DNO (see paragraph 7.1.6(a) above).

(c) Health and Safety Bulletins/Announcements relevant to DNOs which cause urgent or non-urgent variations to their standard working practices.

2. The EMO shall submit the bulletin/announcement, together with a completed Health and Safety Bulletin/Announcement form, to the Code Manager for acceptance. The Code Manager will review the bulletin/announcement in consultation with a minimum of one Review Panel member representing each of the DNO and relevant Parties, within two working days for an urgent bulletin/announcement and five working days if non-urgent. Any accepted bulletin/announcement will be communicated to relevant parties within a further two working days.

3. The information is to be provided on the REC Portal. This may be achieved by providing a link to the appropriate page of the EMO's own website.

4. The DNO shall provide information of three types to the MOA and EMO:

(a) DNO information relating to typical operating procedures, working practices, wiring arrangements etc and other information such as its policy for consent to connect, treatment of existing meters, use of/access to cubicles etc, as detailed in Appendix 13, Part 1.

The information is to be provided on the REC Portal (and updated to reflect changes in the methods of working, safety information or contacts etc. initiated by the DNO from time to time). This may be achieved by providing a link to the appropriate page of the DNO's own website(s). Changes to such information will be communicated by the Code Manager to all MOAs and EMOs.

(b) Site-specific information relating to the Site and its existing equipment as detailed in the BSC Complex Site Supplementary Information and Parts 2 and 3 of this Appendix.

The information is required for each Site (see paragraphs 4.2.1 and 5.1.6 above). Notification of Site-specific changes will be provided to the MOAs and EMOs in accordance with the BSC.

(c) Health and Safety Bulletins/Announcements relating to guidance to MOAs and EMOs which cause urgent or non-urgent variations to the existing information provided in paragraph 4(a), 4(b) and Parts 1 to 3 of this Appendix.

The DNO shall submit the bulletin/announcement, together with a completed Health and Safety Bulletin/Announcement Form, to the Code Manager for acceptance. The Code Manager will review the bulletin/announcement, in consultation with a minimum of one Metering Expert Group member representing each of the DNO and MEM Parties, within two Working Days for an urgent bulletin/announcement and five working days if non-urgent. Any accepted bulletin/announcement will be communicated to relevant CoMCoP Parties within a further two Working Days.

The information is to be provided on the REC Portal. This may be achieved by providing a link to the appropriate page of the DNO's own website(s).

Part 1: DNO Information

Contact name(s) and detail(s) for operational, safety, technical, commercial and escalation liaison.

OPERATIONAL/SAFETY

(a) Contact details for:

(i) New supply liaison;

(ii) Pre-modified HV and LV CT supply liaison;

(iii) Incident/accident on Site reporting; and

(iv) Dangerous situation (category A) reporting.

(b) Operational practices differing from or amplifying Appendix 11 - Generic operational and safety considerations at the DNO/EMO interface;

(c) Control requirements for controlled substations, e.g. need to report, completion of log books;

(d) Access conditions policy and contact details as to options under 10.2.6 and joint access procedures (if utilised);

(e) contact details relating to the requirements for authorising and /or appointing EMO Meter Operatives as competent in accordance with its Distribution Safety Rules; and

(f) Policy relating to any requirements not expressed in (a) to (e) above that may need to be fulfilled prior to the EMO Meter Operative undertaking a connection to that DNO' assets and the means by which MOAs may obtain information as to that policy, in accordance with the Electricity Safety, Quality and Continuity Regulations 2002 (as amended).

TECHNICAL

(g) Typical working practices affecting installation in different areas;

(h) Typical wiring diagrams where used (NOTE: there will be need for disclaimers as to application in every case);

(i) Typical metering practices supporting Site-specific information;

(j) Security practices and special requirements to prevent/deter tampering and interference;

(k) Contact details for DNO metering equipment calibration and commission test records.

COMMERCIAL

(l) Return address and contact details for removed DNO meters;

(m) Re cubicles, whether access to/use of is permitted and any associated commercial arrangements; and

(n) Arrangements and contact details for MOAs and EMOs to obtain items from DNOs, such as fuses and/or fuse carriers;

(o) Contact details for data flow queries.

ESCALATION

(p) Contact details for general escalation issues.

Part 2: Site-specific information

Upon request from a MOA the following Site-specific information shall be provided by

a DNO, either electronically using data flow D0215, or by other means. CT and VT test certificates will also be provided if they are available.

Data Item Name	Data Item Reference
CT Class	J0505
CT Rating	J0506
CT Ratio	J0454
Meter Equipment/Service Location	J1025
MPAN Core	J0003
Number of phases	J0427
Supply Capacity	J0456
Supply Voltage	J0443
VT Class	J0677
VT Rating	J0678

Part 3: HV/LV CT metering label

This label enables the DNO to provide relevant information to EMO associated with VT and CT metered installations. It will be adhered to the inside of the metering cabinet door or placed adjacent to the Test Terminal Block (TTB) at the meter position, the former being the preferred option for security i.e., to avoid unauthorised tampering/removal or fading of the information due to a combination of direct light/time.

It will be used for both HV and LV CT connections and in most circumstances negate the need of the EMO, BSC Technical Assurance Agent and other parties to obtain the information directly from equipment nameplates etc., which are often inaccessible with the connection Energised. The label format accommodates single and multi-phase LV and HV systems.

This label will be completed by the DNO VT/CT installation/commissioning engineer either, preferably using pre-formatted computer/labelling software or, handwritten using an indelible

pen. The label must be completed and fixed before energisation for any new or modified metering installation.

