

## THE INSTITUTION OF GAS ENGINEERS AND MANAGERS



# TECHNICAL CO-ORDINATING COMMITTEE GOVERNANCE MANUAL

IGEM House, 26 & 28 High Street, Kegworth, Derbyshire, DE74 2DA TEL: 01509 678150

EMAIL: technical@igem.org.uk WEBSITE: www.igem.org.uk

Document ref: CD12/10/23

IND	EX		PA	GE			
1	Revis	ion List		1			
2	Intro	duction		5			
3	Docu	ment Con	trol procedure	5			
4	Missi	on Statem	nent	5			
5	Techr	Technical Committees structure					
	5.1	TCC		6			
		5.1.1 5.1.2 5.1.3 5.1.4 5.1.5 5.1.6	Composition Quorum Chairperson and vice-Chairperson Scope Research funding Delegated Authority	6 7 7 8 8			
	5.2	TCC Sub	o-Committees	8			
		5.2.1 5.2.2 5.2.3 5.2.4	Composition Quorum Chairperson Scope	8 12 12 12			
	5.3	Sub-Co	mmittee Working Groups (IGEM administered Standards)	14			
		5.3.1 5.3.2 5.3.3	Composition Quorum Chairperson	14 14 15			
	5.4	Sub-Co	mmittee Gas Industry Unsafe Situations Working Group (GIUSP)	15			
		5.4.1 5.4.2 5.4.3 5.4.4	Composition Quorum Scope Chairperson	15 15 15 16			
	5.5	Panels		16			
		5.5.1 5.5.2 5.5.3 5.5.4 5.5.5 5.5.6	Composition Quorum Chairperson Committee, Working Group and Panel representation Scope Policy statement	16 17 17 17 18 18			
	5.6	Other w	vork undertaken by IGEM technical services	19			
6	TCC,	Sub-Com	nmittee, Sub-Committee Working Group and Panel proceedings	19			
	6.1	Genera	strategy, policy and communications other than IGEM Standards	19			
	6.2	6.2 Drafting Process – IGEM owned Standards 19					

	6.3	Drafting Process – IGEM administered Standards	22		
	6.4	Approval requirements for all draft Standards and other documents	23		
	6.5	Approval requirements for formal committee communications (other than Standards)	24		
	6.6	Approval requirements for other than formal committee communications and technical Standards	24		
	6.7	Approval requirements for urgent amendments to IGEM Standa	ards 25		
7	Owne	rship and liability for all formal documents	25		
	7.1	IGEM owned Standards and other documents	25		
	7.2	IGEM administered Standards	25		
8	Docur	mentation	25		
	8.1	Committee minutes and Panel notes	26		
	8.2	Actions	26		
	8.3	Industry and committee comments	26		
	8.4	Response to industry comments	26		
9		rcing the drafting and production of IGEM-owned and IGEM-administered ards and other documents	26		
	9.1	IGEM owned	26		
	9.2	IGEM administered	27		
10	Review	w of IGEM Standards	27		
11	Hydro	gen Knowledge centre	29		
12	Techn	ical Enquiries	30		
13	Authoriser for the recognition of training 3				
14	Committee and Panel members (Volunteers)				
15	Secretariat procedures 35				
16	Records 35				
17	Appeals against IGEM decisions 35				
18	Glossa	ary and acronyms	36		
	18.1	Glossary	36		

	18.2	Acronyms	36
APPI	ENDIX		
1	Panel sc	oping document	37
TABI	.E		
1	Require	ment for Approval of draft IGEM owned Standards	23
2	Require	ment for Approval of draft IGEM administered Standards	24
FIGU	JRES		
1	Technica	al Committee Structure	6
2	Drafting	process. IGEM owned Standards. Flowchart	20
3	Drafting	process. IGEM administered Standards. Flowchart	22

