

Gas Engineering Recommendation

GER1

Issue 8.1 – 2021 Summer

A GUIDE FOR GAS METER OPERATIVES ON REPORTING AND
ACTING ON ASSET CONDITION ISSUES



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**Operations Directorate
Energy Networks Association
4 More London Riverside
London
SE1 2AU**

In the event that there is any conflict or contradiction between this Guide and governing industry documents referenced in this Guide, the terms of the referenced documents will prevail. These include inter alia relevant gas Regulations, British Standards, Institution of Gas Engineers and Managers (IGEM) standards and Gas Safe Register Technical Bulletins, and the Gas Industry Unsafe Situation Procedure (Current edition).

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Amendments since publication

Issue	Date	Amendment
Issue 1	November 2013	In Appendix Reference 3, the wording was expanded to include "Inaccessible"
Issue 2	June 2014	Amendments to A02, A03, A05, and Appendix reference 8. General changes of reference to Gas Industry Unsafe Situations Procedure (Current edition)
Issue 3	November 14	Various amendments to all categories as a result of feedback from industry groups
Issue 4	August 2016	Fully reviewed by all GDNs. BS6400:1 2016 update.
Issue 4.1	November 2016	Northern Gas Networks contact number changed to new free phone number

Issue 5	July 2017	Ref 19, Ref 20 and Ref 21 added. Page 9-10 Responsibilities.
Issue 5.1	February 2018	Update link of page 36 relating to contacts for MAMs to obtain ECV handles.
Issue 6	Autumn 2018	General update. References 22&23 added. TB 001 now IGE/G/11 Gas Industry Unsafe Situation Procedure, new pictures and a link to iGT adaptor information.
Issue 7	Autumn 2019	General update.
Issue 8	Winter 2020	General update. A06 amended to cover setting meter apparatus. A07 added – Refusal to disconnect. References 24, 25 and 26 added.
Issue 8B	Summer 2021	B06 added, Reference 27 added, plus changes to Reference 20 and wording changes on page 10.

Contents

Acronyms	6
Introduction	7
List of Asset Condition Codes	12
Guidance Sheets.....	13
A01 - Gas Escape: visible signs of escaping gas or a smell of gas exists which is not associated with the downstream gas installation.....	14
A02 - Suspected Fumes/Carbon Monoxide.....	15
A03 - Removed.....	16
A04 - Medium Pressure (MP) or Intermediate Pressure (IP) gas service internal to domestic premises and built over services.....	17
A05 - Emergency Control Valve inoperable or faulty (including failed let by test).....	18
A06 - Incorrect gas pressure measured at the outlet of the meter caused by new apparatus / distribution network.....	19
A07 - Refusal to disconnect.....	20
B01 - Gas service pipe shows signs of significant corrosion.....	21
B02 - Old uncapped steel pipework of unknown type at existing meter position.....	22
B03 - ECV is an old-style Thumb tap.....	23
B04 - Low Pressure (LP) built over services.....	24
B05 - Emergency Control Valve falls to open position, e.g. handle fitted incorrectly.....	25
B06 - Lead Inlet pipes only.....	26
C01 - Removed.....	27
C02 - Visible or exposed Polyethylene service pipe.....	28
C03 - Rising service pipe located within a cavity wall.....	29
C04 - Additional live service discovered in domestic property.....	30
C05 - Third-party damage to gas service, e.g. signs of vandalism, or other external factors.....	31
C06 - Removed.....	32
C07 - Yellow cap instead of ECV handle.....	33
Reference 1 - Suspected voltage on outlet pipework following initial check with appropriate voltage indicator.....	34
Reference 2 - Blocked medium pressure regulator vent pipe or inappropriately installed vent pipe, e.g. pipe end submerged.....	35

Reference 3 - Meter or Emergency Control Valves position enclosed and installer is unable to carry out work.....	36
Reference 4 - Unable to work on or replace meter due to insufficient space or positioning of meter.	37
Reference 5 - Missing Emergency Control Valve handle.	38
Reference 6 - Crossed meters, i.e. flat environments.	39
Reference 7 - LP Gas meter installation in unacceptable close proximity to electricity supply or meter (150mm minimum clearance).	40
Reference 8 - Meter fitted on sole means of escape route.....	41
Reference 9 - Damage to meter box or water ingress problems.	42
Reference 10 - Risk to the public or customer due to meter box position, e.g. semi concealed in public footpath.	43
Reference 11 - No visible evidence of equipotential bonding at gas meter installation or on outlet pipework immediately inside the property.	44
Reference 12 - Adverse environment for the location of the gas meter installation, e.g. too hot, cold, and damp, etc.....	45
Reference 13 - Meter Installation believed to be at substantial risk of physical damage.	46
Reference 14 - Vegetation growth preventing access to the meter.....	47
Reference 15 - Electrical Insulation Joint (IJ) fitted after the Emergency Control Valve.	48
Reference 16 - Old style 'non-typical 'ECV is encountered that is not to current British standard (BS746 or BS21).....	49
Reference 17 - Medium or Intermediate Pressure ECV.	50
Reference 18 - Yellow Handle ECV iGT LP Sites	51
Reference 19 - Lead Outlet pipes.....	52
Reference 20 - iGT LP sites utilising Medium Pressure ECVs.....	53
Reference 21 - Combined IP/LP or MP/LP Regulator Installation (Type C & D Regulators) with above ground valve.....	54
Reference 22 - Meter fitted at height	55
Reference 23 - Exposed PE clad steel sleeve, PE sleeve or PE clad copper outlet.....	56
Reference 24 - Asbestos found at meter location.....	57
Reference 25 - Thermal Cut Off (TCO) device at meter location.....	58
Reference 26 - Unsupported Above Ground Service Pipe.....	59
Reference 27 – IGT sites with braided steel flexible hose inlet between the service entry and ECV.....	60

Acronyms

AMI	Approved Meter Installer
AMO	Association of Meter Operators
BS	British Standards
CO	Carbon Monoxide
DNO	Distribution Network Operator (Electricity Network)
ENA	Energy Networks Association
GDN	Gas Distribution Network
GIRS	Gas Industry Registration Scheme
GIUSP	Gas Industry Unsafe Situations Procedure
GT	Gas Transporter
IGE	Institution of Gas Engineers
IGEM	Institution of Gas Engineers and Managers (formerly the IGE)
IP	Intermediate Pressure
iGT	Independent Gas Transporter
LDF	Leak Detection Fluid
LP	Low Pressure
MAM	Meter Asset Manager
MO	Meter Operative
MP	Medium Pressure
MPRN	Meter Point Reference Number
PE	Polyethylene
UIP	Utility Infrastructure Provider

Introduction

What is the aim of this Guide and who is it for?