HV/LV CT metering label

Voltage/Current Transformer Information

VT/CT	Phase	Manufacturer	Serial Number	Single/Dual/Multi (Ratios Available)	Rating (VA)	Class	Ratio (Connected)
VT	**L1**	Sadtem	01-114274	Single	50	0.5	11,000/110
VT	**L2**	-	-	-	-	-	
VT	**L3**	Sadtem	01-114275	Single	50	0.5	11,000/110
CT	**L1**	Alstom	01/8166500	Low Ratio of 200/100/5	10	0.5s	100/5
CT	**L2**	-	-	-	-	-	
CT	**L3**	Alstom	01/8166501	Low Ratio of 200/100/5	10	0.5s	
Distributor Company: A. N. Networks Installation/Commissioning Engineer: A. N. Other Date: A. N. Date							

The actual size of the label has not been prescribed and an example of the information requirements is shown in italics on the above label.

Label completion details

(a) VT/CT – these installations require both a voltage and current reference

(b) Phase – defined as L1, L2 and L3 connection identifiers

(c) Manufacturer – as described e.g. Sadtem

(d) Meter Serial Number/ Serial Number – this number is usually unique to the relevant manufacturer and can be structured in various formats. It is important that the EMOs Meter Operatives have an understanding of the various configurations

and meanings that are applied e.g., year of manufacture, batch number and serial number etc.

(e) VT Ratio (HV) – e.g., 11,000/110 or 6,600/110

(f) Voltage Ratio (LV) – e.g., 400/230 volts

(g) CT Ratio – e.g., 200/100/5 (dual ratio) can be set to either high or low rating. The values specified will be actual connected ratios and for additional information it is essential for contact to be made with the DNO

(h) Rating (VA) – this is the power output of a VT or CT and the connected burden must not exceed this rating as the overall accuracy of the metering system will be affected

(i) Class – this will need to be appropriate to the relevant BSC Code of Practice determined by the Customer's demand/load requirements

(j) Single/Dual/Multi Ratio – most installations for LV are single ratio CT's and for HV installations the VT is normally a single ratio with dual ratio CT's. For some HV installations the CT's may be multi ratio with dual ratio VT's. If there is any doubt, then these variations must be confirmed with the DNO as the overall accuracy of the Metering Equipment will be affected

Part 4: MOA Information

Contact name(s) and detail(s) for operational, safety, technical, commercial and escalation liaison.

OPERATIONAL/SAFETY

(a) Contact details for:

(i) New supply liaison;

(ii) Pre-modified HV and LV CT supply liaison; and

(iii) Post modified HV and LV CT supply liaison.

TECHNICAL

(b) Contact details for MOA Metering Equipment calibration and commission test records.

COMMERCIAL

(c) Contact details for:

(i) Dangerous situation (category A) DNO Site attendance liaison;

(ii) Asset condition reporting queries; and

(iii) Data flow queries.

ESCALATION

(d) Contact details for general escalation issues.

Appendix 14: 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 by-pass.

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 19.4 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 10.8 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 15: Cable identification

1. For whole current metering, load-carrying conductors shall be marked either L and N for single phase supplies, or L1, L2, L3 and N for polyphase supplies, whenever metering work is carried out. The markings shall be applied as a minimum:

(a) at the meter terminals (except the incoming terminals where security devices are fitted); and

(b) at any equipment fitted by a EMO, DNO or urgent metering services provider on the outgoing side of the meter which interfaces to the Customer's installation (e.g., isolation/supply switch, time-switch, terminal blocks).

The markings may be by printed tape, tag or other suitable permanent medium.

2. The EMO or DNO shall only connect a new Customer's circuit provided it is clearly and unambiguously identified at the end to be connected, either by colour or marking (e.g., L, L1, L2, L3, N) in accordance with the current version of BS 7671.

3. For single insulated cables, or the insulation of insulated and sheathed cable, the EMOs, DNOs and urgent metering services providers shall use the following colours where they provide new or replacement cables.

4. The insulation of the line conductors of a polyphase phase supply shall be either:

(a) all brown and marked L1, L2, L3 at both ends, or

(b) brown, black and grey and marked L1, L2, L3 at both ends.

All neutral conductors shall have blue insulation and marked N at both ends.

5. For conductors of less than 500mm in length and clearly visible throughout, marking at one end may be considered acceptable.

6. For insulated and sheathed cables, the sheath may be the same colour as the insulation (as defined in paragraph 4 above). Where the sheath colour is not the same as the insulation, then it should be a colour other than brown, black, grey, blue, yellow, red, green or green yellow, i.e., not any colour that is currently, or has historically, been used to identify line, neutral or earth conductors.

7. Where cables between the cut-out and outgoing side of the Metering Equipment require replacement then all cables should be replaced by cables which comply with the paragraphs 1 to 6 above.

8. DNOs will use the Energy Networks Association Technical Specification 50-19 standard ferruling marking at the interface (test terminal block and/or fuses/link) for all new and altered wiring. At the DNO terminations, the markings shall be:

(a) CTs: D11, D10, D31, D30, D51, D50 (odd is “feed”)

NB: Where a common return is used, then D10, D30, D50 become D70

(b) Metering Potentials: E10 or E11, E30 or E31, E50 or E51 (depending on whether the interface is the fuse/link or the test terminal block after the fuse).

9. DNO CT metering secondary voltage and current conductors for all new and altered wiring shall be either:

(a) all one colour; or

(b) brown, black, grey (phase colours) and blue (neutral).

10. EMOs shall use the Energy Networks Association Technical Specification 50-19 ferruling marking for all new and altered CT metering wiring, and all CT metering secondary voltage and current conductors shall be:

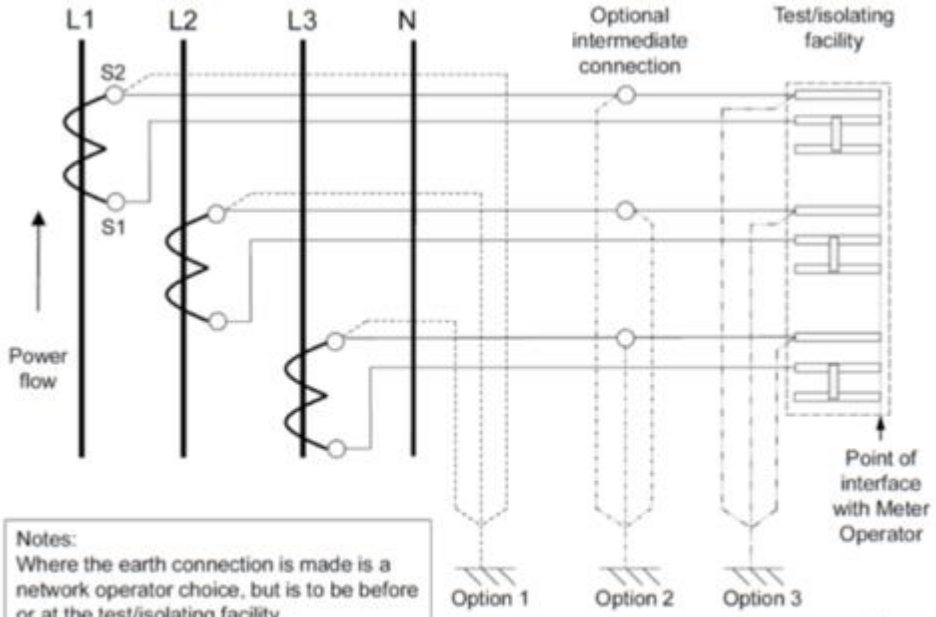
(a) all one colour; or

(b) brown, black, grey (phase colours) and blue (neutral).

NB: For avoidance of doubt, this may be a different colour to that provided by the DNO. Auxiliary wiring (e.g., pulse, rate change and communications signals) does not need to conform but should be suitably identified.

The Energy Networks Association Technical Specification 50-19 requirements in A11.5 and A11.7 secure a clear identification of the different conductors and should be adopted as best practice for identification.

Appendix 16: Earthing of Current Transformers



Notes:
Where the earth connection is made is a network operator choice, but is to be before or at the test/isolating facility .
It is preferable to earth on the "return" (S2) side for consistency.
It is preferable for the connection to be as close to the source as possible (option1), but alternatives are acceptable.

Notes, cont'd:
This diagram is primarily for LV metering. For HV, the L2 CT is normally absent, and the CT earth connection should be in the HV switchgear or marshalling box.

RETAIL ENERGY CODE

Appendix 17: Guidance for the actions to be taken where CT/VT details are not available

1. This Appendix should be used as guidance for EMOs installing and maintaining CT/VT Metering Equipment.

Flowchart for Establishing CT and VT Errors General

2. This flowchart is designed to help Suppliers, EMOs and DNOs to establish the errors for particular CTs and/or VTs to be applied to Metering Equipment .

3. The guiding principle is that the "overall accuracy" must comply with the BSC Metering Code(s) of Practice requirement. For example, BSC Metering Code of Practice 5 issue 6 section 4.3.1 (i) requires an accuracy of +/- 1.5%. Therefore, if this flowchart results in a CT accuracy of +/- 0.5%, then the meter and associated apparatus must not exceed +/- 1.0%.

4. This flowchart is not necessarily the only solution but is offered as guidance only.

5. The Technical Assurance Agent (TAA) will also use this guidance note in assessing compliance with the BSC Metering Code(s) of Practice in accordance with the requirements of BSCP27.

Notes

6. Commissioning sheet means the record of the initial installation (or change of installation) and testing of the Metering Equipment, on the Site concerned. This must include the make, class, ratio and serial number of the CTs and/or VTs. (It may, but not necessarily, include the CT errors as in b) below). (It may also, but not necessarily, include the meter errors).

7. CT certificate (CT Cert) means the record of the errors associated with the CT(s) together with the serial number(s). This will normally have been originally provided by the manufacturer or a meter test station.

8. VT certificate (VT Cert) means the record of the errors associated with the VT(s) together with the serial number(s). This will normally have been originally provided by the manufacturer or a meter test station.

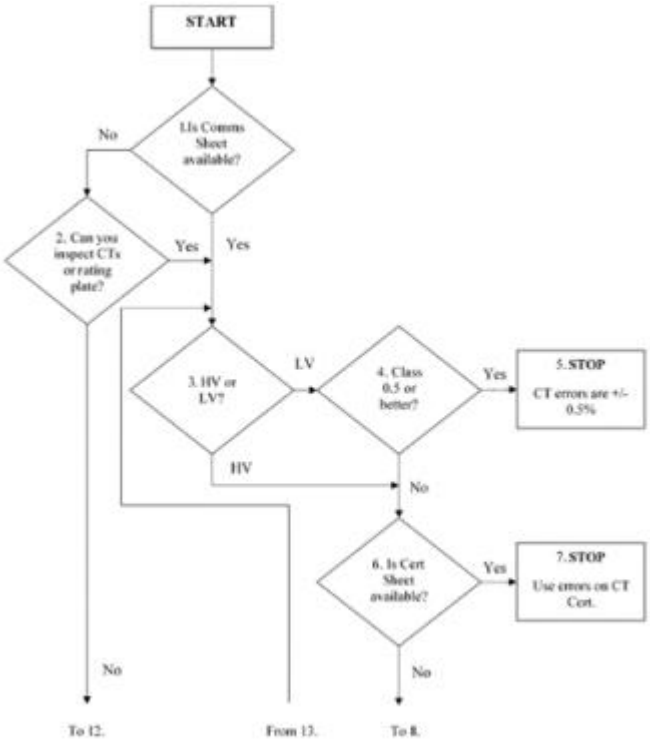
9. Visual inspection of CTs and/or VTs requires access to the CTs and/or VTs and the label and consequently the serial number. This may have safety implications and for this reason an option is included if this is not possible. However, this should be a last resort.