#### 1 REVISION LIST

IGEM TCC Governance Manual	Issue: 25	Page 1 of 4
	Date: Septem	ber 2023

ISSUE NO	SECTION	DATE	DESCRIPTION OF REVISION
1	ALL	09/06	New Controlled Document
2	5.2.4	05/07	Revision of GSEC Scope
	5.4.1(c)(ii)	05/07	Revision of number of representatives
	All	05/07	Various editorial changes
3	5.4.1(c)	02/08	Revised Panel composition. Owners' representation increased from 3 to 4 (to cater for the 4 DNOs)
	New 10	02/08	Addition of policy on review of standards.
	New 11	02/08	Change Section 10 to Section 11.
	2	02/08	Deletion of paragraph referring to CD12A.
	5.1.1	02/08	Editorial changes.
	5.1.3	02/08	Editorial changes.
	5.2.1.2	02/08	Editorial changes.
	5.2.1.6	02/08	Add option of TO to support LNGC meetings.
	Various	02/08	Editorial changes to reflect "IGEM Standards" not "Technical Publications".
	5.3	02/08	Amendment to number of owner representatives (i.e. to include NTS)
4	Various	05/08	Amendment of "IGE/" to "IGEM/"
	6.7	05/08	New Sub-Section to cover urgent amendments to IGEM Standards
5	Section 5	11/08	Minor editorial change to reflect organizational changes
6	Various, 6.7 & 3	02/09	Correction for omission in last issue, plus revised document control to align all Control Documents
7	Various	03/09	Amendment to reflect amalgamation of GTDC and GSEC. Number of Committee meetings. Dissolving of LPGC

	1		
8	Various	07/09	Editorial Update and correction to clause 6.4.1 after internal audit ref: A09/11.
9	Section 5.2	04/11	Committee membership update and DBERR now DBIS
	Clause 5.4.5	06/16	Copyright statement added
	Section 11	·	Technical enquires added
10	Section 5	12/12	Scope 5.2.4 (c) & (k) added 5.4.4 Committee, Working Group and Panel representation - added 5.5 Other work undertaken by IGEM technical services - added
	Section 12		12.2 updated HVCA and SBGI names, Government depts., and added CoGDEM
11	Section 5 Section 6	07/14	Clause 5.1.1 update organizations names Clause 5.2.1.1 update organizations names and added new representation Clause 5.2.1.3 update organizations names and added new representation Clause 6.2 Clarity on the creation of documents
	Section 0		and their review and the process of selecting a chairman and member for the Panel.
	Section 8		Secretariat responsibilities described
12	Section 5	08/14	Clause 5.1.1 update organizations names Clause 5.1.4 added reference to the environment Clause 5.2.1.1 update organizations names and added new representation Clause 5.2.1.2 update organizations names and added new representation Clause 5.2.1.3 update organizations names and added new representation Clause 5.2.1.3 update organizations names and added new representation Clause 5.2.4 added reference to unconventional
	Section 6		gases Clause 6.2 Clarity on the creation of documents and their review and the process of selecting a chairman and member for the Panel.
	Section 8		New section 8 Secretariat responsibilities described
	Section 12		New Section 12 Secretariat procedures described
	Section 13		Clause 13.1 add new term
13	Section 10		New clause 10.3
14	Sub- Section 5.2		Remove 'active'
	Section 13		New Section Records
15	Various sections	06/16	Update throughout for staff roles and titles
	Section 5		Clause 5.2.1.4 BG Group replaced with Shell,

	1		
	Section 6 Section 8		addition of UKLNG and NGV Network to kindred bodies Clause 5.2.4 Addition of IGEM Academy Clause 5.4.1 Panel members approval updated and maximum number of Panel members altered Clause 5.4.2 Quorate explanation reworded Clause 5.4.3 Social media advertisements added in for Chair interest Clause 5.4.4 Location of file for standard consultee list changed Clause 6.2.2 Update for document creation Update secretariat responsibilities Clause 8.2 Update on Panel actions Clause 8.4 Update on Panel response for industry comment
16	Section 11		Update of Technical Enquiry process
17	Sub- Section 5.1 5.4	03/17	Added Sub-Committee Gas Industry Unsafe Situations Working Group (GIUSP)
	Figure 1		
18	Clauses 5.1 8.4; 5.5.4; 14.2	06/17	Amended organisation title Amended industry consultation form reference Update to Government department name
19	Section 12 Section 15	03/18	New Sections
20	Section 5 Clauses 5.2.1.2 5.2.1.4 Sub- Section 5.3 Clause 5.3.1 Sub- Section 5.6 Sub- Section 11 Sub- Section 11 Sub- Section 16.2	05/18	Updated and amended following findings during internal audit. Addition of new member organization  Revised requirements  Revised requirements  Updated and amended following findings during internal audit.  Updated and amended following findings during internal audit.  Updated and amended following findings during internal audit.
21	Sub- Section 5.1.5 Clauses 5.2.1.5	01/19	Research funding process detailed  Hydrogen Committee added