A number of organisations reviewed the business processes for reporting issues associated with gas 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 you, as a Meter Operative, might come across, and gave each one a unique code (“asset condition code”) for reporting purposes.

You may well come across these issues (i.e. defects) when installing smart meters or undertaking other work at gas service positions. This Guide is intended to support you to make a correct diagnosis and give direction on the actions you should take.

Meter Operatives are the primary audience for this Guide; however, it is also intended to assist Meter Operative managers and trainers.

Format and Structure of the Guide

The Guide contains:

- A list of the asset condition codes.
- A “guidance sheet” for each of the asset condition codes, containing:
 - The code and description;
 - Guidance details, which clearly state the actions you must take and the documents you should refer to.
- An appendix of other non GDN or iGT issues that may be identified during meter work.

The codes are categorised as follows:

- A. **Emergency Codes** – Following contact with the National Gas Emergency Service, you must risk assess the situation and decide if you can continue with the Smart Meter installation
- B. **Remedial Work Codes** – You must stop work, risk assess the installation and take appropriate action to resolve. The guidance sheets give references to appropriate industry documents and advises you on whether GDN action is required.
- C. **Potential Asset Management Information Codes** – You can carry on with your work but must report these issues to the GDN or iGT using the appropriate Networks’ enquiry line number, following completion of a smart meter exchange, if relevant.
- D. **Appendix Items** – Potential Issues for consideration that do not need GDN or iGT Intervention.

Colour coding helps to distinguish these categories – red for emergency, amber for remedial work, green for asset condition issues and blue for non GDN / iGT related issues.

GDNs can be contacted via their customer enquiry lines as per the table below:

Cadent	0845 835 1111
NGN	0800 040 7766.
SGN	0800 912 1700
WWU	0800 9122 999
GTC	01359 240363
Other iGTs	Refer to your company list of telephone numbers for iGTs.

Finding your way around the Guide

There is a list of codes, which is a quick reference for all of the code pages. Alternatively, you may just want to flick through the document; the guidance sheets are presented in the order of the codes, from A to C.

In addition, an appendix has been included which identifies other potential issues during the works on a metering installation. These have been included for completeness. However, there is no GDN or iGT action or intervention required against these issues.

Principles of reporting

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

- Only report one code per MPRN.
- Where there are multiple defects at one MPRN, report only the most serious one.
- Ensure that safety and other issues are properly resolved.
- You must seek to resolve all problems within your remit.
- The GDN or iGT will resolve all issues relating to Gas Transporter equipment only at site during their attendance or manage the resolution of remaining issues through subsequent visits.

Note that the codes only apply to Gas Transporter (GDN or iGT) equipment. If an issue relates to supplier or customer equipment, you must follow your own organisation's procedures for managing such occurrences (such as issues identified in the appendix). Defects must be reported to the GDN or iGT as they arise; they shall not be stored up and reported in batches.

When reporting a Category A defect by phone, you will always be asked to provide the following information:

- Your full name;
- Your contact telephone number;
- The category of defect being reported;
- Location of defect i.e. address including postcode;
- Meter Point Reference Number (MPRN);
- Who you are working for;
- Your Gas Safe licence number, and
- The registered supplier.

Developments

There are continuous developments in industry, with areas of regulation and guidance evolving. You will see in this document that reports are not expected under some codes. In other instances, it will become apparent that more codes are required, in order to capture network issues that are not adequately covered by this set of codes.

Gas-Safe

TB 001 has been replaced by IGEM/G/11 (Current edition).

Governance

This document has been developed and is maintained by the ENA and its members.

Document references

Documents that you and other parties should reference, are identified in each Guidance Sheet. This is not a comprehensive list.

Policy and Procedures

This document does not supersede any GDN or iGT policies or procedures and is a guide only for Smart meter installers.

Responsibilities

The GDN or iGT is responsible for all pipework from the gas main up to and including the ECV device. The supplier is responsible for all apparatus after the ECV up to and including the meter outlet connection. The customer is responsible for everything after the meter and the meter box, if fitted. See picture below. Yellow is the GDN or iGT, Blue is the supplier and Brown is the end user.

ECV Position

The ECV position is defined in:

IGEM G/1/ Edition2: 2013, Definition of the end of Network, meter installation and meter pipework

Removal of existing ECV handles

If the new meter being installed affects the operation of the existing ECV, the orientation of the handle and how it is operated by the consumer, then it is your companies' responsibility to supply the new style of ECV handle or revert back to the existing meter type to maintain safe operation of the ECV.

Example:

A crank handle may need to be installed where an E6 type meter is installed facing upwards.

Minor Service Alterations

If the Inlet and/or Outlet pipework requires to be altered by up to 2m, then please refer to your company procedures as you may be required to carry out this type of alteration when exchanging a meter. If you move the meter location by over 2m you must fit an AECV and associated label. Please refer to IGEM/G/4 Edition 2 and BS 6400-1:2016 for full details. Service alterations are contestable works so please consult your company first before advising the customer to contact the GDN or iGT. GDNs or iGTs will fully charge for this work.

GER suite of documents

GER 1 A guide for GAS meter operatives on reporting and acting on asset condition issues.

