

# Guidance for Electricity and Gas Meter Installation Consumer Facing Issues

A guide for meter operatives on how to act and actions to take when identifying consumer facing issues

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## Contents

Glossary of Terms.....	4
<b>1. Introduction.....</b>	<b>8</b>
1.1 What is the aim of this Guidance and who is it for?	8
1.2 Format and structure of the Guide	9
1.3 Key Principles of the Guide	9
1.4 Guidance sheets	10
1.5 Governance	11
<b>2. Diagram of Equipment Responsibility.....</b>	<b>12</b>
<b>3. Flow Chart.....</b>	<b>13</b>
<b>4. Electricity Guidance Sheets.....</b>	<b>15</b>
 <b>Category A – Unsafe Situation – Unable to Resolve</b>	
EA001 Visible exposed conductors on consumer's electrical equipment	16
EA002 Incorrect polarity on consumer equipment	18
EA003 Excessive corrosion on terminals or conductors on consumer owned equipment	20
EA004 Damage to the consumer's electrical equipment	22
EA005 Earthing issues with the consumer's electricity installation	24
 <b>Category B – Unsafe Situation – Able to Resolve</b>	
EB001 Unusual sub main termination points	26
EB002 Suspected Asbestos Containing Materials present on site	28
EB003 Visible evidence of unsafe customer wiring	29
EB004 Suspicion of Theft of Electricity	31
EB005 Damaged or deteriorated boards associated with the meter / service	32
EB006 Damaged meter box	34
EB007 Temporary or permanent obstruction to the electricity meter position	36
EB008 Meter installation proximity/location	38

### **Category C – Not Unsafe – Information Reported**

<i>EC001 Insufficient space for smart meter equipment</i>	40
<i>EC002 Data associated with the meter point is incorrect</i>	42

## **5. Gas Guidance Sheets**

### **Category A – Unsafe Situation – Unable to Resolve**

*Gas emergency issues are dealt with in existing gas industry procedures*

### **Category B – Unsafe Situation – Able to Resolve**

<i>GB001 Asbestos materials suspected at the meter position</i>	44
<i>GB002 Blocked or Inadequate Ventilation</i>	45
<i>GB003 Gas Installation elevated, no visible evidence of equipotential bonding and insulation joint not fitted/correctly</i>	47
<i>GB004 Temporary or permanent obstruction to the gas meter position</i>	49
<i>GB005 Issues with the current location of the gas meter</i>	51
<i>GB006 Damaged meter box</i>	53
<i>GB007 Physical damage to the consumer's gas equipment</i>	55

### **Category C – Not Unsafe – Information Reported**

<i>GC001 Secondary Gas Metering</i>	56
<i>GC002 Meter box is semi-concealed</i>	57
<i>GC003 Data associated with the meter point is incorrect</i>	58

## **Glossary of General Smart Meter Terms**

<b>ACM</b>	Asbestos Containing Material
<b>AECV</b>	Additional Emergency Control Valve
<b>AIB</b>	Asbestos Insulating Board
<b>AMO</b>	Association of Meter Operators
<b>BEAMA</b>	British Electro-technical and Allied Manufacturers Association
<b>BNO</b>	Building Network Operator
<b>CSP</b>	Communication Service Provider
<b>DCC</b>	Data Communications Company
<b>DCUSA</b>	Distribution Connection and Use of System Agreement
<b>DECC</b>	Department of Environment & Climate Change
<b>DNO</b>	Distribution Network Operator
<b>DSP</b>	Data Service Provider
<b>EAWR</b>	Electricity at Work Regulations
<b>ECA</b>	Electrical Contractors Association
<b>ECV</b>	Emergency Control Valve
<b>ENA</b>	Energy Networks Association
<b>ESF</b>	Electrical Safety First
<b>ESTA</b>	Energy Services and Technology Association
<b>ESQCR</b>	Electricity Safety, Quality and Continuity Regulations 2002
<b>E.UK</b>	Energy UK
<b>EUS</b>	Energy & Utility Skills
<b>EUSR</b>	Energy & Utility Skills Register
<b>GDNO</b>	Gas Distribution Network Operator
<b>GIUSP</b>	Gas Industry Unsafe Situations Procedure
<b>GSME</b>	Gas Smart Metering Equipment
<b>GSMR</b>	Gas Safety Management Regulations

<b>GSiUR</b>	The Gas Safety (Installation and Use) Regulations 1998
<b>GSMR</b>	The Gas Safety (Management) Regulations 1996
<b>GSRS</b>	Gas Safe Registration Scheme
<b>GT</b>	Gas Transporter
<b>HAN</b>	Home Area Network
<b>HASAWA</b>	Health and Safety at Work Act 1974
<b>HHD</b>	Hand Held Device
<b>HHT</b>	Hand Held Terminals
<b>HSE</b>	Health and Safety Executive
<b>IDNO</b>	Independent Distribution Network Operator
<b>IET</b>	Institution of Engineering and Technology
<b>IGEM</b>	Institution of Gas Engineers and Managers
<b>IGDNO</b>	Independent Gas Distribution Network Operator
<b>IHD</b>	In-Home Display
<b>Large Supplier</b>	Supplier with at least 250,000 electricity customers or gas customers
<b>Licensee</b>	Any organisation authorised to supply electricity or gas, as defined in the Electricity Act 1989 and the Gas Act 1986
<b>MAM</b>	Meter Asset Manager
<b>MAMCoP</b>	Meter Asset Manager Code of Practice
<b>MAP</b>	Meter Asset Provider
<b>MICC</b>	Mineral Insulated Copper Cable
<b>MIV</b>	Meter Inlet Valve
<b>MOCOPA®</b>	Meter Operation Code of Practice Agreement
<b>MOP</b>	Meter Operator
<b>MPAN</b>	Meter Point Administration Number (Electricity)
<b>MPRN</b>	Meter Point Reference Number (Gas)
<b>MRA</b>	Master Registration Agreement
<b>MRASCo</b>	Master Registration Agreement Service Company

<b>NSAP</b>	National Skills Academy for Power
<b>OAMI</b>	Ofgem Approved Meter Installer
<b>Ofgem</b>	Office of Gas and Electricity Markets
<b>PME</b>	Protective Multiple Earth
<b>PPE</b>	Personal Protective Equipment
<b>PSR</b>	Priority Services Register
<b>RIDDOR</b>	Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013
<b>SAC</b>	Safety Action Code
<b>SEC</b>	Smart Energy Code
<b>Smart Energy GB</b>	Smart Energy GB
<b>SFIC</b>	Safety & Faults Information Centre
<b>SCGB</b>	SMICoP Code Governance Board
<b>SLA</b>	Service Level Agreement
<b>SLC</b>	Supply Licence Condition
<b>Small Supplier</b>	A Supplier with less than 250,000 electricity customers or gas customers
<b>SME</b>	Small & Medium Enterprise businesses
<b>SMETS</b>	Smart Metering Equipment Technical Specification
<b>SMICoP</b>	Smart Metering Installation Code of Practice
<b>SMIP</b>	Smart Metering Implementation Programme
<b>Smart Metering System</b>	Means the Meter, communications device, HAN, WAN, IHD and any other component of the Smart Metering Equipment
<b>UKMF</b>	United Kingdom Metering Forum
<b>UKRPA</b>	United Kingdom Revenue Protection Association
<b>UTRN</b>	Unique Transaction Reference Number
<b>VIR</b>	Vulcanised India Rubber

## 1. Introduction

Energy suppliers are aware that during meter installation visits there will be instances where the meter installer identifies issues with gas and/or electrical equipment or appliances that require corrective action to be taken, either immediately, or at some point in the near future. The responsibility for rectifying issues will in some cases lie with suppliers, some with the gas or electricity network operator, and some with the consumer or premises owner (i.e. a landlord, or local authority).

There are pre-existing industry procedures for dealing with emergency situations, such as the [Gas Industry Unsafe Situations Procedure](#), the [ENA Guidance on Gas Service Termination Issues](#), and the [MOCOPA® Guidelines for Service Termination Asset Reporting](#) procedure. The industry Codes of Practice/Agreements associated with meter installations (MAMCoP and MOCOPA®) also include details of the roles, responsibilities and expectations of meter installers when safety issues are identified during meter installation visits. This guidance document does not replace or replicate those existing procedures and requirements, but complements them by setting out additional actions that meter installers should take, and advice and assistance that meter installers and energy suppliers should provide to consumers when such issues are identified, and when the consumer indicates (or the installer believes) that they will need additional assistance in getting issues resolved.

It is important to note that the act of completing an electricity or gas meter installation or meter exchange does not imply that all equipment or appliances belonging to the consumer or premises owner are safe. In the majority of cases, issues will only be identified as a result of either visual inspection in the vicinity of the current meter location and installer's access route to it, or as part of the Purge & Re-light process after a gas meter has been installed. Whilst meter installers are trained, and have the necessary qualifications to install meters, these qualifications do not necessarily extend to those required for making repairs to, or replacing other gas or electrical equipment at consumer's premises.

### 1.1 What is the aim of this Guidance and who is it for?

A number of organisations reviewed the business processes for reporting issues associated with service termination assets, recognising that there will be increased activity at service positions during the smart meter roll-out. They identified a series of defects that meter installers might come across, and gave each one a unique code ("asset condition code") for reporting purposes. The codes are used to report defects that relate to DNO/GDNO equipment. For the avoidance of doubt, all references to, and actions relating to DNO/GDNO throughout this document includes IDNOs and IGDNOs.

In addition to the issues related to DNOs or GDNOs equipment, there are a number of issues identified where the responsibility for resolution is not clear between the consumer, supplier and the DNO/GDNO, such issues will be exacerbated by the smart metering roll out. As such this guidance is focussed on issues where the responsibility for fixing or resolving them lies with the consumer or premises owner.

Meter installers may well come across these issues (i.e. defects) when installing smart meters, or undertaking any other work at electricity service positions. This Guide is intended to support meter installers in making a correct diagnosis, give direction on the actions meter installers should take, and help meter installers to determine the most appropriate reporting mechanism.