	5.2.4 c)	Hydrogen Committee added
	5.2.4.f)	Hydrogen Committee added
	Section 12	Editorial amendments to address internal audit
		findings
	Section 15	Procedure amended to address internal audit
		findings
22	Sub-	Changes to TCC Governance after amendments
	Section	to Governance manual CD4 Issue 2 05/12/19
	5.1	
	Section 11	New Sub-Section added Hydrogen knowledge
		centre
22	Castian 14	Committee and Danel mount and (Valuations)
23	Section 14	Committee and Panel members (Volunteers)
24	Sub-	Amendments to Governance from Audit & Risk
24	Section	Committee review
	5.1	Committee review
	3.1	
25	Clauses	Amended following agreement at TCC meeting
	5.1.3	on 13 <sup>th</sup> September 2023
	5.1.6	3.1. 3.5 3.5 p. 3.1. 3.5 2.5 2.5
	5.1.7	
	5.1.12	New clauses
	5.1.13	
	ı	!

#### 2 INTRODUCTION

The aim of this Manual is to provide members of the Technical Team, Technical Coordinating Committee, (TCC); the Working Groups; the Sub-Committees and their Panels with guidance and reference material to enable them to operate effectively and in accordance with IGEM requirements.

#### 3 DOCUMENT CONTROL PROCEDURE

To use this manual you must ensure you have obtained the most up-to-date version.

The most up-to-date copy of this manual can be obtained from IGEM's website, or IGEM's Secretariat Computer Network.

This Manual has been approved by the Technical Coordinating Committee and accepted by Council.

A Document Revision List is included in page 1.

Any queries on the contents of this document should in the first instance be raised with the Head of Technical Services (HTS) and then with the Chair of the Technical Coordinating Committee.

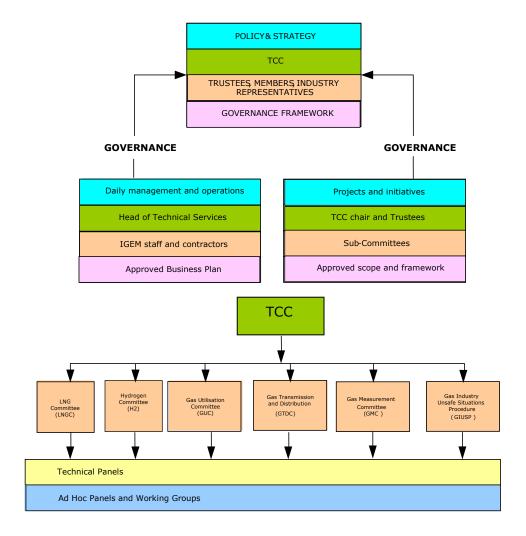
This manual shall be reviewed and amended as necessary (see QAP 8) by the HTS. All amendments to the Manual shall be presented to the TCC for approval. The approval shall be included in the Minutes of the meeting.

#### 4 MISSION STATEMENT

IGEM's Mission Statement is as outlined in IGEM's Governance Manual (CD4).

#### 5 TECHNICAL COMMITTEE STRUCTURE

IGEM's Council and Committee structure is as given in IGEM's CD4. IGEM's technical committee structure is as follows. TCC reports to Council.



#### FIGURE 1 - TECHNICAL COMMITTEE STRUCTURE

The Structural Model in Figure 1 illustrates the Governance hierarchy and reporting lines within IGEM Technical Services.

Secretariat reports to TCC and will have specific operational tasks, manpower and financial controls allocated to it via an agreed annual Business Plan, objective and scope documents and general requests. Secretariat is managed by the Chief Executive Officer (CEO). Once the Business Plan is agreed by TCC, the HTS&P is then responsible for the daily operational management of TCC.

#### 5.1 TCC

#### 5.1.1 Mandate

The functions and responsibilities of the Technical Co-ordination Committee are:

To study and review all gas engineering and other technically related matters incumbent upon IGEM as an independent chartered professional engineering institution.

To review matters affecting engineering, technical and operational practices in the gas industry including the potential effect that such activity or use of gas may have on the environment, and those affecting the use of gas, on which IGEM might give advice by the publication of Reports and Standards or by other means.