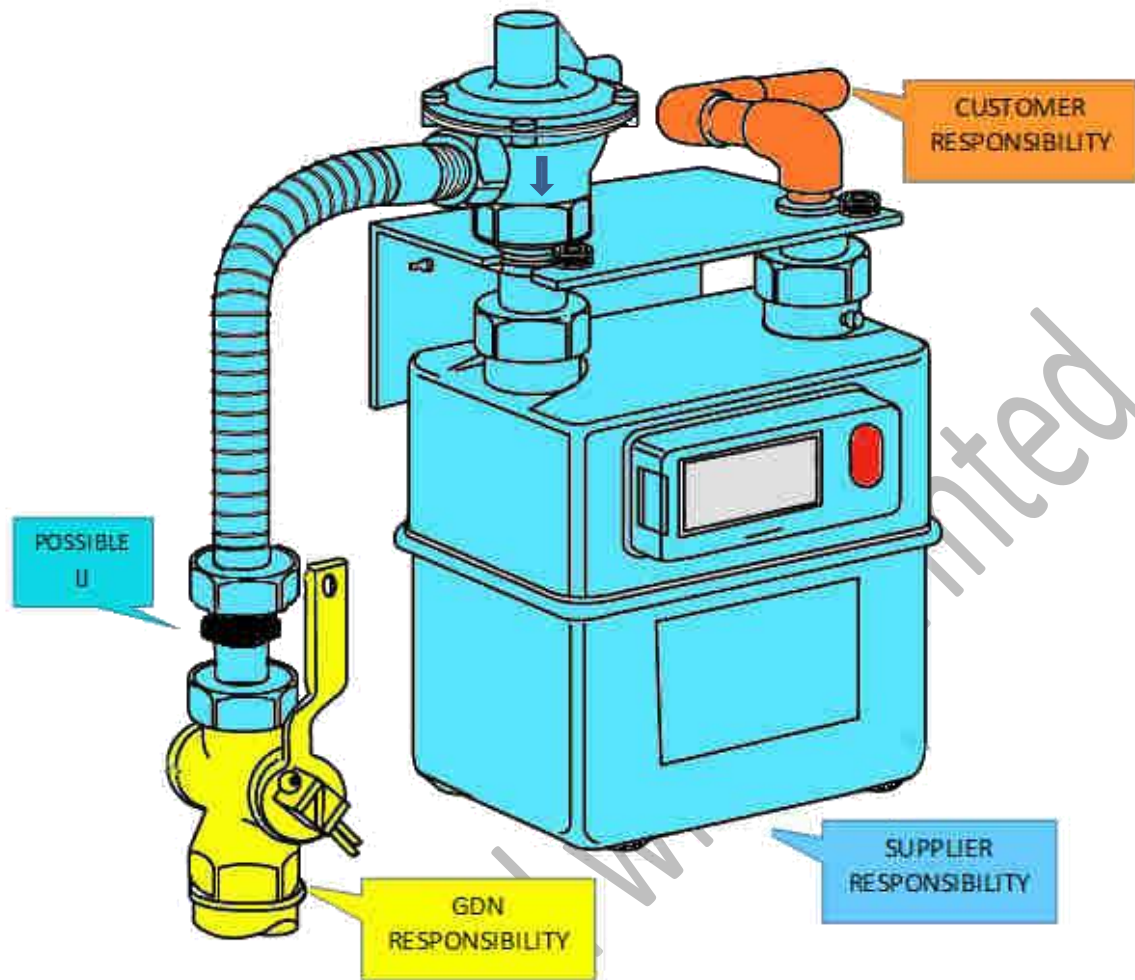
GER 2 BAU issues.

GER 3 Public keys to be used in Network slots on meters. (Limit access due to security)

GER 4 Top 5 Intervention.

GER 5 Correctly identifying exposed PE.

All of the above are hosted by the Energy Networks Association (ENA), on behalf of the Gas Distribution Networks (GDNs), at <http://www.energynetworks.org>



- **Always use new washers.**
- **Always correctly label the meter and complete all metering information boxes using an indelible pen.**
- **Always check outside the property to ensure you are not working on an elevated pressure site as additional governor replacement work may be required. Refer to your company procedures for these sites.**
- **Always carry out a final pressure tightness test before leaving site.**
- **Always use your voltstick before touching any gas apparatus.**
- **Always fit the Meter Regulator in the correct direction of flow.**
- **Only one pliable (flexible) connector can be used within a meter installation, except for installations in a semi-concealed box with a bracket and outlet adaptor. See Gas-Safe TB 084.**
- **Always carry and use approved LDF to check your work where applicable.**

List of Asset Condition Codes

Category A - Emergency

Code	Description
A01	Gas Escape: visible signs of escaping gas or a smell of gas exists which is not associated with the downstream gas installation.
A02	Suspected Fumes/Carbon Monoxide.
A03	Removed.
A04	Medium Pressure (MP) or Intermediate Pressure (IP) gas service internal to domestic premises and built over services.
A05	Emergency Control Valve inoperable or faulty (including failed let by test).
A06	Incorrect gas pressure measured at the outlet of the meter caused by new apparatus / distribution network.
A07	Refusal to Disconnect.

Category B - Remedial work

Code	Description
B01	Gas service pipe shows signs of severe corrosion.
B02	Old uncapped STEEL pipe of unknown type at existing meter position.
B03	ECV is an old-style Thumb tap.
B04	Low Pressure (LP) built over services.
B05	Emergency Control Valve falls to open position, e.g. handle fitted incorrectly.

Category C – Potential Asset Management Information

Code	Description
C01	Removed.
C02	Visible or exposed Polyethylene service pipe.
C03	Rising service pipe located within a cavity wall.
C04	Additional live service discovered in domestic property.
C05	Third party damage to gas service, e.g. signs of vandalism, or other external factors.
C06	Removed.
C07	Yellow cap instead of ECV handle.



Guidance Sheets

Category A- Emergency

Immediately report to the Gas Emergency Service by telephone (0800 111 999)

Safety Action code

A01

Code Description

A01 - Gas Escape: visible signs of escaping gas or a smell of gas exists which is not associated with the downstream gas installation.

Actions:

Where you are informed of and/or you detect an unexpected smell of gas, which has not been identified downstream of the Emergency Control Valve (e.g. the installation passes a tightness test but there is a detectable smell of gas):

- Contact the Gas Emergency Service 0800 111 999 to attend site and investigate within Emergency Response Standards of Service – report code A01.
- Follow your organisation's gas safe instructions – but as a minimum you should initiate safety actions on site, e.g. turn off the gas, unless in a cellar where you can smell gas, ventilate the property and evacuate if necessary.
- Remain on site if there is an immediate risk and the installation cannot be made safe and secure.

Document reference:

- IGEM:
 - IGEM/G/11 - Gas Industry Unsafe Situation Procedure (Current edition).
 - Gas Safety (Management) Regulations 1996.
 - Gas (Standards of Performance) Regulations 2005.
 - IGEM/SR/29 (Institution of Gas Engineers and Managers, Safety Regulations) – Dealing with gas escapes. Copyright 2012.

Category A- Emergency

Immediately report to the Gas Emergency Service by telephone (0800 111 999)

Asset Condition Code	Code Description
A02	A02 - Suspected Fumes/Carbon Monoxide.

Actions:

- Where there are visual signs of spillage or leakage of products of combustion from an appliance this should be dealt with in accordance with the Gas Industry Unsafe Situations Procedure (Current edition). As long as no one has received medical attention i.e. hospital attendance, ambulance called etc., or appears to be suffering from the symptoms of exposure to CO (see below), meter work can continue.
- Only contact the GDN where anyone has received medical attention, see actions above, or appears to be unwell with symptoms that might be caused by exposure to Carbon Monoxide (CO):
 - Advise that immediate medical attention is sought and make the gas installation safe, ventilate the property and inform the Gas Emergency Service.
 - Turn off all appliances where safe to do so.
 - Do not enter cellars.
- Contact the GDN via the Gas Emergency Service 0800 111 999 – report code A02.
- Document references:
 - Gas Safety (Installation and Use) Regulations 1998 – L56 Approved Codes of Practice May 2011.
 - IGEM/G/11– Gas Industry Unsafe Situation Procedure (Current edition).
 - IGE/GL/8 – Reporting and Investigating of Gas related incidents. Edition 3.
 - IGE/SR/29 – Dealing with Gas Escapes.