Meter installers are the primary audience for this Guide; however, it is also intended to assist meter installer supervisors/managers and trainers, and DNO/GDNO staff.



## 1.2 Format and structure of the Guide

The format of this guide is intended to be simple to follow and easy to access either for field staff or for managers and supervisors.

The Guide contains the following key elements:

- A glossary of Smart Meter Terms
- A diagram of equipment responsibility;
- A simplified decision flow chart is provided, to help to identify which category of code is appropriate;
- A list of the asset condition codes;
- A “guidance sheet” for each of the asset condition codes, containing the code, description and where available photographic illustrations;
- Guidance details, which describe the issue, give examples, and clearly state the actions to be taken.

### The individual codes are categorised as follows:

**A. Unsafe Situation – Unable to Resolve** – these must be reported immediately to the consumer and action taken where possible to minimise the immediate safety risk. Additional reporting to the supplier or their Agent may be necessary, dependant on the nature of the issue.

**B. Unsafe Situation – Able to Resolve** – you must assess the risk and on the basis of the issue identified and be able to take appropriate action as identified in the relevant guidance sheet. Generally this may mean taking the following action:

- Correcting the defect and carrying on with the meter installation
- Isolating the problem by disconnecting or isolating an element of the consumers installation and then carrying on with the meter installation
- Fitting a double pole isolator and leaving all or part of the consumers installation disconnected.

In all circumstances, on completion of the meter installation, leave the consumer with a completed Customer Equipment Checklist (an example form can be found in Appendix 12 of MOCOPA®)

**C. Not Unsafe – Information Reported** – generally, you can carry on with your work, but you must report these issues to the supplier for possible further action or information.

## 1.3 Key Principles of the Guide

General principles of reporting the codes presented in this Guide include:

- All meter installations must be subject to a site risk assessment before commencing work
- Ensure that wherever possible safety and other issues related to the metering installation and the consumer’s equipment are properly resolved.
- Installers must seek to resolve all problems within their operational remit (and this should be defined by the installer’s employer).
- Where resolution of a particular issue is not possible on site, the installer must notify the consumer on what action needs to be taken, this may also include escalating the issue to their manager/supervisor where actions required are beyond the responsibility of the consumer
- Installers must follow their own organisation’s procedures for managing such occurrences.
- In all circumstances the safety, health and wellbeing of the consumer, installer, and where appropriate, other third parties during the installation must be paramount.

## 1.4 Guidance sheets

**Electricity:** The following guidance sheets on Electricity issues relating to the consumers installation are intended to clarify those issues not currently documented elsewhere, or indeed have never been documented previously. As mentioned above, other current documents and industry codes cover issues with DNO owned equipment.

This guidance is aimed at supporting meter installers and providing help in understanding what actions to take on discovery of a particular issue. Although comprehensive, it is likely that not all issues which are present on consumer's premises are documented. If an issue is discovered which requires an addition to this guidance document, please escalate this to your supervisor/manager so that they can raise this with your organisation's AMO representative for consideration for inclusion in future revisions to this guidance document by the AMO/Energy UK.

It is also intended that this document provides the opportunity for a consistent approach to be taken by all installers and organisations involved in the smart metering delivery programme.

**Gas:** The Gas guidance sheets differ from those in the electricity section in that all emergency issues are already covered under [Gas Industry Unsafe Situations Procedure](#), and this document does not attempt to cover any such issues.

A range of other non-emergency issues are also clearly dealt with in the [ENA Guidance on Gas Service Termination Issues](#), and therefore where this is the case reference will be made to the relevant sections of that document.

The gas guidance sheets contained in this document therefore provide a repository for those issues which are not dealt with elsewhere.

**General:** Throughout this guidance document it has been the intent to provide a comprehensive approach to all remaining smart metering installation issues which have not been recorded elsewhere. At the time of the publishing of this document, there is an industry awareness of some outstanding electricity and gas issues which are being debated in various industry groups.

It is intended that as the outcome of these issues, once agreed, will be documented and included in this document as soon as possible following receipt of the agreed position statement.

## 1.5 Governance

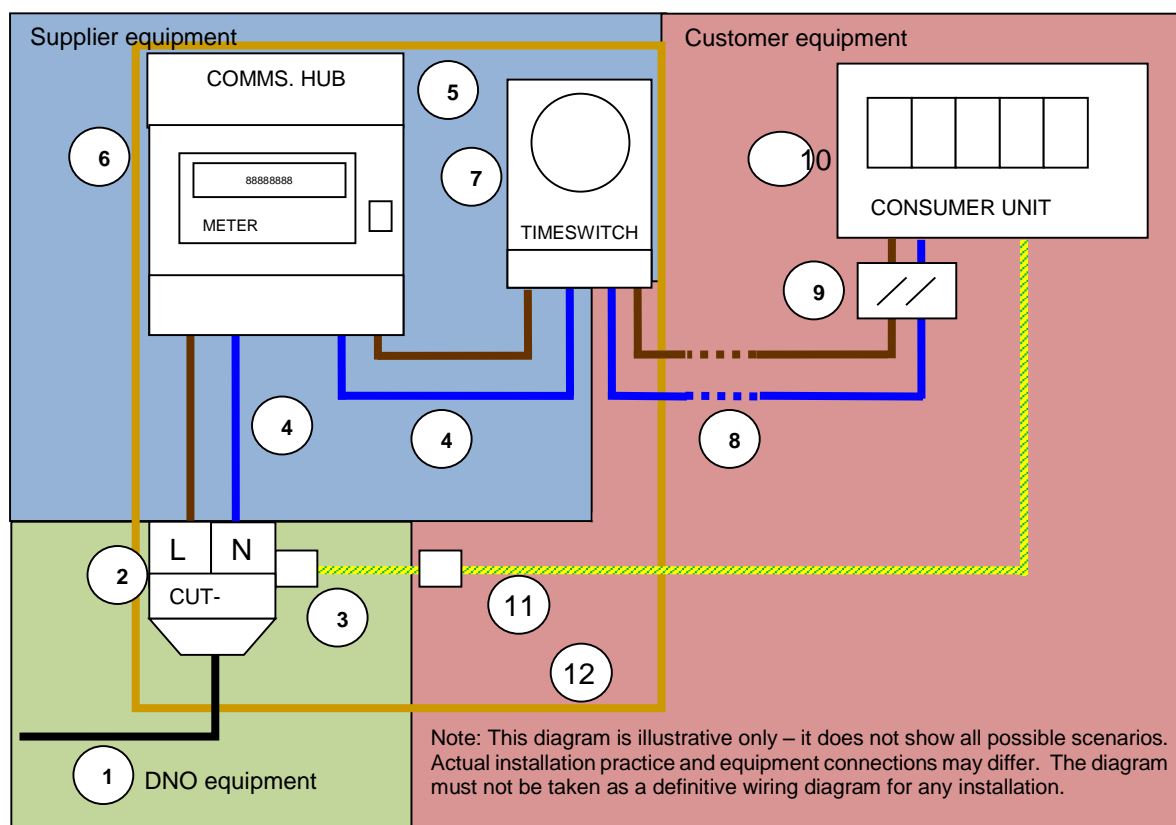
This guidance document has been established with input from members of Energy UK and the Association of Meter Operators.

The guidance is owned and maintained by Energy UK, but members of both organisations will work together and agree any revisions and updates in the future. Electronic versions of the current and most up to date edition of the guidance can be found on the websites of both organisations.

To ensure the content remains appropriate in the future, feedback will be sought from application in the field and a review of content will be conducted at appropriate times, as a minimum this will be on an annual basis.

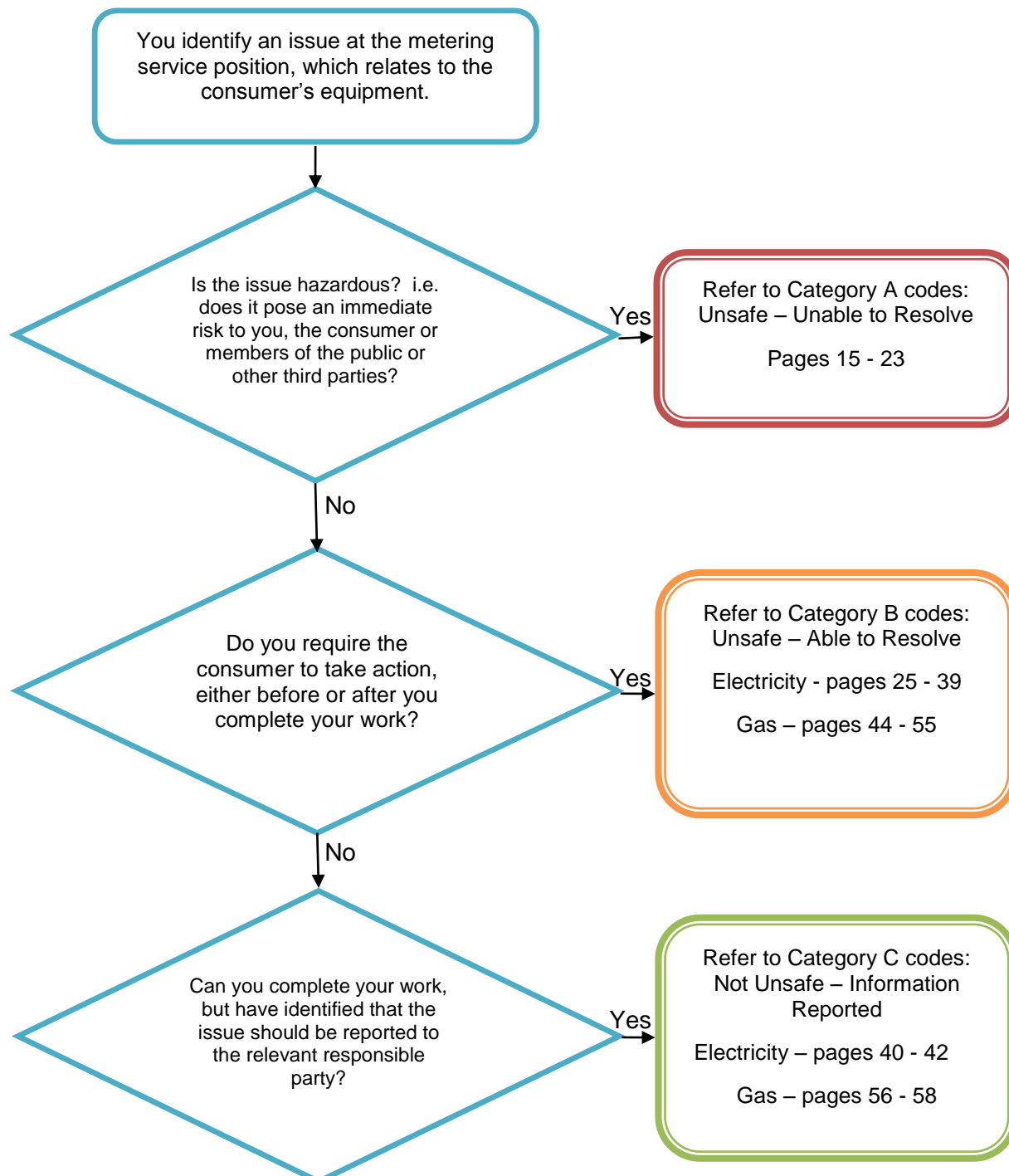
## 2. Diagram of Equipment Responsibility