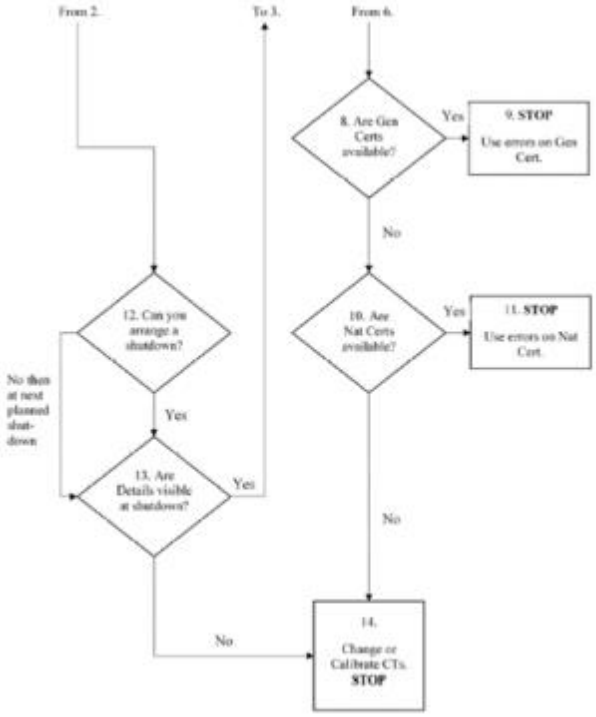
10. Generic Certificates (Gen Certs) means the Generic Certificates for CTs and/or VTs provided by the DNO.

11. National Certificates (Nat Certs) means the National Certificates held on the National

Database by Elexon.

Flowchart for CTs (use similar process for VTs)





Appendix 18: Customer's electrical equipment checklist

1. The model checklist and text may be used by EMOs to fulfil the recommended on-Site working

Model Checklist/Text

To the occupier

VISUAL INSPECTION OF YOUR ELECTRICAL INTAKE POSITION

It is recommended that the electrical installation in your home is checked by a registered electrician* competent person at least once every ten years to confirm whether or not it is in a satisfactory condition for continued service.

Whilst replacing your electricity meter, the Meter Operative observed the following safety issue(s) with the equipment in your electrical intake position that need to be brought to you, or your landlord's, attention:

If any of the following issues have been observed, Electrical Safety First+ recommends that advice is sought from a registered electrician about upgrading your protection against electric shock and fire as a matter of urgency. An inspection by a registered electrician is likely to result in a cost to you even if no work is required.

Your electrical equipment is damaged, exposing live parts to touch. The equipment needs to be repaired or replaced as a matter of urgency to prevent the risk of electric shock

Your electrical installation appears not to be adequately earthed. The purpose of earthing is to minimise the risk of electric shock and/or fire in your home if a fault occurs in your electrical installation or an electrical appliance

Your consumer unit (fuse box) or other equipment is showing signs of overheating. Overheating can be caused by overloaded circuits or loose connections, and can be the cause of fire

The cables connecting the meter to your consumer unit are in a poor/damaged condition. The cables need to be replaced (in conjunction with your electricity supplier/meter operator)

Your electrical installation is not adequately main bonded. The purpose of bonding is to minimise the risk of electric shock to anyone in your home who may be touching two separate conductive parts when a fault occurs somewhere in the supply or in the electrical installation

If any of the following issues have been observed, Electrical Safety First recommends that

you seek advice from a registered electrician.

You should test your voltage-operated earth-leakage circuit-breaker. If the device does not trip when tested, you will be at serious risk of electric shock if a fault develops in your electrical installation or in an electrical appliance. The test should be repeated on a quarterly basis

The cables connecting the meter to your consumer unit, and/or the earthing conductor for your installation, appear to be under-sized

Access to your consumer unit (fuse box) is too restricted. Consideration should be given to having your consumer unit relocated to improve access to it in the event of an emergency, to re-set circuit-breakers or replace fuses in the event of a fault, and to enable you to test the RCDs** (if any) at the recommended quarterly intervals

You have a very old arrangement of separate main switches. Consideration should be given to having them replaced with a modern consumer unit (fuse box) incorporating RCDs to give you increased protection against electric shock and fire

Other observed issues, such as combustible materials in vicinity of metering equipment.

Whilst the Meter Operator may have observed defects, damage or deterioration which may present electrical safety hazards, such an inspection alone cannot fully determine whether an installation is safe for continued use.

For further information and advice about electrical safety in and around your home, visit http://www.electricalsafetyfirst.org.uk/

+ Electrical Safety First is an independent charity committed to reducing deaths and injuries caused by electrical accidents at home and at work.

* Registered electricians in your area can be found by visiting http://www.electricalsafetyfirst.org.uk/find-an-electrician/

** An RCD (residual current device) is a potentially life-saving device that is designed to prevent you getting a fatal electric shock if you touch something live, such as a bare wire. It gives you a level of personal protection that ordinary fuses and circuit-breakers can't provide. Like smoke detectors, RCDs installed in your home could one day save your life!

Description of what the question means and what would need to be carried out on Site

2. Consideration by EMOs must be given to the expected action that the Customer and in turn the Customer's electrician must take in response to points raised, specifically in relation to whether a means of independent isolation (isolator switch) should be fitted.

Your electrical equipment is damaged, exposing live parts to touch

Visual inspection of the meter position and the near surrounding area, typically this would include the consumer unit, should be ticked only if damage is serious but does not inhibit re-energisation.

Your electrical installation appears not to be adequately earthed

Visual attempt to identify the Customer's earthing arrangement i.e., is an earth wire present if not is another form of earthing visible. No expectation of electronic testing, just that there is no earth cable visible.

Your Consumer unit (fuse box) or other equipment is showing signs of overheating

Visual signs of overheating identified – blacked housing or heat damage on the Consumer unit.

The cables connecting the meter to your consumer unit are in a poor/damaged condition

A visual sign of deterioration to the outer sheathing but which does not constitute a reason not to Energise.

Your electrical installation appears not to be adequately main bonded

Where metallic pipes suitable for bonding are in the vicinity of the meter position, bonding should be evident.

You should test your voltage-operated earth leakage circuit breaker. If the device does not trip when tested, you will be at serious risk of electric shock if a fault develops in your electrical installation or in an electrical appliance. The test should be repeated on a quarterly basis

In all cases where an earth leakage circuit breaker (ELCB) is identified, this should be brought to the attention of the Consumer.