Guidance: What is Carbon Monoxide

Carbon Monoxide (CO) is a colourless, odourless, tasteless gas which can be emitted by faulty appliances powered by any fuel that burns.

Signs of Carbon Monoxide

Look out for gas appliance burning with a yellow / orange flame that is normally blue, extra condensation, pilot lights blowing out, sooting and / or yellow stains round appliances.

- | | | |
|----------------------------|--------------------------|---------------------------|
| - 'flu-like' symptoms | - chest or stomach pains | - erratic behaviour |
| - nausea and / or vomiting | - breathlessness | - feeling tired or drowsy |
| - giddiness / headaches | - visual problems | |

Category A- Emergency

Immediately report to the Gas Emergency Service by telephone (0800 111 999)

Asset Condition Code

Code Description

A03

A03 - Removed.

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Category A- Emergency

Immediately report to the Gas Emergency Service by telephone (0800 111 999)

Asset Condition Code	Code Description
A04	A04 - Medium Pressure (MP) or Intermediate Pressure (IP) gas service internal to domestic premises and built over services.

Actions:

- Contact the GDN via the Gas Emergency Service 0800 111 999 to attend site and investigate
 - report code A04.
 - Classification of this activity will require the GDN to arrange an urgent appointment with the consumer to attend site.
 - For LP polyethylene service that have been built over, see B04.
- You may or may not stay on site – follow your organisation's gas safe instructions.

Document reference:

- Gas Safe:
 - Gas Safe Register, Technical Bulletin 003 – Built over polyethylene (PE) Low and Medium pressure natural gas services – Safety concern.
- IGEN:
 - IGE/TD/4 (Institution of Gas Engineers, Transmission and Distribution) – PE and steel gas services and service pipework.
 - IGE/G/11 Gas Industry Unsafe Situation Procedure (Current edition).

Category A- Emergency

Immediately report to the Gas Emergency Service by telephone (0800 111 999)

Asset Condition Code	Code Description
A05	A05 - Emergency Control Valve inoperable or faulty (including failed let by test).

Actions:

- Where you identify an Emergency Control Valve is at risk, ask the GDN (via the Gas Emergency Service 0800 111 999) to attend site and investigate within Emergency Response Standards – report code A05.
 - Classification of this activity will require the GDN to arrange an urgent appointment with the consumer to attend site.
- If the ECV is inaccessible, refer to Appendix Reference 3 and follow the actions described in that section.

Document reference:

- IGEM:
 - IGE/UP/1B edition 3 (Institution of Gas Engineers, Utilisation) - Tightness testing and direct purging of small Liquefied Petroleum Gas/Air, Natural Gas and Liquefied Petroleum Gas installations.
 - IGE/G/11 Gas Industry Unsafe Situation Procedure (Current edition).

Category A- Emergency

Immediately report to the Gas Emergency Service by telephone (0800 111 999)

Asset Condition Code	Code Description
A06	A06 - Incorrect gas pressure measured at the outlet of the meter caused by new apparatus / distribution network.

Actions:

- Please ensure you have carried out your installation checks correctly as you may have an out of box failure (s) with your meter governor(s). Remember if the installation passed the initial tightness tests then your actions or newly fitted apparatus is the most likely cause of the pressure problems. Please refer to your company procedures on how to correctly test your installation and what to do with out of box failures.
- Ensure that you have an adequate gas flow when measuring working pressures and refer to Gas-Safe TB-071.
- If the regulator is not set to the correct working pressure after the installer has followed their company procedures, calling the GDN may result in a PEMS regulator being fitted which will attract the appropriate charge.
- Where you know the installation is working as designed and the incorrect pressure affects the safe operation of any appliance, e.g. combustion and / or flame stability, and the cause is known not to be the installation pipework, meter and / or regulator, contact the GDN or iGT via the Gas Emergency Service 0800 111 999 to attend site and investigate within Emergency Response Standards of Service – report code A06.

Document reference:

- IGEM:
 - IGE/G/11 Gas Industry Unsafe Situation Procedure (Current edition).
- Gas Safe
 - Gas Safe Register, Technical Bulletin 071 – Checking the operating pressure of the meter regulator – Natural gas.
- BSI
 - BS6400:1 - 2016

Category A- Emergency

Immediately report to the Gas Emergency Service by telephone (0800 111 999)

Asset Condition Code	Code Description
A07	A07 - Refusal to disconnect

Actions:

- Ensure you have carried out all your installation checks correctly.
- All engineers working on, or encountering, appliances/installations that are unsafe shall classify the unsafe situation as ID or AR as appropriate.
- With the gas user/responsible person's agreement, the engineer shall make every endeavour to rectify the situation(s) and make the appliances/installation safe at the time of the visit. With permission seal the appliance/installation with an appropriate fitting. See IGEM/G/11 Section 6.1 for full details
- If the gas user/responsible person refuses to allow disconnection, endeavour to turn off the appliance/installation and:
 - Contact the GDN or iGT via the Gas Emergency Service number 0800 111 999 to attend site and investigate within Emergency Response Standards of Service – report code A07.
 - Inform the user/responsible person that continued use would contravene the law e.g. GSIUR Regulation 34.
 - Remain at the site to hand over details to the Gas Network Operative attending site.
 - Consult your line manager and company procedures.

Document reference:

- IGEM:
 - IGE/G/11 Gas Industry Unsafe Situation Procedure (Current edition).

Category B - Remedial Work

Action may be required before you can complete your work

Asset Condition Code	Code Description
B01	B01 - Gas service pipe shows signs of significant corrosion.

Actions:

- GDNs are interested in situations where the gas service pipe and / or fittings show physical signs of corrosion.
- Where pitting of pipe appears visually to be deeper than just powdery rust it may be necessary to assess the remaining pipe wall thickness, particularly at areas where water can collect and react with unprotected metal. Look for evidence of flaking or loose pipe wrapping and signs of localised pitting.

NOTE Do not rub any live severely corroded pipes.

In these circumstances, the GDN or iGT should be informed of the situation as they will need to undertake a risk assessment prior to any meter works being undertaken. See page 8.

Refer to the current version of the IGEM/G/11 Gas Industry Unsafe Situations Procedure-section 3.11

If you discover other unsafe gas service terminations, example below, please inform the GDN/iGT. Notify GDN or iGT - report code B01. See page 8.

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Category B - Remedial Work

Action may be required before you can complete your work

Asset Condition Code	Code Description
B02	B02 - Old uncapped steel pipework of unknown type at existing meter position.

Actions:

- Notify the GDN or iGT - report code B02.
 - Classification of this activity will require the GDN to arrange an appointment with the consumer to attend site. See page 8.