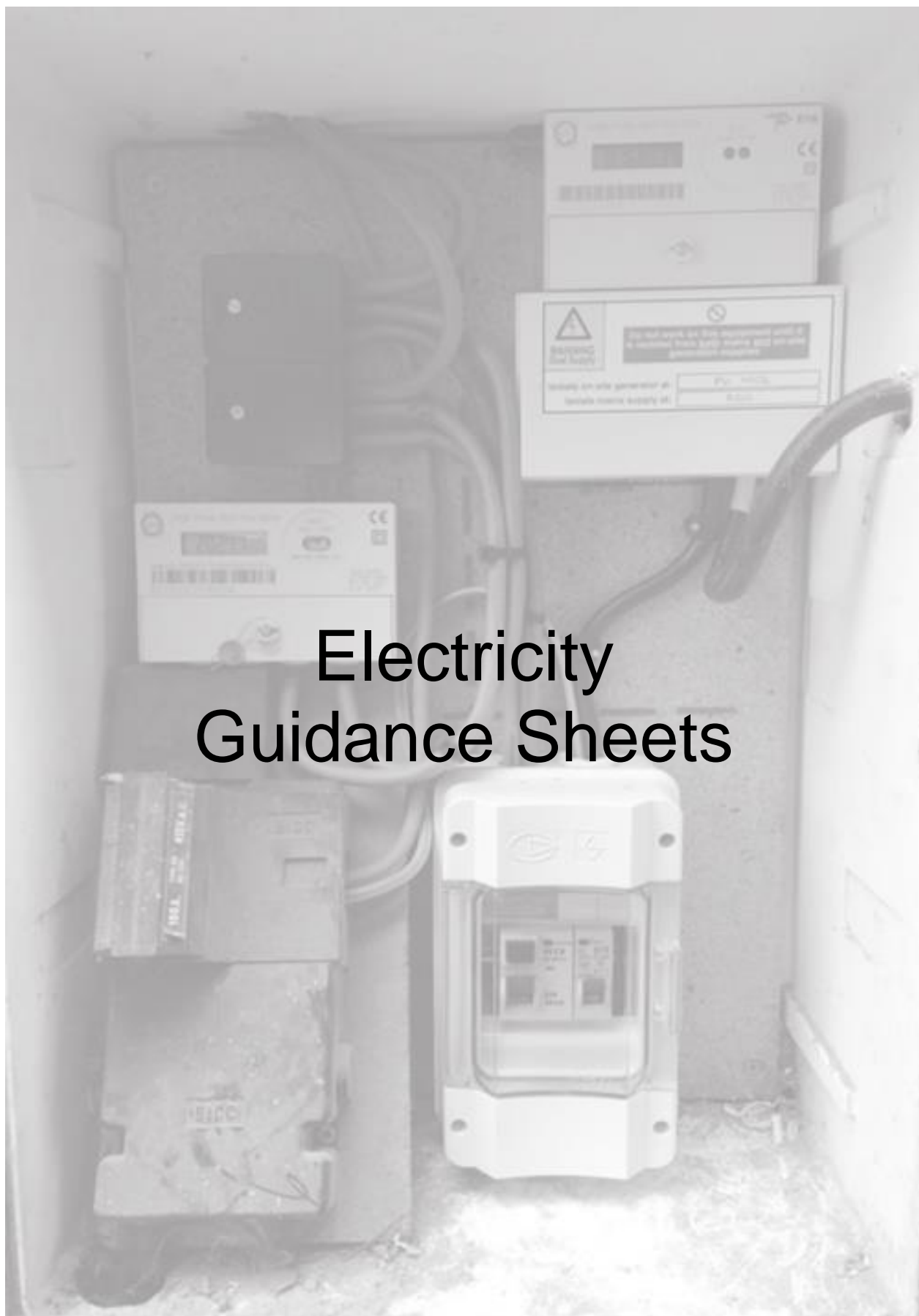
The following diagram shows a typical layout at a domestic service position. The aim of the diagram is to identify boundaries of responsibility and provide clarity around equipment in the ownership of the consumer.



DNO equipment	Supplier equipment	Customer equipment
1. Service cable	4. Meter tails (cut-out to meter and meter to time-switch)	8. Meter tails (between the meter/time-switch and the customer equipment)
2. Cut-out (or main fuse or DNO fuse)	5. Communications hub if fitted (may be either within the meter, on top of the meter (as shown), or in the immediate vicinity of the meter)	9. Customer isolating switch (if fitted / requested) – it is noted that ownership of an Isolation Switch may not be the responsibility of the consumer
3. DNO earth terminal	6. Meter	10. Customer consumer unit
	7. Time-switch (if fitted)	11. Customer earthing conductor (and earth block if fitted)
		12. Meter board (or external meter box if fitted)

### 3. Flow Chart





# Electricity Guidance Sheets

## Category A – Unsafe Situation – Unable to Resolve

Report to the Consumer for immediate remedial action

Asset Condition Code

**EA001**

Code Description

Visible exposed conductors on consumer's electrical equipment

### Description:

There are visible live conductors exposed on electrical equipment under the responsibility of the consumer which presents an immediate safety issue. This could include:

- Consumer Unit/Fuse Box
- Residual Current Device (RCD)
- Isolation Switch
- Auxiliary Load Control Switches
- Off-Peak Load Contactors (for Storage Heating etc)
- Outgoing cables to the domestic wiring circuits

### Examples could include:

- Visible bare conductors from the cable termination on any of the above equipment

### Actions:

- The installer must manage the immediate risk presented by taking all relevant steps to make the situation safe in line with their company procedures, and their own capabilities (both in terms of qualifications, competency and safety).
  - To isolate the equipment at fault at the closest point to the area of risk.
  - If it is considered unsafe to reconnect some or all of the consumer's equipment and in order to facilitate completion of the meter installation, the installer may decide to fit a double pole isolator (depending on his/her company policy). Installers should follow their respective company procedures but only consumer's equipment which is considered safe to be reconnected should be reconnected.
- Advise and explain to the consumer the action/s the installer has taken and why they have been taken.
  - That the consumer will need to contact a suitably qualified electrician or electrical contractor to rectify the problem; or
  - To contact their landlord or local authority or housing association to rectify the problem.

## Category A – Unsafe Situation – Unable to Resolve

Report to the Consumer for immediate remedial action

Asset Condition Code

**EA001**

Code Description

Visible exposed conductors on consumer's electrical equipment

### Continued

#### Before leaving site the installer should always:

- Advise the consumer not to restore their supply or to touch the live conductors/parts until the issue has been resolved
- Provide the consumer with a completed Customer Equipment Checklist (an example form can be found in Appendix 12 of MOCOPA®) with sufficient information that maybe required for them to pass on to a suitably qualified electrician or electrical contractor to resolve the fault.
- Provide details of the generally recognised accreditation schemes (such as National Inspection Council for Electrical Installation Contracting (NICEIC) and Electrical Contractors Association (ECA) accreditation) that any contractor should be associated with, and where the consumer can find relevant contact details for such contractors (such as the Electrical Safety First website or telephone number).
- If a consumer indicates that they need further assistance, the installer should report the details back to the consumer's electricity supplier, and the supplier should seek to provide additional support as deemed appropriate.

#### Photo examples – of issue



Exposed live fuse carriers and consumer unit lid missing – also 13a BS 1363 fuse in lighting circuit

#### Additional notes



## Category A – Unsafe Situation – Unable to Resolve

Report to the Consumer for immediate remedial action

Asset Condition Code

**EA002**

Code Description

Incorrect polarity on consumer equipment

### Description:

Prior to beginning the meter installation, the meter installer has checked the polarity of the installation in line with their respective company procedures. It is discovered that the polarity is incorrect on the consumer's equipment but is correct at the DNO's cut out, or at the meter/associated metering equipment supply terminals.

### Examples of the location of incorrect polarity could include:

- Consumer Unit
- RCD
- Isolation Switch
- Auxiliary Equipment
- The final domestic electrical circuit (including a particular electrical socket as tested during the installation)

### Actions:

- The installer must manage the immediate risk presented by taking all relevant steps to make the situation safe in line with their capabilities (both in terms of qualifications, competency and safety).
  - If it is visibly apparent that the incorrect polarity exists in either an Isolator Switch or RCD, then the installer could correct the polarity as part of the meter installation. Installers should always follow their company procedures and if necessary contact their manager/supervisor for advice before proceeding
  - If the incorrect polarity exists in the consumers Consumer Unit or beyond, then the installer should isolate the electricity supply at the closest point to the area of risk i.e. if the installer is able to identify a particular electrical socket at fault during the initial polarity check (and there are no other faults found), then the installer should switch off the MCB (miniature circuit breaker) or remove the circuit fuse for that electrical socket/circuit; or if the incorrect polarity exists in the Consumer Unit or beyond and the fault is not obviously identifiable, then the Consumer Unit should be isolated.
  - If there is no Isolation Switch or RCD installed at the premises, and there is no other means of isolating the electricity supply, then the cut-out fuse should be removed from the fuse-carrier and the empty fuse-carrier re-inserted and resealed.
  - If it is considered unsafe to reconnect some or all of the consumer's equipment and in order to facilitate the meter installation, the installer may decide to fit a double pole isolator. Installers should follow their respective company procedures but only consumer's equipment which is considered safe to be reconnected should be reconnected.