The cables connecting the meter to your consumer unit, and/or the earthing conductor for your installation, appear to be under-sized

Where the consumer tails are less than 16mm2 many EMOs are identifying this to the Consumer.

Access to your Consumer unit (fuse box) is too restricted

If the meter and the consumer unit are difficult to access it is likely that the job has been

aborted. However, if it is only the Consumer unit with restriction, then the advice is Customers should be suggested to consult an electrician about moving the Consumer unit.

You have a very old arrangement of separate main switches

Any installation that does not have modern Miniature Circuit Breakers (MCBs) in place should be considered here.

Other Observed Issues

A free field to be used at EMOs (Meter Operative) discretion. This field will allow the identification of any other observed potential issues, including the identification of general safety recommendations i.e., combustible materials in the vicinity of Metering Equipment .

Appendix 19: Requirements for the sealing of Metering Equipment and related DNO Equipment

Objectives and application

1. The objectives of the sealing of Metering Equipment and DNO Equipment are:

(a) to ensure basic safety – access to live conductors should require a tool;

(b) to provide an indication of responsibility and/or the right to operate;

(c) to aid with the prevention of tampering/illegal abstraction; and

(d) to indicate the relevant Party and individual to last access the Metering Equipment or DNO Equipment at the Site, in the event of a dispute.

2. These sealing requirements apply respectively to all relevant Party. However, the principles apply to any other agent which may remove seals associated with Metering Equipment such as employees of other Data Collectors, providers of urgent metering services (UMETs) or Elexon's Technical Assurance Authority.

3.This Appendix specifies:

(a) the equipment to be sealed;

(b) the types of seal to be used and their purpose;

(c) general sealing practice; and

(d) particular procedures for the control of Specified Seals and Dies.

4. These sealing requirements apply following initial installation and commissioning of Metering Equipment, where commissioning includes the connection of the Metering Equipment to the DNO Equipment. Prior to initial installation and commissioning of Metering Equipment, it is anticipated that the DNO Equipment will be sealed using an Indicative Seal as a minimum standard.

Equipment to be sealed

5. Table A1 indicates the equipment to be sealed.

6. Where any equipment is required to be sealed by either a Security Seal or a Specified Seal and is contained within a 'housing', and that housing is sealed to the same standard, sealing of the individual items within is not obligated.

Types of seal and purpose

7. This Appendix covers the following types of seal:

(a) Specified Seals;

(b) Security Seals;

(c) Indicative Seals; and

(d) Padlocks.

8. These are additional to the prescribed seals required to be applied to electricity meters which are certified, as per SI 1998 No 1566, and to the seals required by the Measuring Instruments (Active Electrical Energy Meters) Regulations (2006), which should under no circumstances be removed.

Specified Seals

9. A Specified Seal is designed to meet the objectives of (a), (b), (c) and (d) in paragraph 1, and will comprise a ferrule appropriately crimped onto a Wire Rope.

10. The requirements of a ferrule of a Specified Seal are that it shall:

(a) be a tin-plated, annealed, copper ferrule;

(b) not be less than 5.0mm long; and

(c) have the identification symbol appropriate to the EMO or the DNO's company name, marked on one side of the ferrule or on a flange or protuberance, provided that the design of the flange or protuberance is one approved by the Code Manager. Alternatively, the identification symbol or company name may be impressed on the ferrule by the Sealing Pliers when the ferrule is crimped

11. The requirements of Wire Rope are that it shall:

(a) be manufactured from zinc-coated steel wire complying with BS EN 10264-1:2012; and

(b) have a diameter of not less than 0.914mm.

12. The requirements for Sealing Pliers are that it shall:

(a) crimp the ferrule of a Specified Seal onto the Wire Rope sufficiently to withstand

a tensile load of not less than 200N, in order to secure equipment so as to prevent accidental breaking or removal of the seal or Wire Rope;

(b) impress the side of the ferrule with a minimum three-character

(c) identification number of the operative, and where appropriate, the identification symbol or company name of the EMO; and

(d) have a correctly operating Sealing Plier ratchet mechanism

13. The control of Sealing Pliers and associated Dies is specified in paragraphs 24 to 28 of this Appendix

Security Seals

14. A Security Seal is designed to meet the objectives of (a), (b) and (c) in paragraph 1 of this Appendix, and as a minimum would require a tool to remove.

Indicative Seals

15. An Indicative Seal is designed to meet the objectives (b) and (c) in paragraph 1 of this Appendix. The seal should be relatively robust to deter tampering and would indicate where interference has occurred. An Indicative Seal should be appropriate for its intended application.

Padlocks

16. General practice is to use brass bodied, hardened steel hasp locks with a common key suite or code so that any person with appropriate authority, issued with a master key, can open them. In some cases, a coloured sheath (e.g., red) may be applied to indicate danger. For the avoidance of doubt, the use of a padlock should only be determined by a DNO.

GUIDANCE ON SEALING PRACTICE

General

17. Metering Equipment and related DNO Equipment shall be sealed following initial installation and commissioning of the Metering Equipment and shall be resealed following any subsequent works that require the removal of seals, including any works delivered by an independent connections provider for adoption by a DNO. The relevant Party on whose behalf such work is carried out shall be responsible for resealing equipment and for taking the removed seals from the Site and destroying them, whether they are owned by that Party or are the property of another Party. In carrying out sealing and resealing, relevant Parties shall comply with procedures given in the BSC Agreed Procedures, if any, thereunder.

18. Certain older installations may not allow compliance with the requirement to seal. The layout and equipment in these installations may be more vulnerable to interference and care should be taken to ensure that seals are applied so far as possible to minimise the chance of interference.

19. Earlier practice in the UK was to use lead seals with soft wire and these seals may be encountered on older installations. In these circumstances, the seals associated with the Metering Equipment and the associated DNO Equipment should be checked for signs of interference. If no evidence of interference is discovered at the sealing system then lead seals should be replaced with new seals. However, lead seals used as prescribed seals (formerly known as European Smart Metering Alliance (ESMA) or specified seals), i.e., those sealing the meter case as opposed to the terminal block, should not be replaced as they are a guarantee of certification of the meter. Any signs of interference with these should be reported to the relevant Supplier.