Document reference:

- IGEM:
 - IGE/TD/4 (Institution of Gas Engineers, Transmission and Distribution) – PE and steel gas services and service pipework.

Category B - Remedial Work

Action may be required before you can complete your work

Asset Condition Code

Code Description

B03

B03 - ECV is an old-style Thumb tap.

Actions:

- Abort your meter installation and notify the GDN in this case.
- The GDN will arrange an appointment with the customer to exchange the ECV. See page 8.

Category B - Remedial Work

Action may be required before you can complete your work

Asset Condition Code	Code Description
B04	B04 - Low Pressure (LP) built over services.

Actions:

- Notify the GDN or iGT - report code B04. Classification of this activity will require the GDN to arrange an appointment with the consumer to attend site. See page 8.

Document reference:

- IGEN:
 - IGE/TD/4 (Institution of Gas Engineers, Transmission and Distribution) – PE and steel gas services and service pipework.
 - IGE/G/11 Gas Industry Unsafe Situation Procedure (Current edition).
- Gas Safe:

Gas Safe Register, Technical Bulletin 003 – Built over polyethylene (PE) Low and Medium pressure natural gas services – Safety concern.

Category B - Remedial Work

Action may be required before you can complete your work

Asset Condition Code	Code Description
B05	B05 - Emergency Control Valve falls to open position, e.g. handle fitted incorrectly.

Actions:

- If the only action required in order to resolve the issue is for you to correctly re-fit the meter handle, then complete the activity.
- Where you identify that the Emergency Control Valve is at risk, in accordance with the Gas Industry Unsafe Situation Procedures (Current edition), pass to the GDN to arrange an appointment with the consumer to rectify.
 - Classification of this activity will require the GDN to arrange an appointment with the consumer to attend site. See page 8 for contact numbers.

Document reference:

- IGEM:
 - IGE/G/11 Gas Industry Unsafe Situation Procedure (Current edition).

Category B - Remedial Work

Action may be required before you can complete your work

Asset Condition Code

B06

Code Description

B06 - Lead Inlet pipes only

**Actions:**

- Where you identify a Lead Inlet, you are advised to stop any gas meter work and consult your company procedures
 - Classification of this activity will require the GDN to arrange an appointment with the consumer to attend site. See page 8 for contact numbers.

Category C- Asset Condition Notification
Continue with your work and subsequently report the issue

Asset Condition Code	Code Description
C01	C01 - Removed.

Actions:

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Category C- Asset Condition Notification

Continue with your work and subsequently report the issue

Asset Condition Code

Code Description

C02

C02 - Visible or exposed Polyethylene service pipe.

**Actions:**

- There is no requirement for GDN or iGT works prior to completing your metering work.
- Check Reference 23 on page 55 before reporting this to the GDN or iGT.
- Notify the GDN or iGT - report code C02. See page 8.

Category C- Asset Condition Notification

Continue with your work and subsequently report the issue

Asset Condition Code	Code Description
C03	C03 - Rising service pipe located within a cavity wall.

Actions:



- For Permalite meter box situations follow guidance in Gas-Safe **TB136**.

The GDN needs to know about any situations where a service pipe rises in a cavity wall to a meter position/ECV. Usually this occurs when an outer skin has been added to what was a single skinned property or when other building works have been undertaken at the premises.

The GDN does not need to be informed of situations where the service pipe runs through a cavity wall taking the shortest possible route or rises through a solid floor.

If the issue is with the installation pipework, then refer to the GIUSP.

For assessment of Permalite type housings then you must refer to Gas-Safe **TB136** to identify the configuration onsite and determine whether meterwork can be undertaken.

Category C- Asset Condition Notification

Continue with your work and subsequently report the issue

Asset Condition Code	Code Description
C04	C04 - Additional live service discovered in domestic property.

This situation can occur when two individual properties have been converted into one.

Actions:

- Notify the GDN or iGT – report code C04. See page 8.
- No further action required.

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Category C- Asset Condition Notification

Continue with your work and subsequently report the issue

Asset Condition Code	Code Description
C05	C05 - Third-party damage to gas service, e.g. signs of vandalism, or other external factors.

Actions:

- Notify GDN or iGT – report code C05. See page 8.
- If smell of gas or signs of a gas escape, follow guidance on Guidance Sheet A01.
- You do not need to stay on site unless you report an escape – follow your organisation’s gas safe instructions.

Document reference:

- IGEN:
 - Gas (Standards of Performance) Regulations 2005.
 - IGEN/SR/29 (Institution of Gas Managers and Engineers, Safety Regulations) – Dealing with gas escapes.



Category C- Asset Condition Notification

Continue with your work and subsequently report the issue

Asset Condition Code	Code Description
C06	C06 - Removed

Actions:

Intentionally Left Blank.

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Appendix item – For information No GDN or iGT action or intervention is necessary	
Reference	Code Description
1	Reference 1 - Suspected voltage on outlet pipework following initial check with appropriate voltage indicator.
<p><u>This is not a GDN or iGT Issue.</u></p> <p><u>Actions:</u></p> <ul style="list-style-type: none"> • No GDN or iGT action required. • Follow your company procedures when dealing with a live voltage indication. • The fault current may be travelling from outside the premises and the local DNO may need to be informed. <p><u>Document reference:</u></p> <ul style="list-style-type: none"> • General: <ul style="list-style-type: none"> ○ Gas Safety (Installation and Use) Regulations 1998 – L56 Approved Codes of Practice May 2011. • IGEM: <ul style="list-style-type: none"> ○ IGE/G/11 Gas Industry Unsafe Situation Procedure (Current edition). <p>Note: The above documents cover Main Equipotential Bonding issues.</p>	

Appendix item – For information

No GDN or iGT action or intervention is necessary

Reference	Code Description
2	Reference 2 - Blocked medium pressure regulator vent pipe or inappropriately installed vent pipe, e.g. pipe end submerged.

This is not a GDN or iGT Issue.

Actions:

- For medium pressure regulators that are part of the meter installation, it is the Supplier's and / or their Meter Asset Manager's responsibility to rectify the situation.
 - A potential solution would be to consider moving the flexible vent pipe.
 - An alternative solution would be a service alteration, which is contestable works.
- For gas service pipe alterations contact the GDN, iGT (See page 8) or a suitable Gas Industry Registration Scheme (GIRS) Registered UIP (Utility Infrastructure Provider).

Document reference:

- IGEM:
 - IGE/G/11 Gas Industry Unsafe Situation Procedures (Current edition).
- BSI:
 - BS6400-2: Section 6.6 Vent pipes.