#### **5.1.2** Terms of reference

Without limiting the scope of the authority set out above, the duties of the Technical Co-ordination Committee shall be to:

- advise Council on the structure for titles and status of IGEM Standards
- advise Council on the provision of research required to support the work of the TCC Sub-Committees in production of Standards
- advise Council in the establishment and/or closure of specialist technical sub-committees and work groups
- consider what specialist sub-committees are required and what should be their terms of reference and membership
- coordinate the work of sub-Committees
- seek advice from individuals or organisations as may be appropriate, by co-option or otherwise
- make recommendations for further action in collaboration with other technical bodies where appropriate
- plan the Committee's work programme taking into account availability of resource and viability of projects such as production of Standards, technical publications.
- prepare, and when necessary revise, the IGEM/G series of Standards and IGEM/IG series of Industry Guidance.
- develop and sustain partnerships and alliances for expanding the utilisation and impact of Technical Standards within the industry
- consider and report on any other matters remitted to the Committee by Council.

#### 5.1.3 Composition

- Chairperson
- Deputy Chairperson
- At least one Trustee as appointed by Council
- President\*
- Hon Secretary\*
- Chairpersons of all technical Sub-Committees (5)
- Chairperson of Gas Industry Unsafe Situations Procedure Working Group (GIUSPWG)
- representative of the IGEM Young Persons Network (YPN)
- independent specialists, as appropriate, who shall be IGEM Members
- nominated representatives of:
  - Energy & Utilities Association (EUA) (2)
  - Gas Safe Register (Capita)
  - Association of Independent Gas Transporters (AIGT)
  - Health and Safety Executive (HSE)

- Office of Gas and Electricity Markets (Ofgem)
- other organisations as appropriate.
- nominated representatives of:
  - a utilisation company (currently British Gas Services)
  - Liquefied petroleum gas (LPG) specialist (2) (currently DNV and Vacant)
  - a gas supply company (currently Centrica)
  - National Gas
  - Distribution Network Owners (DNOs) (up to 4) (currently Cadent Gas, Northern Gas Networks, Scotia Gas Networks and Wales and West Utilities).

The Committee shall be supported at meetings by at least one of:

- IGEM CEO\*
- IGEM HTS\*
- IGEM Technical Officer (TO)\*.
- \* Ex-officio

#### **5.1.4** Quorum

Five (5), at least one (1) Committee member present throughout must be a Trustee.

#### 5.1.5 Chairperson and vice Chairperson

A Chairperson will be appointed by Council. The Chairperson will be confirmed by Council annually. The Chairperson shall be a Chartered Engineer Member of IGEM.

The Chairperson shall not formally represent a stakeholder (but may be an employee of one).

#### 5.1.6 Reporting

Chairperson to make a report to each Council meeting.

#### **5.1.7** Tenure

The Chairperson is appointed for a term of three (3) years, but this period may be extended at the discretion of Council. Council will confirm the appointment of Committee Chairs on an annual basis, paying particular attention to extended period.

Committee members, who are not staff nor co-opted, are appointed for a period of up to 5 years, this period may be extended at the discretion of the Committee.

#### 5.1.8 Meeting frequency

The Technical Co-ordination Committee will normally meet four (4) times a year but may meet more often as business demands. The meetings may be run in such a way as to allow for virtual attendance.

#### 5.1.9 Decisions

Decisions are normally made by consensus. In the event that views are evenly divided, the Chairperson shall have a casting vote.

#### **5.1.10** Research funding

In order to fund research work to support the review and revision of Standards, the following is required:

- TCC to initiate a standing question to Technical Committees on what funding requirements are expected in support of the forecast for the following year's Standards review. This needs to be undertaken in the months of (April/May/June)
- TCC to capture and summaries the research work required and the estimated costs in (July/August). A paper to be presented to Council in September
- CEO to build requests into following year's budget
- Finance Committee to agree the funding request prior to budget approval by Council in November/December.

#### **5.1.11** Delegated Authority

Cognisant of Council's Business Plan objectives, to approve for publication and printing the Standards and other documents within the Committee's remit.

#### 5.1.12 Review

The Committee should routinely and periodically assess its effectiveness and will review the Terms of Reference annually.

#### **5.1.13** Approval of terms of reference

Any changes to the Terms of Reference will be proposed to Council for approval.