## Category A – Unsafe Situation – Unable to Resolve

Report to the Consumer for immediate remedial action

Asset Condition Code

**EA002**

Code Description

Incorrect polarity on consumer equipment

### Continued

- Advise and explain to the consumer the action/s the installer has taken and why they have been taken.
- That the consumer will need to contact a suitably qualified electrician or electrical contractor to rectify the problem; or
- To contact their landlord or local housing authority to rectify the problem.

### Before leaving site the installer should always:

- Advise the consumer not to restore their supply until the issue has been resolved
- Provide the consumer with a completed Customer Equipment Checklist (an example form can be found in Appendix 12 of MOCOPA®) with sufficient information that maybe required for them to pass on to a suitably qualified electrician or electrical contractor to resolve the fault.
- Provide details of the general recognised accreditation schemes (such as National Inspection Council for Electrical Installation Contracting (NICEIC) and Electrical Contractors Association (ECA) accreditation) that any contractor should be associated with, and where the consumer can find relevant contact details for such contractors (such as the Electrical Safety First website or telephone number).
- If a consumer indicates that they need further assistance, the installer should report the details back to the electricity supplier, and the supplier should seek to provide additional support as deemed appropriate.

### Photo examples – of issue:



Clear illustration of a reverse polarity found on a customer's socket outlet whilst carrying out pre work polarity check.

## Category A – Unsafe Situation – Unable to Resolve

Report to the Consumer for immediate remedial action

Asset Condition Code

**EA003**

Code Description

Excessive corrosion on terminals or conductors on consumer owned equipment

### Description:

There is excessive corrosion to terminals or conductors associated with consumer's equipment as a result of excessive moisture present or in the air at the current location. It is thought that this type of scenario will not be widespread, but where found, then the following provides guidance on how an installer should proceed. In general terms, each scenario found will need to be dealt with on a case-by-case basis. It may also be the case that the meter board is also damaged as a result of the excessive moisture present (see Asset Condition Code EB005).

### Examples could include:

- A damp cellar
- Damp walls
- Location exposed to impacts of weather
- Previous immersion in water

Where the risk has been removed, for example, that the current environment has been improved (to the extent that no future risk exists), the meter installation should proceed as intended.

Where the risk remains, then the meter installation should be aborted, pending further discussion between the electricity supplier and the consumer on the relevant remedial action that is required.

If the risk is also applicable to equipment owned by the DNO (Cut Out/Service Cable etc) then it may also be necessary to notify the relevant DNO. In addition, where equipment is also owned by the Building Network Operator (BNO) in a multiple occupancy dwelling, then they may also need to be informed / involved in the rectification work.

### Actions:

- Where the meter installation has been aborted due to the ongoing risk of continued damage to equipment, advise and explain to the consumer the action/s the installer has taken and why they have been taken.
  - That the electricity supplier will contact the consumer to discuss remedial actions required; or
  - The electricity supplier will contact the consumer's landlord, local authority or housing association to discuss remedial actions required by them to rectify the problem.

## Category A – Unsafe Situation – Unable to Resolve

Report to the Consumer for immediate remedial action

Asset Condition Code

**EA003**

Code Description

Excessive corrosion on terminals or conductors on consumer owned equipment

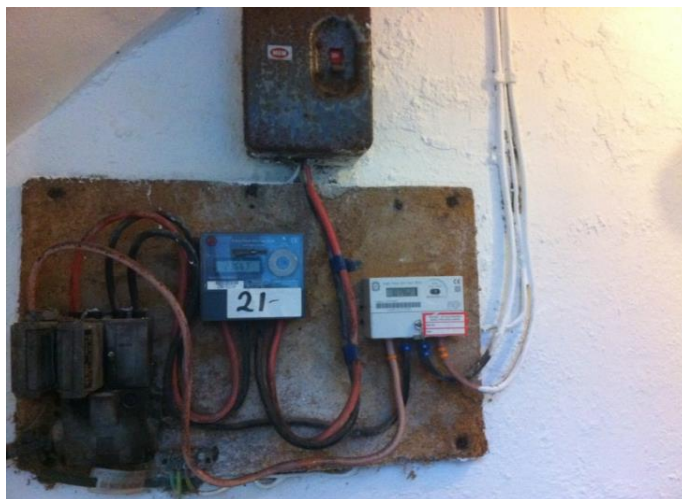
### Continued

- If it is considered unsafe to reconnect some or all of the consumer's equipment and in order to facilitate the meter installation, the installer may decide to fit a double pole isolator. Installers should follow their respective company procedures but only consumer's equipment which is considered safe to be reconnected should be reconnected.

### Before leaving site the installer should always:

- Provide the consumer with appropriate contact details for their electricity supplier (for example, a contact telephone number for the relevant department that will be dealing with the situation).
- If a consumer indicates that they need further assistance, the installer should report the details back to the electricity supplier, and the supplier should seek to provide additional support as deemed appropriate.

### Photographic examples – of issue



Two photographs illustrating a meter position which is now exposed to weather conditions. Connections to both the cut out, meter and customers switch fuse are severely corroded

## Category A – Unsafe Situation – Unable to Resolve

Report to the Consumer for immediate remedial action

Asset Condition Code

**EA004**

Code Description

Damage to the consumer's electrical equipment

### Description:

There is visible evidence of physical damage to the consumer's electrical equipment which has created access to live terminations

### Examples include damage to:

- Consumer Unit/Fuse Box
- Isolation switch
- RCD
- Internal wiring including outgoing tails into consumer equipment
- Consumer's Contactors
- Auxiliary load control switch(s)

### Examples of damage could include:

- Broken or cracked outer casing of equipment.
- Equipment is showing signs of overheating
- Visible evidence of malfunctioning equipment.
- Outgoing tails to consumer unit/fuse box are in a damaged/poor condition.

This will require remedial action either by the meter installer (where qualified and capable to carry out the work) or a qualified electrician at the request of the consumer.

### Actions:

- The installer must manage the immediate risk presented by taking all relevant steps to make the situation safe in line with their capabilities (both in terms of qualifications, competency and safety).
  - To isolate the equipment at fault at the closest point to the area of risk.
  - If it is considered unsafe to reconnect some or all of the consumer's equipment and in order to facilitate the meter installation, the installer may decide to fit a double pole isolator. Installers should follow their respective company procedures but only consumer's equipment which is considered safe to be reconnected should be reconnected.

## Category A – Unsafe Situation – Unable to Resolve

Report to the Consumer for immediate remedial action

Asset Condition Code

**EA004**

Code Description

Damage to the consumer's electrical equipment

### Continued

- Advise and explain to the consumer the action/s the installer has taken and why they have been taken.
  - That the consumer will need to contact a suitably qualified electrician or electrical contractor to rectify the problem; or
  - That they should contact their landlord, Local Authority or local housing association to rectify the problem.

### Before leaving site the installer should always:

- Advise the consumer not to restore their supply or the damaged equipment until the issue has been resolved
- Provide the consumer with a completed Customer Equipment Checklist (an example form can be found in Appendix 12 of MOCOPA®) with sufficient information that maybe required for them to pass on to a suitably qualified electrician or electrical contractor to resolve the fault.
- Provide details of the general recognised accreditation schemes (such as National Inspection Council for Electrical Installation Contracting (NICEIC) and Electrical Contractors Association (ECA) accreditation) that any contractor should be associated with, and where the consumer can find relevant contact details for such contractors (such as the Electrical Safety First website or telephone number).
- If a consumer indicates that they need further assistance, the installer should report the details back to the electricity supplier, and the supplier should seek to provide additional support as deemed appropriate.

### Photographic examples - of issue



Customer's old Wylex consumer unit with severely damaged cover, exposing live terminals



Poorly positioned customers RCD with broken cover. Terminals now exposed to touch.

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**EB001**

Code Description

Earthing issues with the consumer's electricity installation

### Description:

During the installer's site risk assessment, (undertaken prior to commencing any meter installation activity) at the electricity service position, there appears to be a problem with, or lack of immediate visible evidence of adequate earthing associated with the consumer's electricity installation.

Examples include the following:

- The bonding clamp on the water or gas pipes is missing, (or damaged/loose/heavily corroded such that the earthing connection may no longer be effective);
- Damage to the consumer's earthing terminal;
- An earthing conductor is visibly disconnected;
- Severe damage to visible earthing conductors
- No visible form of earthing present.

### Actions:

- The installer should decide on the evidence available whether it is safe for the meter installation to continue
- It is likely that in most circumstances the meter could be installed safely but in some circumstances the situation may be so severe that work should stop and the installer should notify their manager/supervisor
- It should be remembered that the earthing arrangements in the property are not the responsibility of or within the capability of the installer to correct
- Advise and explain to the consumer that the installer has either identified an issue with, or the lack of visibility of adequate earthing arrangements at the service position.
  - That the consumer will need to contact a suitably qualified electrician or electrical contractor to investigate further; or
  - To contact their landlord, local authority or housing association to carry out further investigation.

### Before leaving site the installer should always:

- Provide the consumer with a completed Customer Equipment Checklist (an example form can be found in Appendix 12 of MOCOPA®) with sufficient information that maybe required for them to pass on to a suitably qualified electrician or electrical contractor to investigate further.



## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**EB001**

Code Description

Earthing issues with the consumer's electricity installation

### Continued:

- Provide details of the general recognised accreditation schemes, (such as National Inspection Council for Electrical Installation Contracting (NICEIC) and Electrical Contractors Association (ECA) accreditation) that any contractor should be associated with, and where the consumer can find relevant contact details for such contractors (such as the Electrical Safety First website or telephone number).
- If a consumer indicates that they need further assistance, the installer should report the details back to the electricity supplier, and the supplier should seek to provide additional support as deemed appropriate.