Appendix item – For information

No GDN or iGT action or intervention is necessary

Reference	Code Description
3	Reference 3 - Meter or Emergency Control Valves position enclosed and installer is unable to carry out work.

This is not a GDN or iGT Issue.



Actions:

- Follow Gas Industry Unsafe Situation Procedures (Current edition).
- The customer or landlord may need to move fixtures and fittings to allow full access to the ECV.
- The customer or landlord may need to request a service pipe alteration to resolve this issue - these are contestable works.
- For gas service pipe alterations contact the GDN, iGT (See page 8) or a suitable Gas Industry Registration Scheme (GIRS) Registered UIP (Utility Infrastructure Provider).

Document reference:

- General:
 - Gas Safety (Installation and Use) Regulations 1998 – L56 Approved Codes of Practice May 2011.

Appendix item – For information

No GDN or iGT action or intervention is necessary

Reference	Code Description
4	Reference 4 - Unable to work on or replace meter due to insufficient space or positioning of meter.

This is not a GDN or iGT Issue.



Actions

- This is not a GDN or iGT issue.
- The customer or landlord may need to move fixtures and fitting to allow full access to the meter.
- The customer or landlord may need to request a service pipe alteration to resolve this issue - these are contestable works.
- For gas service pipe alterations contact the GDN, iGT (See page 8) or a suitable Gas Industry Registration Scheme (GIRS) Registered UIP (Utility Infrastructure Provider). This is chargeable work.
- After consultation with the Meter Asset Manager, consider the option of extending the meter inlet to allow relocation of the meter.

Document reference:

- General:
 - Gas Safety (Installation and Use) Regulations 1998 – L56 Approved Codes of Practice May 2011.

Appendix item – For information

No GDN or iGT action or intervention is necessary

Reference	Code Description
5	Reference 5 - Missing Emergency Control Valve handle.

Actions:

- Please ensure that you always carry spare handles.
- Fit a replacement handle.
- No contact needed with the GDN or iGT unless a specific handle is not available. If no handle is available for this type of ECV then the Emergency Control Valve is at risk, in accordance with the Gas Industry Unsafe Situation Procedure (Current edition), pass to the GDN to arrange an appointment with the consumer to rectify. See page 8. Also see B05.
 - Classification of this activity will require the GDN to arrange an appointment with the consumer to attend site.

Document reference:

- General:
 - Gas Safety (Installation and Use) Regulations 1998 – L56 Approved Codes of Practice May 2011.
- Ofgem:
 - <https://spaa.co.uk/Lists/OperationalGuidelines/ECV%20Handles%20protocol.pdf>

Appendix item – For information

No GDN or iGT action or intervention is necessary

Reference	Code Description
6	Reference 6 - Crossed meters, i.e. flat environments.

This is not a GDN or iGT Issue.

Actions:

- Supplier(s) to resolve.
- No GDN or iGT action required.

Note: An administrative process, initiated by the Supplier, will follow the identification of a crossed meter to address the customer's potential billing issues that may arise.

Uncontrolled when printed

Appendix item – For information

No GDN or iGT action or intervention is necessary

Reference	Code Description
7	Reference 7 - LP Gas meter installation in unacceptable close proximity to electricity supply or meter (150mm minimum clearance).

This is not a GDN or iGT Issue.

A gas meter and its associated fittings must be more than 150 mm from an electricity meter/electrical apparatus or more than 25 mm away from the electricity supply and distribution cables.

Actions:

- As specified in BS 6400:1, ensure that a suitable insulating material is placed between the existing gas meter and the electricity service or electricity meter.
- No notification required to the GDN or iGT.

Document reference:

- General:
 - Gas Safety (Installation and Use) Regulations 1998 – L56 Approved Codes of Practice May 2011, Regulation 12(3).
- BSI
 - BS 6400:1 2016
 - BS 6891:2005+A2:2008
- IET On-site Guide
 - Section 2.3, Page 18

Appendix item – For information

No GDN or iGT action or intervention is necessary

Reference	Code Description
8	Reference 8 - Meter fitted on sole means of escape route.

This is not a GDN or iGT Issue.

Actions:

- Refer to your company procedures if you find this issue.
- Reference L56 ACOP 12(1) - (2).
- An alternative solution to the above guidance or relocating metering installations would be a service alteration, which is contestable work and fully chargeable.
- For gas service pipe alterations contact the GDN, iGT or a suitable Gas Industry Registration Scheme (GIRS) Registered UIP (Utility Infrastructure Provider).

Document reference:

- BSI:
 - BS 6400:1- 2016

Appendix item – For information

No GDN or iGT action or intervention is necessary

Reference	Code Description
9	Reference 9 - Damage to meter box or water ingress problems.

This is not a GDN or iGT issue.

If you find a damaged meter box or a semi-concealed box full of water,



Actions:

- This is a matter for the Supplier or customer to resolve.
- No contact with the GDN or iGT is required.
- The Supplier or customer may need to request a service pipe alteration to allow the damaged meter box to be replaced, e.g. inset meter box damage exposing cavity in wall – service alterations are contestable works and fully chargeable.
- For gas service pipe alterations contact the GDN, iGT (See page 8) or a suitable Gas Industry Registration Scheme (GIRS) Registered UIP (Utility Infrastructure Provider).

Document reference:

- BSI:
 - BS 6400:1 – 2016.
- AMO reference:
 - <https://www.meteroperators.org.uk/faqs>

Appendix item – For information

No GDN or iGT action or intervention is necessary

Reference	Code Description
10	Reference 10 - Risk to the public or customer due to meter box position, e.g. semi concealed in public footpath.

This is not a GDN or iGT Issue.



Actions:

- The Supplier or customer shall resolve as necessary.
- The Supplier or customer may need to request a service pipe alteration to allow the meter box to be repositioned – these are contestable works and fully chargeable.
- For gas service pipe alterations contact the GDN, iGT (See page 8) or a suitable Gas Industry Registration Scheme (GIRS) Registered UIP (Utility Infrastructure Provider).

Document reference:

- BSI:
 - BS 6400:1 – 2016.

Appendix item – For information

No GDN or iGT action or intervention is necessary

Reference	Code Description
11	Reference 11 - No visible evidence of equipotential bonding at gas meter installation or on outlet pipework immediately inside the property.

This is not a GDN or iGT Issue.

Actions: or

- This is not a GDN or iGT issue.
- Follow the procedure in the Gas Industry Unsafe Situation Procedure (Current edition).

Document reference:

- IGEM:
 - IGE/G/11 Gas Industry Unsafe Situation Procedure (Current edition).
- BSI:
 - BS 6400:1 – 2016.
- General:
 - Gas Safety (Installation and Use) Regulations 1998 – L56 Approved Codes of Practice May 2011, Regulation 12(3).

