



**ACS.MET 4  
INITIAL & RE-ASSESSMENT  
EMERGENCY SERVICE PROVIDER AND  
GAS METER INSTALLER  
NON-DOMESTIC  
DIAPHRAGM METERS  
NATURAL GAS**

**MET4****INITIAL and RE-ASSESSMENT****Introduction**

Tests gas safety competence to install, exchange, remove and commission diaphragm type gas meters.

Candidates who have achieved CMET1 may also install meters within the scope of MET4

Candidates successfully completing this assessment may also install LP meters of capacity  $\leq 6$  m<sup>3</sup>/h.

CBs may adopt Competence and Criteria numbering different to that used in this document.

CB documentation may adopt wording for criteria different to that used in this document, provided the meaning is unaffected.

**Range**

Primary diaphragm meters of badged capacity  $\leq 40$ m<sup>3</sup>/h.

Pipework of diameter  $\leq 2$ " (50 mm) diameter.

LP only.

**Pre-requisites**

CMA1 or CESP1 or CCN1 or COCN1 or CCCN1  
or QCF or S/NVQ.

Note: If working on meters  $>16$ m<sup>3</sup>/hr or working on installations out of scope of UP/1B TPCP1 or TPCP1A is required.

**Note : Work on meters with MP meter  $\leq 6$  m<sup>3</sup>/h require REGT1 , MP supplies  $\geq 6$  m<sup>3</sup>/h also require REGT 2.**

**Exclusions**

Secondary meters; meter reading; pre-payment mechanisms; meter box installation; construction of meter compartments or housings; service pipework; installation or exchange of ECV/MIV; service valves or their operation; meter removal from site and subsequent disposal; testing by OFGEM and theft of gas.

**References**

- HSL56
- IGEM/GM/6 Edition 2
- GIUSP.

Where a reference point (REF) is listed in this criteria this is only a guide to where the criteria could be resourced, therefore the REF may not be exhaustive.

ACS.SMB.003.ACDND indicates those Normative Documents that should be held by ACs.

**Abbreviations**

AC. Assessment Centre

ECV. Emergency control valve

GSIUR. Gas Safety (Installation & Use) Regulations

I. Initial

LP. Low pressure

MIV. Meter inlet valve

MOP. Maximum operating pressure

MOV. Meter outlet valve

MP. Medium pressure

OP. Operating pressure

Ref. Reference.

PERFORMANCE CRITERIA		REF	I	R
1a.	determine pressure in service as LP <del>or MP.</del> OQ Related to service pressures > 75mbar		✓	
1.	check ECV/MIV operates correctly		✓	
2.	note and confirm connected appliances to internal supply are of the 'standard type' <del>OQ Related to non-standard appliances</del>		✓	
3.	check meter and installation components are fit for use and purpose and regulator has been factory set at an appropriate pressure to suit the installation and sealed with manufacturer's mark	IGEM /GM/6 Section 8 and 15	✓	✓
3(a).	Preparation check of meter components for obstructions	IGEM /GM/6 15.1 to 15 1.10	✓	✓
3(b).	check pressure test records of components		✓	
4.	isolate gas supply prior to work		✓	
5.	remove plug/cap from ECV/MIV		✓	
6.	Connect diaphragm meter meter, ECV/MIV and regulator via bracket, semi-rigid connection, fittings, washers	IGEM/GM/6 Fig 30 to 32	✓	
7.	Correct use temporary continuity bond <del>correctly</del>		✓	
7a	<del>Exchange</del> check the meter and <del>check</del> associated pipework and fittings use appropriate materials and jointing agents, to MIs and normative documents (repair gas escape on meter union on installation ) see practical provisions	IGEM/GM/6 Section 10 & MI's		✓
7b	<del>check installation pipework and fittings use appropriate materials and jointing agents, to MIs and normative documents</del>	10.3		✓
7c	<del>check valves, controls, filters, regulators, flanges, and other appropriate gas Safety fittings and equipment use appropriate materials and jointing agents, to MIs and normative documents</del>	IGEM/GM/6 Section 9 & MI's		✓
7d	<del>Exchange meter</del>	IGEM/GM/6 Section 20		✓
8.	re-establish gas supply	Section 16	✓	
9.	check work carried out is gas tight	16.2	✓	✓
10.	purge <del>exchanged</del> meter and re-light appliance(s)	16.2	✓	✓
10a.	check regulator locks up at a pressure <30-28 mbar with no gas flowing	9.2.3	✓	✓
11.	check regulator OP	17.3	✓	✓
12.	<del>break seal, re-set regulator and re-seal</del>	9.2.6-9.2.6.2	✓	
12a	observe meter for faulty operation	IGEM /GM/6	✓	✓
12b	check valves, controls, filters, regulators for correct and safe operation	9.2.3 -9.2.5.3	✓	✓
12c	identify gas safety faults on valves, controls, filters, regulators	17.2.2	✓	✓
12d	identify suitable unsuitable meter locations	Section 14	✓	✓
12e	identify unsafe installations (AR, ID)	GIUSP	✓	✓
13.	disconnect and seal meter		✓	
14.	apply appropriate labels and complete warning notices/ certificates	IGEM/GM/6 Section 18	✓	✓
15.	explain operation and use of ECV/MIV	9.4 - 9.4.8	✓	
16.	<del>verify newly installed pipework between ECV and outlet of regulator for MOP &gt; 75 mbar??</del>			✓
KNOWLEDGE AND UNDERSTANDING		REF	I	R
1.	Incorrect meter locations	GSIUR	✓	
1a	Provisions and clearances required around meters	IGEM /GM/6 7.5.1.2	✓	
1b	Permission requirements for meters & regulators when relocated	TB127	✓	
1d	the use of pliable connections in meter installations	IGEM/GM/6		
2.	determine the meter capacity is sufficient	IGEM /GM/6 5.3. section 8 & Appendix 3	✓	
2a	The requirements and understanding of load	IGEM /GM/6 5.3. section 8 & Appendix 3	✓	
3.	volume of gas which has to be passed by a meter to effect a satisfactory purge		✓	
4.	provision of an MOV		✓	
5.	<del>gas meters supplying mobile dwellings and boats</del>		✓	
6.	ECVs/MIVs when meter is installed remotely from dwelling		✓	
7.	where primary meters serving different parts of a building are grouped together		✓	
8.	<del>installation of secondary meters</del>		✓	
9.	safety notices and labels		✓	
10.	providing gas supply to installation pipework/appliances for first time		✓	
11.	procedure for meter installation when gas service is not connected to gas i.e. Reg.33		✓	
12.	unsafe meter installations		✓	
13.	<del>verifying newly installed pipework between ECV and outlet of regulator for MOP &gt;</del>			✓

	<del>75 mbar ??</del>			
14.	<b>HSL56:</b>			
(i)	Reg.12 Meters – General provisions 12 (1) to (6)		✓	
(ii)	Reg.13 Meter Housings 13 (1) to (4)		✓	
(iii)	Reg.16 Primary meters 16 (1) and (2)		✓	
15	completion of commissioning reports	17.8	✓	✓
16	<b>recognition of meter installations not in scope of IGEM/GM/6 Edition 2 &amp; MET4 i.e.:</b>	IGEM /GM/6 Scope & Appendix 5	✓	✓
	(i) containing a by-pass of the meter and/or of the regulator			
	(ii) not of Standard Design			
	(iii) outside pressure and design capacity scopes having non-standard appliances fitted downstream			
	<del>17. break seal, re-set regulator and re-seal</del>		✓	✓
	<del>18. GT authorisations</del>		✓	✓