#### **5.2 TCC SUB-COMMITTEES**

#### 5.2.1 Composition

#### 5.2.1.1 GTDC

- Chairperson
- Chairpersons of all GTDC Panels
- representative of the IGEM YPN
- independent specialists, as appropriate, who shall be IGEM Members, including to cover the areas of:
  - legislation and standards
  - LPG (2)
  - electrical engineer
  - mechanical engineer
  - safety and environment adviser
  - safety engineering and storage.
- nominated representatives of:
  - AIGT
  - British Steel

- EUA (3)
- Pipeline Industries Guild (PIG)
- HSE.
- nominated representatives of:
  - Natural Gas suppliers/shippers (currently E-ON UK and Centrica plc)
  - LPG supplier/shipper (currently Calor)
  - gas transporters (2) (currently E-ON UK and Brookfield Utilities)
  - National Gas
  - Cadent Gas
  - Scotia Gas Networks
  - Wales and West Utilities
  - Northern Gas Networks
  - a technology company (currently DNV)
  - steel pipe manufacturer (Tata Steel).

The Committee shall be supported at meetings by at least one of:

- IGEM HTS
- IGEM TO.

#### 5.2.1.2 GMC

- Chairperson
- Chairpersons of all GMC Panels
- representative of the IGEM YPN
- independent specialists as appropriate, who shall be IGEM Members, including:
  - for LPG
  - high pressure metering (2).
- nominated representatives of:
  - National Measurement & Regulation Office (NMRO)
  - Ofgem
  - AIGT
  - Association of Meter Operators (AMO)
  - RECCO
  - CMAP
  - Gas Safe Register (Capita)
  - EUA (6)
  - Energy & Utility Skills
  - BSI/GSE/25.
- nominated representatives of:
  - a Network Owner (2) (currently Cadent Gas, Northern Gas Networks)
  - an independent gas transporter (currently Brookfield Utilities)
  - gas suppliers (2) (currently RWE npower and Centrica)
  - meter equipment managers (MEMs) (2) (currently National Gas and Energy Assets)
  - a gas technology company (currently DNV).

The Committee shall be supported at meetings by at least one of:

- IGEM HTS
- IGEM TO.

#### 5.2.1.3 GUC

The Committee shall comprise:

- Chairperson
- Chairpersons of all GUC Panels
- independent specialists as appropriate, who shall be IGEM Members, including:
  - for LPG
  - flues.
- nominated representatives of:
  - ICOM Energy Association
  - Chartered Institute of Building Services Engineers (CIBSE)
  - Combustion Engineering Association (CEA)
  - Council for Gas Detection and Environmental Monitoring (CoGDEM)
  - Energy & Utility Skills
  - Gas Safe Register (Capita)
  - HSE
  - EUA
  - UK Liquid Gas
  - Building Engineering Services Association (BESA)
  - SNIPEF.
- nominated representatives of:
  - gas transporters (3) (currently British Gas New Housing Connections; Cadent Gas; vacant)
  - MEMs (2) (currently National Gas and Energy Assets)
  - gas supplier (Biogas) (British Gas)
  - gas supplier (LPG) (currently Calor)
  - a technology company (currently DNV)
  - installation and service companies (4) (currently British Gas Services, Homeserve,).

The Committee shall be supported at meetings by at least one of:

- IGEM HTS
- IGEM TO.

#### 5.2.1.4 LNGC

- Chairperson
- LNG operators:
  - Shell
  - South Hook LNG
  - BP
  - Conoco Phillips
  - Shannon LNG

- Canotex
- CNG Services
- National Grid Grain LNG
- Hong Kong and China Gas
- Calor.
- Gas Transporters
  - Cadent.
- Regulators
  - Department for Energy Security and Net Zero (DESNZ)
  - Ofgem.
- Specialists
- Kindred Bodies
  - UKLNG
  - NGV Network
  - Society of International Gas Tanker & Terminal Operators (SIGTTO)
  - International Group of Liquefied Natural Gas Importers (GIIGNL).

The Committee should be supported at meetings by at least one of:

- IGEM HTS
- IGEM TO.

All members shall represent an industrial affiliate of IGEM, or shall represent a body recognised as being a kindred body or a regulator.