### Photographic examples – of issue



Both pictures show a collection of old single and two way 'fuse boxes'. Some visible signs of earthing but in poor condition and some units appear not to have an earthing provision



### Additional notes

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**EB002**

Code Description

Unusual sub main termination points

### Description:

During the installer's site risk assessment, (undertaken prior to commencing any meter installation activity) it is identified that the sub main termination point (usually within properties of multiple occupancy) is of an unusual configuration, for example:

- An MICC cable enters the property adjacent to the meter but is not terminated into a fixed isolator or other suitable termination point
- The sub main cables are single insulated VIR covered conductors, enclosed or not enclosed in conduit or trunking
- Other similar cable related termination point defects

### Actions:

The installer should complete the site installation risk assessment and then determine (according to their own company procedures) if:

- It is safe to continue with the meter installation , or
- Disturbance of the unusual sub main termination cables could mean either damage could occur to the conductors/insulation, or a flashover could occur in extreme circumstances
- If it is safe to continue, then the installer should proceed with the meter installation as normal. Given that the conductors installed are of a design/type which are not normal installation practice found at the service position, progress to terminate the incoming supply conductors to the new meter should proceed with care with as minimal disturbance to the conductors as possible. Note: Depending on the condition of the current insulation, it may be appropriate to install 'over-sleeving' to the existing conductors.
- Consideration should be given as to whether it would be more appropriate to terminate the sub-main conductors into individual blocks, rather than straight into the electricity meter.
- Where such a risk exists to the installer or the condition of the unusual sub main cables is such that proceeding with the installation may damage the conductors, or poses or is likely to pose a risk to the installer or the installation, then the installation work should stop.
- Advise and explain to the consumer the action/s taken and why.
  - That the consumer will need to contact a suitably qualified electrician or electrical contractor to rectify the problem; or
  - That they should contact their landlord, local authority or local housing association to rectify the problem.



## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**EB002**

Code Description

Unusual sub main termination points

### Continued

Before leaving site the installer should always:

- Provide the consumer with a completed Customer Equipment Checklist (an example form can be found in Appendix 12 of MOCOPA®) with sufficient information that maybe required for them to pass on to a suitably qualified electrician or electrical contractor to investigate further.
- Provide details of the general recognised accreditation schemes, (such as National Inspection Council for Electrical Installation Contracting (NICEIC) and Electrical Contractors Association (ECA) accreditation) that any contractor should be associated with, and where the consumer can find relevant contact details for such contractors (such as the Electrical Safety First website or telephone number).
- If a consumer indicates that they need further assistance, the installer should report the details back to the electricity supplier, and the supplier should seek to provide additional support as deemed appropriate.

### Photographic examples



Shows an MICC (Pyro) cable terminated directly into a meter with no appropriate termination or means of local isolation



Shows a multi property service position with sub mains to properties in VIR single cables contained in conduit. VIR's appear deteriorated and movement of cables to fit a new meter could cause damage or potentially a 'flashover'

### Additional notes

In many cases, this is an issue relevant to the Building Network Operator. It may be appropriate to contact the landlord directly to resolve issues deemed 'unresolvable' by the installer.

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**EB003**

Code Description

Suspected Asbestos Containing Materials present on site

### Description:

The installer suspects the presence of asbestos containing materials in the vicinity of the meter position.

### Possible locations

There is a range of possible materials at the meter position which may be found to contain asbestos, some of these are as follows:

- Meter Boards
- Boarding used to support metering equipment etc in multiple meter installations
- Asbestos Containing Materials (building) in the vicinity of the service position which may be disturbed during the meter installation process

### Actions:

The installer should follow its own company procedures as required under the Asbestos at Work Regulations. In order to manage this process effectively across all installation processes. Members of The Association of Meter Operators working with other industry partners and stakeholders have created a guidance document which provides advice to stakeholders in managing the risk of asbestos containing material found in the vicinity of metering equipment. It provides background information and details the approach to be taken on discovery of suspected material including what communication should be had with the consumer.

That guidance has been developed to enable stakeholders to incorporate the information into their own company's Health, Safety and Environmental management systems and does not form a standalone policy. Companies should amend or adapt that guidance to suit their own management system. It is for individual companies to ensure that they comply with the law. If any reader believes any advice in that document is contradictory to current UK legislation or Codes of Practice, then please highlight the concerns directly to the author via the Association of Meter Operators.

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**EB003**

Code Description

Suspected Asbestos Containing Materials present on site

### Continued

The document – ‘**Guidance to manage asbestos during metering activities**’ can be accessed by following this link:

[http://www.meteroperators.org.uk/images/Info\\_for\\_Members/Asbestos\\_in\\_metering\\_guidance -  
\\_Published Version - May 19th 2014.pdf](http://www.meteroperators.org.uk/images/Info_for_Members/Asbestos_in_metering_guidance_-_Published_Version_-_May_19th_2014.pdf)

### Photographic Examples:



Both pictures show examples of a meter board which has been identified as containing asbestos materials. In close up it can be seen that the board is deteriorating, probably due to the damp conditions in the cellar location.

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**EB004**

Code Description

Visible evidence of unsafe customer wiring

### Description:

During the installer's site risk assessment, (undertaken prior to commencing any meter installation activity), the installer observes what is or appears to be unsafe consumer electrical equipment. This may take the following forms:

- Very old or obviously unsafe Consumer Unit/s (fuse box etc)
- VIR (or similar) tails to consumers equipment
- Sub-circuits which are in lead, VIR, rubber etc
- Overall poor condition of consumers equipment

### Actions:

- Where appropriate, the installer should manage any immediate risk presented by taking all relevant steps to make the situation safe in line with their capabilities (both in terms of qualifications, competency and safety). Note, if an emergency issue is discovered then this should be approached in line with advice identified in E1 or E5.
  - If unsafe equipment has been identified, isolate the equipment at fault at the closest point to the area of risk.
  - If it is considered unsafe to reconnect some or all of the consumer's equipment, and in order to facilitate the meter installation, the installer may decide to fit a double pole isolator. Installers should follow their respective company procedures but only consumer's equipment which is considered safe to be reconnected should be reconnected.
- Advise and explain to the consumer the action/s the installer has taken and why they have been taken.
  - That the consumer should contact a suitably qualified electrician or electrical contractor to test the installation and rectify the problem; or
  - That they should contact their landlord, local authority or housing association to rectify the problem.



## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**EB004**

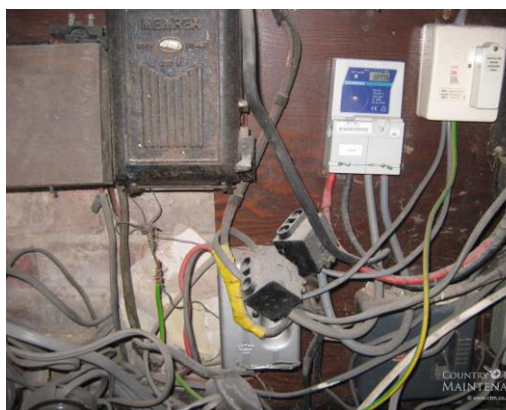
Code Description

Visible evidence of unsafe customer wiring

Before leaving site the installer should always:

- Provide the consumer with a completed Customer Equipment Checklist (an example form can be found in Appendix 12 of MOCOPA®) with sufficient information that maybe required for them to pass on to a suitably qualified electrician or electrical contractor to resolve the fault.
- Provide details of the general recognised accreditation schemes (such as National Inspection Council for Electrical Installation Contracting (NICEIC) and Electrical Contractors Association (ECA) accreditation) that any contractor should be associated with, and where the consumer can find relevant contact details for such contractors (such as the Electrical Safety First website or telephone number).
- If a consumer indicates that they need further assistance, the installer should report the details back to the electricity supplier, and the supplier should seek to provide additional support as deemed appropriate.

Photographic examples - of issue



Shows a variety of unsafe consumers wiring, including lead cables, old metal cased consumer units, untidy cables etc.



Whilst this picture identifies a particularly difficult cellar located service position, Close examination shows a variety of consumer wiring issues which will need to be taken into account when carrying out any meter installation activity.

Additional notes

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**EB005**

Code Description

Suspicion of Theft of Electricity

### Description:

During the smart meter installation process, instances of attempted theft of electricity through interference with metering equipment may be discovered. Installers should ensure they are aware of possible scenarios which could exist where equipment has been interfered with.

A wide range of possible actions may have been taken by some consumers in an attempt to steal electricity. These are well documented by suppliers and their agents. Further information, help and advice can be obtained through the UK Revenue Protection Association.

### Actions:

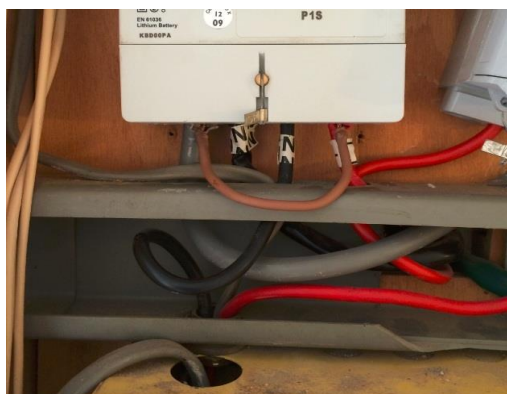
In all circumstances reference should be made to the individual organisation's internal processes and procedures for identifying and dealing with suspected theft of electricity.

Installers should generally ensure that they take into account their personal safety and health on site and should not enter into discussion with the consumer on site. They should preserve all relevant evidence, but wherever possible continue with the installation of the smart meter if their internal processes and procedures allow.

Following completion of the installation the installer should report their discovery to the relevant person or persons (in line with their internal processes and procedures) as soon as possible to notify them about their discovery and to discuss what further action may be necessary.

If there is concern that the future security of the meter being installed may be in jeopardy, then the installer may decide not to proceed with the meter installation and should notify their supervisor as soon as practical after leaving site.