20. In the event that a relevant Party finds it not possible to apply the appropriate seal, in accordance with the relevant part of Table A1, a seal of the next practicable level of security shall be applied.

General Guidance specific to EMOs

21. Subject always to paragraphs 10.8.2 to 13.7.4 and 13.9, if a Meter Installer suspects that DNO's equipment has been interfered with, he must report this to the relevant persons.

General Guidance specific to DNO

22. The absence of a seal must at once give rise to suspicion of interference, which must be dealt with, in the most careful and cautious manner (see paragraphs 13.7.1 to 13.7.6 and 13.9.1).

23. In the event that work requiring a Specified Seal to be broken is carried out on the behalf of a DNO by an independent connections provider, the DNO shall be responsible for ensuring a Security Seal (as a minimum) is applied. The DNO shall be responsible for replacing any Security Seal with a Specified Seal within 28 calendar days (subject to reasonable endeavours to gain access to Site) following notification to the DNO.

CONTROL OF Sealing Pliers AND ASSOCIATED Dies

Sealing Pliers and Dies

24. Sealing Pliers to be used with uniquely identified Dies for crimping and marking Specified Seals, must be provided by relevant Parties for each operative.

25. Dies shall not be transferred between CoMCoP parties.

26. No CoMCoP party shall retain any duplicate sets of Dies.

27. Dies or Specified Seals shall not be used other than for sealing equipment.

28. Sealing Pliers with Dies that do not make legible marks shall not be used.

Re-allocation/destruction of Dies

29. A CoMCoP party shall be permitted to re-allocate sets of Dies that are no longer required because the relevant operative will no longer be sealing Metering Equipment or DNO Equipment on its behalf. Alternatively, a CoMCoP party may choose to destroy sets of Dies no longer required by the relevant operative.

30. A CoMCoP party shall be required to destroy sets of Dies that have been damaged.

31. In the event of a CoMCoP party ceasing to hold a Registration Certificate all sets of Dies shall be destroyed by it forthwith.

Record of Dies

32. A CoMCoP party shall record the following particulars when Sealing Pliers or Dies are issued to an operative, returned by an operative or are sent for repair and shall produce such records on request by the Code Manager:

(a) the identification marks on each set of Dies held;

(b) the name of the person to whom the Dies were issued or the name of the company to which Dies are sent for repair; and (iii) the dates of issue and return.

33. A record shall be made of all Dies destroyed in accordance with this Appendix , Paragraphs 29 to 31 above.

34. A record shall be made of any sets of Dies which have been lost or stolen. The CoMCoP party shall inform the Code Manager immediately of any missing Dies.

35. A CoMCoP party shall keep any records made under paragraphs 31 to 34 for a period not less than 10 years after the loss or destruction of Dies.

Inspection of Records and Dies

36. On being given reasonable notice, a CoMCoP party shall allow the Code Manager to inspect any records or Dies required to be kept pursuant to this Appendix 19.

Blank Seals

37. Each CoMCoP party shall make suitable efforts to ensure sealing materials, especially pre-marked seals, are kept secure before use.

TABLE A1: EQUIPMENT TO BE SEALED AND TYPE OF SEAL REQUIRED

	Equipment	***Seal required (as a minimum)***
Service termination equipment	Cut-out	Specified Seal
	Distribution board	Specified Seal/Padlock (as appropriate)
Whole current metering	Meter terminal cover	Specified Seal
	Meter case (cover)	Specified Seal (where prescribed seals are not present (see Appendix 7))
	Auxiliary fuses	Specified Seal
	Timeswitch/Teleswitch/ Contactor/ Isolator (forming part of Metering Equipment)	Specified Seal
	Connecting blocks (except after metering)	Specified Seal
	Token acceptor	Specified Seal
	Communications equipment	Specified Seal
	Maximum demand indicator reset	Indicative Seal
CT operated Low (additional to all above)	Metering voltage circuit fuses	Specified Seal
	CT chamber	Specified Seal
	CT terminal cover	Specified Seal

	Test terminal block	Specified Seal
	Switch (controlling supply)	Padlock
	Secondary voltage fuse	Specified Seal
	Communications port	Indicative Seal
	Metering panel	Specified Seal
CT/VT operated High voltage (additional to LV)	VT racking	Indicative Seal
	VT fuses (on switchgear)	Indicative Seal
	VT Marshalling box	Indicative Seal
	VT fuses (on metering panel)	Specified Seal
	Auxiliary fuses	Indicative Seal
	CT Marshalling box	Indicative Seal

Appendix 20: Minimum Sample Size

Installations at Domestic Premises

Fewer than 5k planned installation-visits per annum

If an Energy Supplier is planning fewer than 5k installations in respect of Domestic Premises within the calendar year, there is no requirement to survey Consumer for compliance purposes.

5k-20k planned installation-visits per annum

If an Energy Supplier is planning between 5k-20k installations in respect of Domestic Premises within the calendar year, a total of 500 surveys will need to be completed to cover the 12-month period. The Energy Supplier will advise the Code Manager before the of the first Calendar quarter (January-March) if they are on installing between 5k-20k installations in respect of Domestic Premises within that calendar year. Results from surveys will be submitted in full by the end of the calendar year, and could be passed to (or requested by) the Authority and be used for compliance purposes.

More than 20k planned installation-visits per annum

If an Energy Supplier is planning more than 20k installations in respect of Domestic Premises within the calendar year, a minimum of 500 surveys will need to be completed each calendar quarter where 5k and above installations have taken place. Results from these surveys could be passed to (or requested by) the Authority, and used for compliance purposes.

Installations at premises of Micro-Business Consumer

Fewer than 5k planned installation-visits per annum

If an Energy Supplier is planning fewer than 5k installations in respect of premises of Micro-Business Consumer in the next 12 months, then reasonable endeavours should be used to gather as many survey returns as possible. Results from these surveys should be submitted on an annual basis.