#### 5.2.1.5 Hydrogen Committee

- Chairperson
- Chairpersons of all Hydrogen Panels
- independent specialists as appropriate, who shall be IGEM Members, including:
- nominated representatives of:
  - ARUP Consortium
  - Department for Energy Security and Net Zero (DESNZ)
  - BOC
  - Building Engineering Services Association (BESA)
  - Chartered Institute of Building Services Engineers (CIBSE)
  - Combustion Engineering Association (CEA)
  - Council for Gas Detection and Environmental Monitoring (CoGDEM)
  - Energy & Utility Skills
  - EUA
  - Gas Safe Register (Capita)
  - HHIC
  - HSE
  - ICOM Energy Association
  - KIWA.

- nominated representatives of:
  - Gas Distribution Networks (Cadent, NGN, SGN, WWU)
  - Independent gas transporter (1)
  - MEM (1)
  - gas supplier (1)
  - a technology company (1)
  - installation and service companies (1).

The Committee shall be supported at meetings by at least one of:

- IGEM HTS
- IGEM TO.

#### 5.2.2 Quorum

Five, including the Chairperson (unless an alternative is pre-nominated and accepted by the Committee).

#### 5.2.3 Chairperson

A Chairperson shall be appointed by TCC. The Sub-Committee may nominate a succeeding Chairperson to TCC. The Chairperson is appointed for a 3 year period and is eligible to be re-appointed for up to two further 3 year periods. The chairperson shall be a Chartered Engineer Member of IGEM.

The Chairperson shall not formally represent a stakeholder (but may be an employee of one).

#### **5.2.4** Scope

To advise and report to TCC and:

(a) GTDC, GMC, GUC, Hydrogen and Gas Quality Committees

To consider all technical matters and new techniques on Natural Gas, LPG, LNG, unconventional gases, hydrogen and carbon dioxide; including the environmental impact of the construction and use of installations relating to:

- (GTDC) gas transmission and distribution, including
  - materials and ancillary plant
  - health and safety of people
  - the safe construction, commissioning, operation, maintenance decommissioning and ultimate dismantling of plant and equipment and related engineering processes, all in respect of gas production, storage, transportation and use.
- (GMC) meter installations, associated pressure regulation and measurement of flow of gas and measurement of gas quality as it affects the billing of energy used.
- (GUC) the utilisation of gas and, in addition where appropriate and with the agreement of relevant leading organisations in the respective field, to include other energy sources such as oil and other fuel gases.

#### (b) LNGC

LNG operations specifically to:

- discuss areas of common interest regarding health and safety
- share safety alerts rapidly across the LNG industry
- develop best practice guidelines for LNG operations
- provide suitable references for public domain LNG statistics
- provide guidance and support to member companies regarding Safety Cases, COMAH, HAZOP surveys, planning enquiries etc.
- provide expert input to the gas quality debate
- influence the regulatory debate regarding LNG
- promote the LNG Hub model.

#### (c) Hydrogen Committee

Hydrogen operations specifically to:

- discuss areas of common interest regarding health and safety
- share safety alerts rapidly across the Hydrogen industry
- develop best practice guidelines for Hydrogen operations
- provide suitable references for public domain Hydrogen statistics
- provide guidance and support to member companies regarding Safety Cases, COMAH, HAZOP surveys, planning enquiries etc.
- provide expert input to the gas quality debate
- influence the regulatory debate regarding Hydrogen.
- (d) To agree technical work plans for the preparation or review of technical Standards or Guidance drafted by HTS.
- (e) To set up and monitor the work of Technical Panels that may be required to meet the objectives of TCC.
- (f) To prepare and when necessary revise:
  - (GTDC) IGEM/TD, SR and GL series Standards
  - (GMC) IGEM/GM series Standards and Specifications
  - (GUC) IGEM/UP and GL series Standards
  - (LNGC) IGEM/LNG series Standards
  - (Hydrogen) IGEM/Hydrogen series Standards
  - (All Committees) IGEM/G series Standards and IGEM/IG series Industry Guidance as directed by TCC.

All in consultation with other Sub-Committees as appropriate.

(g) To review current European and British legislation and Standards, as well as International Standards, relating to the Sub-Committee's scope. In addition to provide input through proper channels on draft legislation and Standards.

- (h) To monitor important gas related developments worldwide.
- (i) To nominate IGEM representatives to other bodies concerned with matters under the Sub-Committee's scope.
- (j) To obtain, examine and consider reports of unusual occurrences and prepare reports for publication.
- (k) To maintain an effective liaison with regulating authorities for example HSE and other bodies concerned with the gas supply industry.
- (I) To promote knowledge and understanding throughout the gas industry by providing technical updates from the publication of new or revised technical Standards or Guidance and provide training as required by industry. This may be through the technical Panels, Working Groups, IGEM Academy, industry experts and training companies.