### Photographic examples - of issue



Example of meter by-passed



Previous signs of tampering

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**EB006**

Code Description

Damaged or deteriorated boards associated with the meter / service

### Description:

The board on which the meter, cut out or service is fixed to is damaged or deteriorated and in such a condition that cannot be safely rectified.

Examples include:

- Rotten boards with woodworm or other similar deterioration
- Damp environments in cellars, alley ways etc which has resulted in the meter board decaying.
- The cut-out may be securely attached to the meter board, but the meter board may be rotting at its fixed point.
- When the cut out fuse is pulled, the meter board comes away from the wall.

### Actions:

- Where the DNO's cut-out fuse is co-located (with the electricity meter) on the damaged or deteriorated board, the meter installation should be aborted and reported (via the supplier) to the relevant DNO for agreement on a combined resolution,
- For instances where the damaged or deteriorated board houses the electricity meter only, where possible installers should install a new board as part of the meter installation process. If this is not possible, the meter installation should be aborted and reported to the supplier for resolution.
- Advise the consumer of the action/s the installer has taken and why they have been taken.
  - That the electricity DNO/supplier will contact the consumer to discuss remedial actions required; or
  - The electricity DNO/supplier will contact the consumer's landlord, local authority or housing association to discuss remedial actions required to rectify the problem.
  - That the electricity supplier will contact the consumer to re-schedule a meter installation visit once the electricity DNO/supplier have carried out the necessary remedial action to rectify the problem.

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**EB006**

Code Description

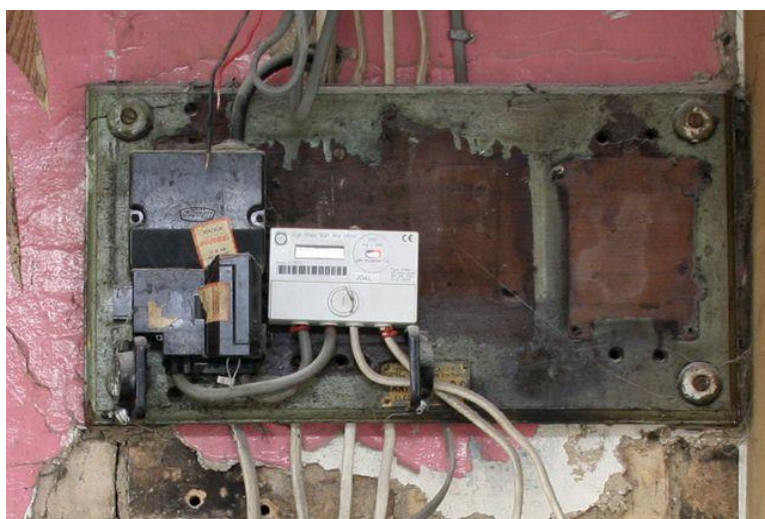
Damaged or deteriorated boards associated with the meter / service

### Continued

Before leaving site the installer should always:

- If a consumer indicates that they need further assistance, the installer should report the details back to the electricity supplier, and the supplier should seek to provide additional support as deemed appropriate.

Photo examples – of issue



Picture shows a meter board in poor condition. Although not easily visible from this picture, the board shows previous signs of woodworm and is loose on the wall

Additional notes



## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**EB007**

Code Description

Damaged meter box

### Description:

The external meter box is damaged in such a way that it leaves the meter and service position open to the elements and insecure.

Examples of damage include:

- Broken / missing meter box door.
- Broken / missing hinges and / or locks.
- Damage to the external meter box housing, hinge or lock mounting

It may be possible to repair the meter box to allow the installation to continue. However, if this is not the case the installer or consumer may need to take remedial action to make the electricity equipment within it safe and protected from adverse weather conditions.

### Actions:

- The installer should replace broken/missing meter box door hinges, and/or locks as part of the meter installation.
- If the meter box door is missing or is broken beyond repair, and the meter box is of standard type construction, then the installer should replace the door as part of the meter installation (or notify the electricity supplier to arrange a subsequent visit to replace the door).
- Where damage to the meter box is beyond repair, and the whole meter box needs to be replaced, this is likely to require a co-ordinated visit with the DNO and electricity supplier to install a replacement meter box. This may result in a charge to the consumer.

### Before leaving site the installer should always:

- Advise the consumer of the reasons for aborting the meter installation (where relevant) and that the electricity supplier (and/or DNO) will contact them to discuss corrective actions to install or replace the electricity meter box
- Report this to the supplier who will then contact the consumer to advise them on an appropriate course of action

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**EB007**

Code Description

Damaged meter box

### Continued

- If a consumer indicates that they need further assistance, the installer should report the details back to the electricity supplier, and the supplier should seek to provide additional support as deemed appropriate.

### Photographic examples – of issue



Both pictures show meter box doors missing, exposing equipment to damage, exposure to weather conditions etc. Hinges are missing in some instances and some minor box damage exists.

### Additional notes

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**EB008**

Code Description

Temporary or permanent obstruction to the electricity meter position

### Description:

The meter installer is unable to gain adequate access to the meter in order to carry out a meter installation, due to a permanent or temporary obstruction that is either preventing safe access to the meter position or imposes physical limitations in the work space.

### Examples include:

- Building works have created a situation where the service position is no longer accessible, or the access is very restricted
- Lockable security meter boxes/shared meter cupboards to which the consumer does not have access, or the meter is behind a locked gate to which a consumer does not have access
- Meter is located in another building, or part of a building to which the consumer does not have access
- Over-grown vegetation restricting access to the meter position
- Disused vehicle or caravan in front of the meter box
- Out-housing or temporary building obstructing the meter position
- Building works or renovation has permanently blocked access to the meter (i.e. meter position behind built-in kitchen units)
- The consumer is preventing access to the meter via a deliberate physical obstruction
- Insufficient room in meter room / cupboard to carry out the meter installation.
- Meter position not easily accessible (i.e. is too high and therefore can only be accessible via a ladder, or is too low or in an area of restricted physical access)

In order to complete the work, remedial action/s will need to be taken by the consumer / landlord or housing authority to allow adequate access.

### Actions:

- Advise the consumer that the installation cannot be completed due to the inaccessibility of the meter position
- Where possible and whilst on site, agree a suitable means of achieving access to the meter position with the consumer

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**EB008**

Code Description

Temporary or permanent obstruction to the electricity meter position

### Continued:

- If a suitable means of access cannot be agreed with the consumer on site, advise the consumer of the actions needed to be taken to allow access to the electricity meter; or advise the consumer to contact their landlord, local authority or housing association about the actions needed to allow access to the electricity meter.
- Notify the electricity supplier that the meter installation has been aborted due to inaccessibility issues, the reasons why and the actions required to secure access in the future

### Before leaving site the installer should always:

- Advise the consumer of the reasons for aborting the meter installation and that the electricity supplier will contact them to discuss corrective actions to allow access to the electricity meter position
- If a consumer indicates that they need further assistance, the installer should report the details back to the electricity supplier, and the supplier should seek to provide additional support as deemed appropriate.

### Photographic examples – of issue



The photograph shows very restricted access to service position and consumers equipment located in a commercial kitchen environment.

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**EB009**

Code Description

Meter installation proximity/location

### Description:

During the installer's site risk assessment, (undertaken prior to commencing any meter installation activity), it is determined that the meter position is currently in a vulnerable position, and it is inappropriate or unsafe to proceed with the meter installation. Installers must take reasonable care when considering where to place electricity metering equipment to avoid further remedial work at a later date.

### Examples include

- Electricity meter is installed close to gas pipes or gas equipment (i.e. less than required 150mm separation)
- Meters currently installed within, or close to hazardous environments
- Meter position which may be subjected to current or future damage
- The current position of the meter could mean that work activity currently being undertaken on site could impact on the future access to the meter or safety of the installed equipment

### Actions

In order to complete the work remedial action may need to be taken by the consumer / landlord or housing authority to allow adequate access.

- Identify the issue and where necessary discuss actions to take with supervisor/manager
- Where necessary, advise the consumer that the installation cannot be completed at the time due to the location or unsafe position of the meter
- Where possible and whilst on site, discuss and agree with the consumer a suitable means of achieving a safe location of the meter position in order that the installer can carry out the meter installation
- If a suitable means of meter location cannot be agreed with the consumer on site, advise the consumer of the actions needed to be taken to allow safe positioning of the electricity meter; or advise the consumer to contact their landlord, local authority or housing association about the actions needed to allow safe positioning of the electricity meter.
- Notify the electricity supplier that the meter installation has been aborted due to positioning/location issues, the reasons why and the actions required to provide a safe location in the future

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**EB009**

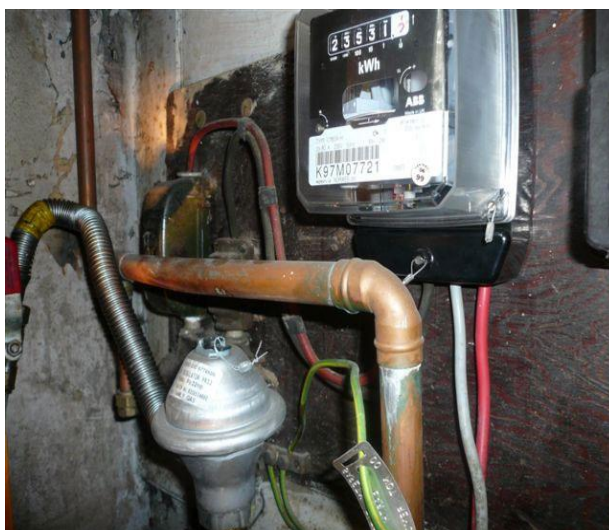
Code Description

Meter installation proximity/location

Before leaving site the installer should always:

- Provide the consumer with a completed Customer Equipment Checklist (an example form can be found in Appendix 12 of MOCOPA®) with sufficient information that maybe required for them to pass on to a suitably qualified electrician or electrical contractor to resolve the fault.
- Advise the consumer of the reasons for aborting the meter installation and that the electricity supplier will contact them to discuss corrective actions to allow a safe positioning of the electricity meter position
- If a consumer indicates that they need further assistance, the installer should report the details back to the electricity supplier, and the supplier should seek to provide additional support as deemed appropriate.