Interim results from these surveys could be passed to (or requested by) the Authority, but only the annual results would be used for compliance purposes.

More than 5k planned installation-visits per annum

If an Energy Supplier is planning more than 5k installations in respect of premises of Micro-Business Consumers in the next 12 months, reasonable endeavours should be taken to carry out 500 surveys each calendar quarter. Regardless of whether the 500 survey target is

met, results from these surveys should be submitted on a quarterly basis. Results from these surveys could be passed to (or requested by) the Authority, and used for compliance purposes.

Appendix 21: Reporting File Structure

SMI compliance reporting file structure

The responses to the survey will be submitted in the format described via the REC Portal using the file structure provided in the Domestic and Micro Business Customer Survey Templates. Within this file the checksum is the total of the No. of 'Y', 'N', 'Don't Know' and free text answers from within the survey summary report details.

This file format will be used for all questions, the first questions asked will be the meter installation questions and the next questions asked will be the demographic question.

Note

The checksum calculation should be the 'No. of surveys completed' value multiplied by the number of questions that is included in a survey. This includes both the survey question and sub-questions and should exclude the demographic survey questions.

Appendix 22: 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/MEM/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:

Date and time installation/exchange/removal

Final meter reading

Meter module diagnostic flags

Meter Serial Number

Manufacturer

Condition of seal

Type (Diaphragm /Ultrasonic/Turbine/Rotary)

Meter Model

Maximum Stamped Capacity

Year of manufacture

Number of reading dials

Index scaling (x1, x10, x100)

Registration units (Cubic Ft/Meters)

Meter Type (Credit, Prepayment – token/credit)

Data logger/AMR equipment details

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

GT approval of By-pass

By-pass fitting

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

Converter model

Serial number

Reading (converted/unconverted)

Number of dials (converted/unconverted)

Temperature conversion

Pressure conversion

Compressibility conversion

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)

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Appendix 23: Further Requirements and Obligations

Part 1: Gas

This CoMCoP 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.

Note: The CoMCoP utilises the definition of the meter installation which appears in IGEM/G/1. Where a situation appears to be within the scope of the CoMCoP, but it is not explicitly covered, reference is to be made to the REC helpdesk for guidance.

The CoMCoP 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.

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

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.

This CoMCoP sets out the framework with specific requirements and duties of a REC approved Metering Equipment Manager (MEM) and an Approved Meter Installer (AMI) as referred to in standard condition 12 of the Gas Supplier Licences.

Note: This CoMCoP details the rules dealing only with the business interfaces between organisations and not the commercial content of the associated agreements that facilitate the interfaces.

Gas Suppliers are obliged by the standard conditions of the Gas Supply 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 CoMCoP requires the MEM 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 MEMs/AMIs gain an

understanding of what is expected of Gas Suppliers. Copies of the standard conditions of Gas Supply Licences can be obtained from Ofgem.

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 MEMs 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.

Where the MEM and AMI contracts work within the scope of this CoMCoP to another party, it is the responsibility of that MEM and AMI to ensure that the sub-contractor complies with the relevant requirements of this CoMCoP and that it is competent in the field of work for which it is contracted.

When applied to gas meters which are not Embedded Meters, the normal practice is to attach an AMR Device to the meter without interruption to the supply of gas to the end Consumer so eliminating the need for an AMR installer to have specific gas meter installation skills.

However, the AMR installer must ensure that any AMR Device being attached to a gas meter meets all health and safety requirements, that the AMR Device is installed with sufficient care and skill and does not compromise the safety of the gas metering installation.

The Government modified the Gas Supply Licence conditions in April 2009 requiring Suppliers to roll out advanced gas meters (effectively AMR) to their larger non-domestic gas Consumers (those consuming over 732,000 kWh/year).

Extract from Gas Supply Licence

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

(a) Provides measured gas consumption data for multiple time periods, and is able to provide such data for at least hourly time-periods; and

(b) Is able to provide the licencee with remote access to such data."

Part 2: Smart Metering

The Code Manager shall make this CoMCoP publically available on the REC Portal for Energy Suppliers to provide to Consumers where required. To allow the Energy Supplier to adhere to Standard Licence Conditions (SLC) E41, G35 and sub-clause 21, the Energy Supplier will have the ability to filter this CoMCoP document for Smart specific clauses only

This CoMCoP applies to installations at the properties of both Domestic Consumers and Micro-Business Consumers, except where the requirement is explicit that it applies to only one or the other. The requirements concerning Vulnerable Consumers do not apply in respect of Micro-Business Consumers; although these may be applied on a voluntary basis.

This CoMCoP describes specific activities in the period running up to an Installation Visit, the installation itself, and the period from the Installation Visit to the Consumer receiving the first bill using smart meter data for meters in credit mode, or the first vend for meters in prepayment mode.

This CoMCoP is intended to cover the first gas and/or electricity Smart Metering System installed under licence obligation. The pertinent clauses will be applied for subsequent Smart Metering System installations.

The installation of Smart Meters for emergency reasons (including damaged, unsafe, faulty or failed meters and those that have been subject to tampering) is not in scope of this CoMCoP. The installations of Smart Meters carried out during a scheduled visit under warrant will be within scope of this CoMCoP unless the installer reasonably considers their safety to be at risk. If the Smart Metering System installed in these circumstances is the first for that property, the Energy Supplier shall ensure that appropriate follow up activity is undertaken.

Where an Energy Supplier contracts with a third party for the provision of installation services, the Energy Supplier is responsible for ensuring compliance with all components of this CoMCoP. There is no difference in the standards and requirements applied to contracted third parties and their employees from those applied to an Energy Supplier and its employees.

Part 3: Electricity

The information given in sections dealing with safety responsibilities is for guidance only and is not intended to be exhaustive, nor as a substitute for the legislation concerned.