Appendix item – For information

No GDN or iGT action or intervention is necessary

Reference	Code Description
12	Reference 12 - Adverse environment for the location of the gas meter installation, e.g. too hot, cold, and damp, etc.

This is not a GDN or iGT Issue.

Actions:

- This is a matter for the Supplier to resolve.
- The Supplier or customer may need to request a service pipe alteration to allow the meter installation to be repositioned - service alterations are contestable works and fully chargeable.
- Please refer to your company procedures and BS6400:1 - 2016
- For a chargeable gas service pipe alteration, contact the GDN, iGT or a suitable Gas Industry Registration Scheme (GIRS) Registered UIP (Utility Infrastructure Provider). See page 8.

Document reference:

- BSI:
 - BS 6400:1 – 2016.

Appendix item – For information

No GDN or iGT action or intervention is necessary

Reference	Code Description
13	Reference 13 - Meter Installation believed to be at substantial risk of physical damage.

This is not a GDN or iGT Issue.



Actions:

- This is a matter for the Supplier to resolve.
- The Supplier or customer may need to request a service pipe alteration to allow the meter installation to be repositioned - service alterations are contestable works and fully chargeable.
- For gas service pipe alterations contact the GDN, iGT or a suitable Gas Industry Registration Scheme (GIRS) Registered UIP for service alteration services. See page 8.

Document reference:

- BSI:
 - BS 6400:1 – 2016.

Appendix item – For information

No GDN or iGT action or intervention is necessary

Reference	Code Description
14	Reference 14 - Vegetation growth preventing access to the meter.

This is not a GDN or iGT Issue.

Actions:

- This is a matter for the Supplier or customer to resolve.

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Appendix item – For information

No GDN or iGT action or intervention is necessary

Reference	Code Description
15	Reference 15 - Electrical Insulation Joint (IJ) fitted after the Emergency Control Valve.

This is not a GDN or iGT Issue.

Where an electrical insulation joint is fitted downstream of the ECV (in a legacy installation), please refer to your company procedures regarding this type of fitting. See diagram on page 11 of this document for a possible IJ position. An IJ may be found anywhere between the ECV and the Meter Regulator.

Actions:

- Please refer to your company procedures regarding Insulation Joints.
- Do not call the GDN for removal as the IJ is after the ECV.

Document reference:

- BSI:
 - BS 6400:1 – 2016.
- General:
 - Gas Safety (installation and use) Regulations 1998.
- ENA
 - Engineering Recommendation G12 Issue 4 Amendment 1 December 2015 Requirements for the Application of Protective Multiple Earthing to Low Voltage Networks.
- IGEN:
 - IGEN/G/5 Edition 2 document.

Appendix item – For information

No GDN or iGT action or intervention is necessary

Reference	Code Description
16	Reference 16 - Old style 'non-typical' ECV is encountered that is not to current British standard (BS746 or BS21).

This is not a GDN or iGT Issue

There are many types of ECV currently in operation which are different in style to the current British Standards BS21 and BS746. One example is shown in the pictures below.



Pictures above show an example of an ECV which will require an adaptor – the ECV does not require changing if it is fully functional and not leaking.

Provided that these ECV's are not letting by, leaking or inoperable (i.e. they can be turned on and off) they are acceptable and do not require exchanging.

Actions:

- Suppliers and installers need to carry the appropriate adaptors to allow them to make connections to these ECV's. See IGEM-GM-PRS-1 (Comm 1793).

In most instances, it will not be necessary to exchange the ECV.



Picture above show an example of two types of ECV adaptor to allow the meter install to take place – both with a BS746 outlet thread and 22mm capillary – the ECV does not require changing if it is fully functional and not leaking.

Appendix item – For information

No GDN or iGT action or intervention is necessary

Reference	Code Description
17	Reference 17 - Medium or Intermediate Pressure ECV.

This is not a GDN or iGT Issue

There are many gas services operating at medium pressure terminating with an appropriate ECV. It should be noted that in some areas intermediate pressure ECVs will be encountered. Check for any labelling attached to the ECV i.e. the Service Information Label (SIL) for indication of the supply pressure.



Provided that these ECV's are not letting by, leaking or inoperable (i.e. they can be turned on and off) they are acceptable and do not require exchanging.



Actions:

- Suppliers and installers need to carry the appropriate adaptors to allow them to make connections to these ECV's.
- In most instances, it will not be necessary to exchange the ECV.
- The pictures above do not show the full range of suitable adaptors available. See IGEM-GM-PRS-1 (Comm 1793).

Appendix item – For information
No GDN action or intervention is necessary

Reference	Code Description
18	Reference 18 - Yellow Handle ECV iGT LP Sites

This is an iGT issue



Actions:

- Adaptors for this type of installation are available and must be used when exchanging the meter. The correct adaptor fitting is pictured on the far right.
- Where valves with butterfly handles are encountered, contact the relevant iGT once you have exchanged the meter to arrange a handle exchange.

Appendix item – For information
No GDN action or intervention is necessary

Reference	Code Description
19	Reference 19 - Lead Outlet pipes

Lead outlets are not a GDN or iGT issue.



Actions:

- This is a matter for the Supplier or customer to resolve.
- You may have to extend your copper pipework so please refer to your company procedures and metering contract.
- If you move the meter location by over 2m, you must fit an AECV and associated label.

Appendix item – For information
No GDN action or intervention is necessary

Reference	Code Description
20	Reference 20 - iGT LP sites utilising Medium Pressure ECVs.

This is an iGT issue

The following photographs indicate examples of adaptors and installation configuration.



3/4" female BSP Taper x 3/4" male BSP Taper Valve



3/4" female BSP Taper x 3/4" male BSP Taper Valve with 3/4" female BSP Taper x 3/4" BS746 adaptor fitted. (Same adaptor can be used for angled valves with 3/4" male BSP outlet thread).

A number of Medium Pressure ECVs were installed for Low Pressure applications on a small number of iGT networks in the late 1990s and early 2000s. When installed they complied with the industry standards of the day. Should a MAM/meter installer require to exchange a LP meter and encounter an ECV rated for MP, suppliers and installers need to carry the appropriate adaptors to allow them to make connections to these ECVs.

No iGT or GDN intervention is necessary, however should a MAM or meter installer wish to commission the replacement of the ECV, this will be a chargeable operation.

Actions:

- Please use the correct adaptor as fully described in the document to be found at the URL below.
- Only use these adaptors on iGT sites.

Further guidance can be found at: www.gtc-uk.co.uk/suppliers/downloads and select the Energy Suppliers radio button.

Also see IGEM-GM-PRS-1 (Comm 1793) for adaptor designs.

Appendix item – For information

No GDN action or intervention is necessary

Reference	Code Description
21	Reference 21 - Combined IP/LP or MP/LP Regulator Installation (Type C & D Regulators) with above ground valve.