Photographic examples of issue



Picture shows a consumer's gas pipe located in very close proximity to the meter, tails and also restricting access to the metal clad cut out.

Additional notes



## Category C – Not Unsafe – Information Reported

Continue with your work if possible but report the issue to the supplier

Asset Condition Code

**EC001**

Code Description

Insufficient space for smart meter equipment

### Description:

There is insufficient space to install the smart meter and associated equipment in the existing service position location, including insufficient space in an existing meter box, cupboard or communal meter position.

### Examples of associated equipment which may need to be installed include:

- The communications hub;
- Separate HAN Connected Auxiliary Load-Control Switches (HCALCS); and
- Isolation switches which may need to be installed as part of the installation.
- Any other associated equipment (such as Terminal Blocks etc)

### Actions:

- Advise the consumer that the meter installation cannot take place due to there being insufficient space for the smart metering equipment to be installed.
- The installer should report details of the reasons for the job being aborted to the electricity supplier.
- Where the restriction in space is the responsibility of the consumer, landlord, local authority or housing association then they should be notified of the reasons why.

### Before leaving site the installer should always:

- Advise the consumer of the reasons for aborting the meter installation and that the electricity supplier will contact them to discuss corrective actions to facilitate the successful installation of the meter
- If a consumer indicates that they need further assistance, the installer should report the details back to the electricity supplier, and the supplier should seek to provide additional support as deemed appropriate.

### Category C – Not Unsafe – Information Reported

Continue with your work if possible but report the issue to the supplier

Asset Condition Code

**EC001**

Code Description

Insufficient space for smart meter equipment

**Continued**

Photographic examples – of issue



Although the use of space in this multi property installation has been constrained by the location, it may be difficult or impossible to install replacement smart meters so intervention on site may be necessary

Additional notes



## Category C – Not Unsafe – Information Reported

Continue with your work if possible but report the issue to the supplier

Asset Condition Code

**EC002**

Code Description

Data associated with the meter point is incorrect

### Description:

The data associated with the meter point, consumer and / or metering equipment is incorrect or crossed with another meter point.

Examples include:

- MPAN does not match the premises address
- MPAN attached to a plot number is incorrect

MPAN and/or premise address and Meter Serial Number do not match

### Actions:

- Record the correct MPAN/Address and Meter Serial Number and report these back to the electricity supplier.
- If the incorrect details prevents the meter installation, the installer will inform the consumer that once the address and meter details have been corrected, their electricity supplier will re-arrange a meter installation appointment with them

### Additional notes



# **Gas Guidance Sheets**

## 5.0 Gas Guidance Sheets

### Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code	Code Description
<b>GB001</b>	Asbestos materials suspected at the meter position

#### Description:

During the installer's site risk assessment, (undertaken prior to commencing any meter installation activity), the installer suspects the presence of asbestos containing materials in the vicinity of the meter position.

#### Possible locations

There is a range of possible materials at the meter position which may be found to contain asbestos, some of these are as follows:

- Gas meter support platforms
- Boarding used to support metering equipment etc in multiple meter installations
- Asbestos Containing Materials (building) in the vicinity of the service position which may be disturbed during the meter installation process

#### Actions:

The installer should follow its own company procedures as required under the Asbestos at Work Regulations. In order to manage this process effectively across all installation processes. The Association of Meter Operators have created a guidance document which provides guidance to stakeholders in managing the risk of asbestos containing material found in the vicinity of metering equipment. It provides background information and details the approach to be taken on discovery of suspected material including communication with the consumer.

That guidance has been developed to enable stakeholders to incorporate the information into their own company's Health, Safety and Environmental management systems and does not form a standalone policy. Companies should amend or adapt that guidance to suit their own management system. It is for individual companies to ensure that they comply with the law. If any reader believes any advice in that document is contradictory to current UK legislation or Codes of Practice, then please highlight the concerns directly to the author via the Association of Meter Operators.

The document – '**Guidance to manage asbestos during metering activities**' can be accessed by following this link:

[http://www.meteroperators.org.uk/images/Info\\_for\\_Members/Asbestos\\_in\\_metering\\_guidance - Published Version - May 19th 2014.pdf](http://www.meteroperators.org.uk/images/Info_for_Members/Asbestos_in_metering_guidance_-_Published_Version_-_May_19th_2014.pdf)

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**GB002**

Code Description

Blocked or Inadequate Ventilation

### Description:

During the installer's site risk assessment, (undertaken prior to commencing any meter installation activity), the installer discovers the ventilation for an appliance is inadequate based on current standards, or the ventilation is blocked. Examples include:

- Ventilation point is blocked with leaves
- Ventilation point is missing or inadequate for the relevant appliance
- Ventilation point is in an inappropriate position
- Ventilation point is blocked or obstructed by cupboards

### Actions:

- The installer must manage the immediate risk presented by taking all relevant steps to make the situation safe as stated in the requirements under the Gas Industry Unsafe Situations Procedure, and in line with their capabilities (both in terms of qualifications, competency and safety).
- Advise and explain to the consumer of the action/s the installer has taken and why they have been taken.
  - That the consumer will need to contact a suitably qualified Gas-Safe Register engineer to rectify the problem; or
  - To contact their landlord or local housing authority to rectify the problem.

### Additional notes

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**GB002**

Code Description

Blocked or Inadequate Ventilation

### Continued

Before leaving site, the installer should always:

- Advise the consumer not to restore their supply, or reconnect any isolated appliance until the issue has been resolved
- Provide the consumer with a completed Gas Industry Unsafe Situations Form with sufficient information that is reasonably required for the consumer to pass on to a suitably qualified Gas-Safe Register engineer to resolve the fault.
- Provide details of the Gas-Safe Register accreditation scheme that any engineer or contractor should be associated with, and where the consumer can find relevant contact details for such contractors (such as the Gas-Safe Register website or telephone number).
- If a consumer indicates that they need further assistance, the installer should report the details back to the electricity supplier, and the supplier should seek to provide additional support as deemed appropriate.

Photo examples – of issue



Although not fully blocked, this picture identifies a gas boiler flue which has vegetation encroaching on the outlet. Left unattended this will eventually cover the outlet.

Additional notes

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**GB003**

Code Description

Gas Installation elevated, no visible evidence of equipotential bonding and insulation joint not fitted/correctly

### Description:

During the installer's site risk assessment, (undertaken prior to commencing any meter installation activity), the installer identifies that one or more of the following potential defects have been identified:

- Consumer's gas installation pipes have a raised potential sufficient to illuminate an industry approved test device.
- There is no evidence of an earth bonding clamp adjacent to the gas meter installation on the consumers side of the meter
- The earth bonding clam is incorrectly positioned
- There is no insulation joint fitted on one side of the ECV

(Note: this issue is currently subject to industry discussion and once agreed this guidance will be updated)

### Actions:

The actions to be undertaken will be based on the initial site risk assessment and the discovery of the particular issue identified above by the installer on site. As a general rule, the following approach should be taken but dependant on the specific issue found, the installer may need to take additional action on site or contact their manager/supervisor for help and guidance.

In line with the three possible defects found above, the following actions should be taken:

#### **Gas pipe has raised potential**

This could be as a result of an installation where the polarity of the electrical installation is reversed, where a DNO service cable has faulted onto a steel gas main, or the gas service pipe is subject to an induced-voltage.

If the installer has dual- fuel meter installation capability, then they should proceed to isolate the electricity and gas supplies to the property and check the polarity in existence using their normal company procedures. If it is found that a reverse polarity exists on the metering equipment which can be corrected by the installer, then they should carry on to correct the installation using guidance in this document and their specific company procedures.

If it is identified that a reverse polarity exists on the DNO's cut-out, then the installer should use procedures already identified in the MOCOPA® Guidance for Service Termination Issues. If appropriate checks have been carried out and a raised potential remains, then the installer should contact their manager/supervisor for advice on how to proceed. It is likely that it will be necessary to contact the local DNO for emergency exploratory work to be conducted.



## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**GB003**

Code Description

Gas Installation elevated, no visible evidence of equipotential bonding and insulation joint not fitted/correctly

### Continued

If the installer does not have dual-fuel meter installation capability, the installer will need to advise the consumer that the installation cannot be completed and of the actions required to rectify the issue.

### No earth clamp visible, or incorrectly positioned

In the majority of installations, an earth bonding clamp should be evident as close as possible to the consumer's side of the gas meter. The clamp should also be connected to an earth bonding conductor which is subsequently connected to the consumer's main earth terminal provided by the DNO.

Installers should only undertake a visual check to see whether there is evidence of a clamp and that an earth conductor is connected to it, and that it is positioned correctly. No other checks should be undertaken on site. If no clamp exists this should be noted and communicated to the consumer, and appropriate guidance provided as detailed below. Note - GDNO position given in Reference 11 of the ENA - GUIDE FOR GAS METER OPERATIVES ON REPORTING AND ACTING ON ASSET CONDITION ISSUES. For an additional source of guidance, installers should refer to the "The Gas Industry Unsafe Situations Procedure: Guidance for Dealing with Unsafe Situations and Non-compliance with Current Standards and Procedures in Domestic and Non-domestic Premises Supplied with Natural Gas or Liquefied Petroleum Gas"

**No insulation joint fitted** Note: Currently subject to industry and stakeholder discussion

Before leaving site, and depending on the issue the installer may:

- Where the installer is a dual-fuel meter installation capability, provide the consumer with a completed Customer Equipment Checklist (an example form can be found in Appendix 12 of MOCOPA®) with sufficient information that maybe required for them to pass on to a suitably qualified electrician or electrical contractor to resolve the fault. If the installer is a gas-only installer, then the installer must notify the consumer of the nature of the issue and the actions required to resolve it.
- Provide details of the general recognised accreditation schemes (such as National Inspection Council for Electrical Installation Contracting (NICEIC) and Electrical Contractors Association (ECA) accreditation) that any contractor should be associated with, and where the consumer can find relevant contact details for such contractors (such as the Electrical Safety First website or telephone number).
- Where the issue is so severe, advise the consumer not to restore their supply, or reconnect any isolated appliance until the issue has been resolved.
- If a consumer indicates that they need further assistance, the installer should report the details back to the gas or electricity supplier (as relevant), and the supplier should seek to provide additional support as deemed appropriate.