The Sub-Committees will meet as required subject to demand and availability with a minimum target of 3 meetings per annum.

## 5.3 SUB-COMMITTEE WORKING GROUPS (IGEM administered Standards and other work)

#### **5.3.1** Composition

The Working Group shall comprise:

- Chairperson
- a member of the relevant Sub-Committee who does not represent the owners of the Standard, if applicable
- three representatives of the owners of the Standard, if applicable
- the membership must be representative of the subject/that part of the industry for which the work is being carried out
- where appropriate one member of Cadent Gas, Northern Gas Networks, Scotia Gas Network, Wales and the West Utilities, AIGT and National Transmission System.

Meetings shall be supported by at least one of:

- IGEM HTS
- IGEM TO.

#### 5.3.2 Quorum

Three.

#### 5.3.3 Chairperson

The Chairperson shall be the Chairperson of the relevant Sub-Committee or as otherwise nominated by the Sub-Committee.

## 5.4 SUB-COMMITTEE GAS INDUSTRY UNSAFE SITUATIONS WORKING GROUP (GIUSPWG)

#### 5.4.1 Composition

- Chairperson
- Secretariat
- Independent Gas Industry Experts covering the following gas sectors:
  - Natural Gas (downstream) expertise drawn from within the GIUSP WG (all members)
  - Liquefied Petroleum Gas (LPG)/LPG/Air (2 members)
  - Domestic gas utilisation (2 members)
  - Metering (2 members)
  - Non-domestic gas utilisation (2 members)
  - Emergency Service Provision (ESP) (2 members)
  - Registration body Gas Safe Register (1 member)
  - Health and safety enforcement authorities in the geographical areas covered by Gas Safe Register (1 member).

Note:

The Health and Safety Executive (HSE) in Great Britain will attend with the authority of the other relevant geographical health and safety enforcement authorities.

#### **5.4.2** Quorum

The minimum number of GIUSPWG members shall be six and the maximum number shall be twelve.

#### **5.4.3** Scope

The aim of this Technical Governance document is to provide participants of the Gas Industry Unsafe Situations Procedure (GIUSP) Working Group (WG) with guidance and reference material to enable them to operate effectively.

The purpose of the GIUSP is to assist and support registered gas businesses, to correctly identify, classify and deal with a wide variety of gas-related unsafe situations that they are likely to encounter during the course of their work.

The information developed and provided by the GIUSPWG will be relevant to all existing gas installations and appliances for both 'lighter' and 'heavier' than air gases, installed in both domestic and non-domestic properties in Great Britain, Northern Ireland, the Isle of Man and Guernsey. The resulting guidance will be based on assessed risk with the intent to provide sound engineering guidance on how competent gas operatives should deal with various situations which currently affect, or may in the future affect safety.

The GIUSP should deal only with situations that arise out of duties under the primary legislation concerning the safe installation, maintenance and use of gas systems and appliances, (e.g., in Great Britain – the Gas Safety (Installation and Use) Regulations (GS(I&U)R)) and also other gas safety situations which may be encountered and affect gas users.

Note: Similar gas safety legislative requirements apply in Northern Ireland, the Isle of Man and Guernsey.

#### 5.4.4 Chairperson

A Chairperson will be appointed by the GIUSPWG through nomination and consensus. Representatives from HSE and Gas Safe Register will not be eligible to undertake the role of Chair. The Chair will be appointed for a period of three years. If the chair is unable to attend a meeting, they will appoint a deputy.

#### 5.5 PANELS

#### 5.5.1 Composition

- (a) For all IGEM-owned Standards except IGEM/G or IG series:
  - Chairperson who shall be appointed by the relevant Sub-Committee and who preferably shall be a Member of IGEM
  - a suitable cross section of representatives active and expert in the subject matter all approved by the Panel Chair for the Standard being reviewed
  - representatives of other sectors of the gas industry that may be affected directly or indirectly by the Standard being reviewed.

Priority should be given to membership by organisations that represent a significant number of the companies involved in the subject matter and to companies with a significant share of the relevant market activity in the sector.

Individuals not representing an organisation or company shall be Members of IGEM.

The minimum number of Panel Members shall be four and the maximum number of Panel Members shall be fifteen, both unless approved otherwise by the relevant Sub-Committee.