Appendix 24: Glossary	
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.
ancillary equipment	Any equipment connected to the metering equipment but not forming part of the metering installation e.g., data logger
Approved Meter Installer (AMI)	means a Party which is approved (or which is seeking approval) as such under the Metering Accreditation Schedule, being the entity which undertakes the installation, replacement, repair and maintenance of gas Metering Equipment.
Automated Meter Reading (AMR) equipment	Equipment that enables gas meters to be read automatically (i.e., remotely).
badged meter	A gas meter which has been stamped and/or approved by BEIS or other metrological authority acceptable to BEIS, as legal metrology and which operates within prescribed statutory limits.
business process	A process in place between the person placing the contract and MEM, by which work related information is exchanged. This may include RGMA processes.
combined heat and power plant (CHP)	Equipment which provides both heat and electricity: heat for a process or application and electricity, which can be used to offset its own requirements or exported to drive another process or application.
commercial arrangements	The processes, practices and contracts that an organisation or person has in place to manage their undertaking.
competence	The necessary skills, experience, knowledge and personal qualities necessary for an employee to carry out his or her tasks consistently to the

	require standards.
design maximum incidental pressure (DMIP)	The maximum pressure which a system is permitted to experience under fault conditions, limited by safety, when the system is operated at the design pressure.
design minimum pressure (DMP)	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
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).
diaphragm meter	A positive displacement meter in which the measuring chambers have deformable walls.
distribution main	Any pipeline through which a GT is for the time being distributing gas and which is not being used only for conveying gas in bulk.
electronic meter	A meter that infers the volume of gas passing through it, for example by means of the behaviour of an ultrasonic beam.
emergency service provider (ESP)	Person who is appointed and acts on behalf of a person conveying gas who responds to an escape of gas.
gas conveyor	A person who conveys gas through pipes and having duties under GS(M) Regs and PSR and who may also hold a Gas Transporter Licence.
gas fittings	For the purpose of this CoMCoP, 'gas fittings' has the same meaning as in IGEM/G/1
gas meter	For the purpose of this CoMCoP, 'gas meter' has the same meaning as in IGEM/G/1

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)
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.
Installer or MI	Means an Installer as defined in the Interpretation Schedule.
Institution of Gas Engineers and Managers (IGEM)	A Professional gas engineering institution, licenced by the Engineering Council, which publishes gas engineering standards.
legacy gas supply arrangements	Gas supply arrangements (usually that have been installed prior to the publication of IGE/G/1) and that are not consistent with the installations defined as being recommended gas supply arrangements.
lowest operating pressure (LOP)	The minimum pressure which a system is designed to experience under normal operating conditions.
maximum incidental pressure (MIP)	The maximum pressure which a system is permitted to experience under fault conditions, limited by safety pressure devices.
maximum operating pressure (MOP)	The maximum pressure at which a system can be operated continuously under normal operating conditions.
meter inlet valve (MIV)	A valve fitted upstream of, and adjacent to, a gas meter to shut off the supply of gas to the meter.
Meter installation	For the purpose of this CoMCoP, meter installation shall have the meaning as in IGEM/G/1

Meter installation component	Any component of the meter installation other than a meter (as defined in the IGEM/G1
meter installation inlet valve (MIIV)	A valve fitted upstream of all the other meter installation components to shut off the supply of gas.
meter installation outlet valve (MIOV)	A valve fitted downstream of all the other meter installation components to shut off the supply of gas through the meter installations.
meter outlet adaptor	A fitting which facilitates the connection of a gas Consumer's installation pipework to the outlet of the meter.
meter outlet valve (MOV)	A valve fitted downstream of, and adjacent to, a gas meter, to shut off the supply of gas from the meter.
Meter Operative	means an employee, agent or subcontractor appointed by the MAM or EMO.
meter regulator	As defined in IGEM/G/1.
metering pressure	The pressure of the gas passing through the metering element and measured at the pressure reference point.
Natural Gas	For the purposes of this CoMCoP natural gas is a gas meeting the purposes of GS(M)R.
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
Non-RGMA CDSP Meter Technical Details File	The Non-RGMA CDSP Meter Technical Details File provides an agreed structure for the submission of meter technical details and MAP IDs from MAMs to the CDSP following either a site visit resulting in a change to the asset (meter install, removal or exchange) or any

	known update to existing data items. This file should be used by those MAMs who do not utilise the formalised RGMA file flows and is required to be issued in addition to any equivalent files sent by MAMs to their Suppliers providing this information. The document defining the content and format of the Non-RGMA CDSP Meter Technical Details File will be maintained by the CDSP as a Category 3 REC document
normative standard	Industry Standard with which this CoMCoP may require compliance
operating pressure (OP)	The pressure at which the gas system operates under normal conditions.
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.
pressure regulating installation (PRI)	An assembly of equipment designed to regulate, or reduce, the pressure of gas. A PRI comprises all pressure-containing and associated equipment between the upstream face of the PRI inlet valve (IV) and the downstream face of the PRI outlet valve (OV).
priority Consumer	A Consumer type, such as hospitals, for whom the potential consequences of a loss of gas supply are such as to warrant priority status under Ofgem criteria.
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.
Registration Body	Shall mean the REC Code Manager or any successor body appointed by RECCo to manage the registration scheme for the approval of MEMs, who demonstrate that they operate within the requirements of CoMCoP.

regulator/PRI inlet valve (PRIIV)	A valve fitted upstream of, and adjacent to, a regulator/PRI to shut off the supply of gas.
regulator/PRI outlet valve (PRIOV)	A valve fitted downstream of, and adjacent to, a regulator/PRI to shut off the supply of gas.
relief valve	A valve which automatically opens at a pre-determined pressure to vent gas so as to relieve the pressure in a gas system.
service (pipe)	A pipe for conveying gas to premises from a distribution main, being any pipe between a distribution main and the outlet of the ECV.
	Note: The service (pipe) is, normally owned or is the responsibility of a GT.
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.
work instruction	Formal written document used to control work.

Refer to Schedule 1 – Interpretations and Definitions for the meanings of other terms referenced in this document.