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**GB004**

Code Description

Temporary or permanent obstruction to the gas meter position

### Description:

The meter installer is unable to gain adequate access to the meter in order to carry out a meter installation, due to a permanent or temporary obstruction that is either preventing safe access to the meter position, or physical limitations in the work space. NOTE: Where the ECV is inaccessible, please take the necessary actions as listed in Section 5 of the Gas Industry Unsafe Situations Procedure.

### Examples include:

- Lockable security meter boxes/shared meter cupboards to which the consumer does not have access
- Meter is behind a locked gate to which a consumer does not have access
- Meter is located in another building, or part of a building to which the consumer does not have access
- Over-grown vegetation restricting access to the meter position
- Dis-used vehicle or caravan in front of the meter box
- Out-housing or temporary building obstructing the meter position
- Building works or renovation has permanently blocked access to the meter (i.e. meter position behind built in kitchen units)
- The consumer is preventing access to the meter via a deliberate physical obstruction
- Insufficient room in meter room / cupboard to carry out the meter installation.
- Meter position not easily accessible (i.e. is too high and therefore can only be accessible via a ladder, or is too low or in an area of restricted physical access)

In order to complete the work remedial action will need to be taken by the consumer / landlord or housing authority to allow adequate access.

### Actions:

- Advise the consumer that the installation cannot be completed due to the inaccessibility of the meter position
- Where possible and whilst on site, agree a suitable means of achieving access to the meter position with the consumer in order for the installer to carry out the meter installation.

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**GB004**

Code Description

Temporary or permanent obstruction to the gas meter position

### Continued

- If a suitable means of access cannot be agreed with the consumer on site, advise the consumer of the actions needed to be taken to allow access to the gas meter; or advise the consumer to contact their landlord or local housing authority about the actions needed to allow access to the gas meter.
- Notify the supplier that the meter installation has been aborted due to inaccessibility issues, the reasons why and the actions required to secure access in the future

### Before leaving site the installer should always:

- Advise the consumer of the reasons for aborting the meter installation and that the gas supplier will contact them to discuss corrective actions to allow access to the gas meter position
- If a consumer indicates that they need further assistance, the installer should report the details back to the gas supplier, and the supplier should seek to provide additional support as deemed appropriate.

### Photo examples – of issue



Picture shows gas meter position where kitchen units have been built around the installation. Although in this particular instance the meter may be able to be replaced with difficulty, the positioning may in other circumstances make it very difficult or impossible to replace the meter without consumer intervention

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**GB005**

Code Description

Issues with the current location of the gas meter

### Description:

The location or position of the meter is not appropriately accessible for the consumer to operate a prepayment meter, or a smart meter in prepayment mode. NOTE: Where the ECV is inaccessible, please take the necessary actions as listed in Section 5 of the Gas Industry Unsafe Situations Procedure.

### Examples include:

- Temporary or permanent inaccessibility of the meter position due to property renovations.
- Inaccessibility due to the meter being in an internally/externally locked meter cupboard to which the consumer does not have access to.
- Meters in communal areas.
- Meters positioned at a height inaccessible to the consumer.

In such cases, the consumer may not be able to carry out key activities associated with prepayment such as activating emergency credit, or re-enabling supply if all means of available credit have been exhausted. Either an alternative method of interfacing with the meter is required, or the meter will need to be repositioned.

### Actions:

- If the gas meter can be repositioned to a more suitable location, that is acceptable to the consumer, and can be carried out as part of the meter installation, the installer should take the necessary action to relocate the gas meter as part of the meter installation.
- Where a meter cannot be repositioned as part of the meter installation visit, the installer should:
  - Abort the meter installation visit, and advise the gas supplier of the reasons for the installation being aborted, and of the corrective actions required to rectify the situation.
  - The gas supplier must then contact the consumer and advise them of the actions required to enable the meter installation to proceed – in certain cases, this may result in a charge to the consumer, landlord or local housing authority.
- In cases where the meter cannot be installed due to inaccessibility of the gas meter in its current location (for example, if the gas meter is in a locked or inaccessible cupboard), advise the consumer to contact their landlord or local housing authority to allow them ready access to the gas meter.

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**GB005**

Code Description

Issues with current location of the gas meter

### Continued

Before leaving site the installer should always:

- If the meter installation has been aborted, advise the consumer of the reasons for aborting the meter installation and that the gas supplier will contact them to discuss corrective actions to allow access to the gas meter position
- If a consumer indicates that they need further assistance, the installer should report the details back to the gas supplier, and the supplier should seek to provide additional support as deemed appropriate.

### Photo examples – of issue



Picture shows a gas meter position located above a door approximately 8 feet high and inaccessible to the consumer without the use of a step-ladder etc.

In certain circumstances this type of location may also be very difficult to reach for the installer or be impossible to replace the meter in its current position

### Additional notes

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**GB006**

Code Description

Damaged meter box

### Description:

The external meter box is damaged in such a way that it leaves the meter and service position open to the elements and insecure or it would permit escaping gas to enter cavity and/or property.

### Examples of damage include:

- Broken / missing meter box door.
- Broken / missing hinges and / or locks.
- Damage to the external meter box housing, hinge or lock mounting
- Broken box allowing escaping gas into cavity and/or property

It may be possible to repair the meter box to allow the installation to continue. However, if this is not the case the installer, or consumer may need to take some remedial action to make the service secure.

### Actions:

- The installer should replace broken/missing meter box door hinges, and/or locks as part of the meter installation.
- If the meter box door is missing or broken beyond repair, and the meter box is of standard type construction, then the installer should replace the door as part of the meter installation (or notify the gas supplier to arrange a subsequent visit to replace the door).
- Where damage to the meter box is beyond repair, and the whole meter box needs to be replaced, this is likely to require a co-ordinated visit with the GDNO and gas supplier to install a new meter box. This may result in a charge to the consumer.

### Before leaving site the installer should always:

- Advise the consumer of the reasons for aborting the meter installation (where relevant) and that the gas supplier (and/or GDNO) will contact them to discuss corrective actions to install or replace the gas meter box
- The meter installer should report this to the supplier who will then contact the consumer to advise them on an appropriate course of action



## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**GB006**

Code Description

Damaged meter box

### Photo examples – of issue



Picture shows gas meter box doors missing, exposing equipment to damage, exposure to weather conditions etc. Hinges are missing in some instances and some minor box damage exists.

### Additional notes

## Category B – Unsafe Situation – Able to Resolve

Other work may be needed to complete the meter installation

Asset Condition Code

**GB007**

Code Description

Physical damage to the consumer's gas equipment

### Description:

During the meter installation, damage to the consumer's gas equipment is identified.

### Examples of consumer equipment include:

- Broken or cracked pipework
- Poor joints/failed tightness test
- Malfunctioning equipment
- Faulty ignition/thermocouples.

This will require remedial action either by the meter installer or a qualified Gas Safe engineer at the request of the consumer.

### Actions:

- The installer must manage the immediate risk presented by taking all relevant steps to make the situation safe as stated in the requirements under the Gas Industry Unsafe Situations Procedure, and in line with their capabilities (both in terms of qualifications, competency and safety).
- Advise and explain to the consumer of the action taken, and of the need to contact a suitably qualified Gas Safe engineer to rectify the problem; or
- To contact their landlord, local authority or housing association to rectify the problem.

### Before leaving site, the installer should always:

- Advise the consumer not to restore their supply, or reconnect any isolated appliance until the issue has been resolved
- Provide the consumer with a completed Gas Industry Unsafe Situations Form with sufficient information that is reasonably required for the consumer to pass on to a suitably qualified Gas-Safe Register engineer to resolve the fault.
- Provide details of the Gas-Safe Register accreditation scheme that any engineer or contractor should be associated with, and where the consumer can find relevant contact details for such contractors (such as the Gas-Safe Register website or telephone number).
- If a consumer indicates that they need further assistance, the installer should report the details back to the gas supplier, and the supplier should seek to provide additional support as deemed appropriate.

### Additional notes

### Category C – Not Unsafe – Information Reported

Continue with your work but report the issue to the supplier

Asset Condition Code

**GC001**

Code Description

Secondary Gas Metering and/or sub-deduct gas metering

Description:

Intentionally left blank – currently subject to industry and stakeholder discussion

## Category C – Not Unsafe – Information Reported

Continue with your work but report the issue to the supplier

Asset Condition Code

**GC002**

Code Description

Meter box is semi-concealed

### Description:

The gas meter is located in a semi-concealed meter box, which in certain circumstances may pose installation issues or pose a risk to the meter itself.

### Examples include:

- Insufficient space to install the new meter and any associated equipment
- Location of semi concealed box shows signs of water ingress or previous damage due to the impact of water ingress
- The location of the box could present a risk to the meter installation due to proximity to drains, run off water or garden hoses

### Actions

- An on-site risk assessment should be undertaken to determine whether it is safe and appropriate for the meter installation to continue
- Installers should refer to the suppliers' policy in relation to the installation of meters in semi-concealed meter boxes

### Photo examples – of issue



Picture shows a semi concealed gas meter box in a location close to an entrance path to a property.

In this instance the slate covering the ground may allow rain to drain away, but in other circumstances, ie on driveways this may create a situation where the meter box becomes immersed or partially filled with water.

## Category C – Not Unsafe – Information Reported

Continue with your work but report the issue to the supplier

Asset Condition Code

**GC003**

Code Description

Data associated with the meter point is incorrect

### Description:

The data associated with the meter point, consumer and / or metering equipment is incorrect or crossed with another meter point.

### Examples include:

- MPRN does not match the premises address
- MPRN attached to a plot number is incorrect
- MPRN and/or premise address and Meter Serial Number do not match

### Actions:

- Record the correct MPRN/Address and Meter Serial Number and report these back to the gas supplier.
- If the incorrect details prevents the meter installation, the installer will inform the consumer that once the address and meter details have been corrected, their gas supplier will re-arrange a meter installation appointment with them

### Additional notes