This is not a GDN issue



The orientation and type of regulator arrangement may vary according to the pressure tier and period when the installation was installed. The first valve above ground is the end of the gas network, therefore these regulators form part of the metering installation and are not a GDN responsibility. Please ensure that you are competent to work on this type of installation as you may be required to replace all governor apparatus on the site.

Actions:

- Check for any labelling attached to the ECV i.e. Service Information Label (SIL) for indication of the supply pressure. A visual inspection outside the property must be carried out, to check for any external regulators.
- Please refer to your company procedures regarding this type of installation if you find an external regulator. A fully chargeable service alteration may be required.
- These installations must always be recorded for MAM maintenance purposes.

Document references:

- IGEM:
 - IGEM/G/1 Edition2 - Defining the end of the Network, a meter installation and installation pipework.
- British Standards
 - BS6400-2:2006. Part 2: Medium pressure (2nd family gases).
- Ofgem
 - COP/1c Code of Practice for all Higher Pressure and all other Low-Pressure Meter Installations not covered by COP/1a or COP/1b.
- HSE
 - Pressure Systems Safety Regulations (PSSR) - Written Scheme of Examination (WSoE) (IP installations).

Appendix item – For information
No GDN action or intervention is necessary

Reference	Code Description
22	Reference 22 - Meter fitted at height

This is not a GDN issue



The meter is fitted at height and cannot be worked on without ladders.

Actions:

- This is a matter for the Supplier and customer to resolve.
- You may have to move the meter by extending your copper pipework so please refer to your company procedures and metering contract.
- Please refer to BS6400:1 - 2016.
- The Supplier or customer may need to request a service pipe alteration to allow the meter installation to be repositioned - service alterations are contestable works so please consult your company first before advising the customer to contact the GDN as the work is fully chargeable.
- For gas service pipe alterations contact the GDN, iGT or a suitable Gas Industry Registration Scheme (GIRS) Registered UIP (Utility Infrastructure Provider). See page 8.

Appendix item – For information
No GDN action or intervention is necessary

Reference	Code Description
23	Reference 23 - Exposed PE clad steel sleeve, PE sleeve or PE clad copper outlet.

This is not a GDN or iGT issue



Please do not report a PE clad steel sleeve or a PE sleeve as exposed PE on an inlet connection. See first red circle example above.

Do not report outlet pipework as this is the property owners' responsibility.

You may also find PE clad copper on an outlet which should not be confused as exposed PE, see second picture above.

Please see GER5 for more detailed examples and pictures.

Appendix item – For information

No GDN action or intervention is necessary

Reference	Code Description
24	Reference 24 - Asbestos found at meter location

This is not a GDN or iGT issue

Asbestos was not commonly used as part of a gas meter installation across the old gas regions, so the chances of finding any are low. However, if you do find asbestos at the gas meter location:

Actions:

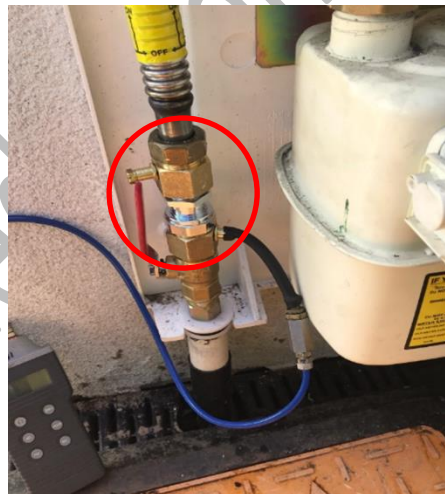
- Do not disturb the asbestos.
- Immediately consult your company procedures for identifying and dealing with asbestos.
- If in doubt call your company supervisor for advice.
- Refer to the AMO Guidance Document 2019.
 - Guidance to Manage Asbestos During Metering Activities
 - www.MeterOperators.org.uk
- No need to call the GDN.

Appendix item – For information
No GDN action or intervention is necessary

Reference	Code Description
25	Reference 25 - Thermal Cut Off (TCO) device at meter location

This is not a GDN or iGT issue

Where a thermal cut off device is fitted downstream of the ECV (in a legacy installation), please refer to your company procedures regarding this type of fitting. See diagram on page 11 of this document for a possible position that may be similar to an Insulating Joint. A TCO may be found anywhere between the ECV and the Meter Regulator. The picture below on the left shows an old style TCO device. Some Multiple Occupancy Buildings may have newer style TCO devices, see red circle below. These TCOs should not be removed and if they are removed, they must be replaced with a suitable alternative.



Actions:

- Please refer to your company procedures regarding Thermal Cut Off devices.
- Do not call the GDN for removal as the TCO is after the ECV.

Document references:

- British Standards
 - BS6400-1:2016.

Appendix item – For information
No GDN action or intervention is necessary

Reference	Code Description
26	Reference 26 - Unsupported Above Ground Service Pipe

This is a GDN or iGT issue

Where you discover unsupported service pipework please refer to Table 1 below before reporting the issue to the relevant gas Network. If the length of unsupported pipe exceeds the length in the table below then please pass the details to the GDN or iGT, also inform the customer that the GDN or iGT will be in touch to rectify the problem.

Maximum Unsupported Length (m)		
Nominal Bore	Screwed Steel horizontal	Screwed Steel vertical
¾"	2.5m	3.1m
1"	2.5m	3.1m
1½"	2.7m	3.3m
2"	3.0m	3.7m

Table 1

The above table is the most common service pipes you will find, but a full list of pipe sizes, materials and jointing techniques can be found in Table 9 of IGEM/G/5 Ed2.

Outlet pipework is the responsibility of the property owner and not the responsibility of the GDN or the iGT.

Actions:

- Please contact the relevant GDN or iGT using the telephone numbers on page 8 if the unsupported service pipework length exceeds the length in the table above. Please quote the unsupported length when calling.
- Please refer to your own company procedures regarding outlet pipework problems.

Document references:

- IGEM
 - IGEM/G/5 Ed2

Appendix item – For information
No GDN action or intervention is necessary

Reference	Code Description
27	Reference 27 – IGT sites with braided steel flexible hose inlet between the service entry and ECV.

This is not a GDN or iGT Issue.

There are a small number of GTC networks with PE services fitted with a braided steel flexible hose between the service entry and ECV. This is installed to accommodate potential ground subsidence within the vicinity of the PE service pipe and must not be removed.

No GTC intervention should be necessary when replacing the meter on such installations and MAMs/meter installers can complete their works as normal.



Further guidance for Suppliers on these installations can be found at: -

www.gtc-uk.co.uk/suppliers/downloads and then select the Energy Suppliers radio button.