- (b) For IGEM/G or IG series:
  - Chairperson who shall be appointed by TCC and who preferably shall be a Member of IGEM
  - a suitable cross section of representatives active and expert in all gas industry sectors covered by the Standard or Guidance.

Priority should be given to membership by organisations that represent a significant number of companies involved in the subject matter and to companies with a significant share of the relevant market activity in the sectors.

Individuals not representing an organisation or company shall be Members of IGEM.

The Panel shall, as far as possible have balanced representation from the different sectors.

The minimum number of Panel Members shall be six. The maximum number of Panel Members shall be fifteen, unless approved otherwise by TCC.

- (c) For IGEM administered Standards
  - (i) Chairperson who shall be appointed by the relevant Sub-Committee and who shall be a Member of IGEM
  - (ii) a maximum of four and a minimum of two representatives nominated by the owners of the Standard and which shall include at least one representative of the owners themselves
  - (iii) one representative, active and expert in the subject matter and not a representative or employee of any of the representatives in (ii) above who shall be approved by the relevant Sub-Committee and shall be a Member of IGEM.

The minimum number of Panel Members shall be four unless approved otherwise by the relevant Sub-Committee and agreed by the owners of the Standard.

#### 5.5.2 Quorum

A Panel is quorate if 50% of the total number of Panel members is present, including the Chairperson (unless an alternate is pre-nominated and accepted by the Panel). The total number of the Panel members does not include corresponding Panel members.

#### 5.5.3 Chairperson

- (a) Where a Panel is to be reconvened for any purpose the Chairperson of the dormant Panel will be invited to Chair the reconvened Panel.
- (b) For any reconvened Panel without a continuing Chairperson (see (a) above) and for any new Panel a Chairperson will be sought from:
  - the relevant Sub-Committee or TCC or alternatively;
  - a company or organisation represented on the relevant Sub-Committee or TCC or alternatively;
  - IGEM Industrial Affiliate companies via the Industrial Affiliate section or alternatively;
  - volunteers resulting from publicity in IGEM's journal, website or social media advertisements.
- (c) In the event of more than one nominee, the Sub-Committee (or TCC for IGEM/G and IG series) will select a Chairperson.

#### 5.5.4 Committee, Working Group and Panel representation

Representation to IGEM shall be determined by the scope of the work.

Organisations shall be identified whose members are involved in working in the relevant subject area such as ENA, BESA, COMA, HHIC, ICOM, CIBSE, AIGT etc. This will include as appropriate the Regulator (HSE, Ofgem) or their nominated partner (Gas Safe Register) and may include Government departments such as DESNX and DEFRA.

It may also be necessary to identify industry or subject specialist in the form of companies or individuals which need inviting to participate.

The current list of such organisation is to be found in S: $\1$  - Working Area $\B$ .04.) - Tech Team Administration $\B$ .04. - 2016-00013 - List of Standard consultees

At the start of any new or revision to any existing Standard or Guidance communication by IGEM secretariat shall be made with all the relevant consultees and invited to actively support the work.

#### 5.5.5 Scope of technical work

The scope and target deadlines for the completion of any work of Technical Panels shall be determined by the relevant Sub-Committee (or TCC for IGEM/G and IG series).

To aid this planning process a scoping document (see Appendix 1) shall be completed at the first Panel meeting.

#### **5.5.6** Policy Statement

The following applies to any work on any IGEM administered Standards and shall be agreed to when scope and ideal completion dates are set:

In order to fulfill the Institution's stewardship obligations and at the same time sustain an adequate financial business model, IGEM asserts and protects its copyright over its publications and the intellectual property associated with the activities of its technical Committees and Panels.

Contributions towards the creation and development of IGEM technical Standards, whether written or verbal are accepted on the following terms unless otherwise specifically agreed in advance of submission.

- a) Contributions made by Committee, Panel members or others towards the preparation and publication of IGEM standards and related presentational material are accepted on the basis that the contributor has the right or permission to contribute.
- b) No material known to infringe another party's copyrights shall be included within a Standard unless permission has been obtained from the copyright holder.
- c) Copyright in material created by Committee, Panel members or others for the purpose of the Standard are exclusively and irrevocably assigned to the Institution and that all intellectual property in such material shall for the purposes of the Standard be fully vested with the Institution.
- d) Contributors accept that exploitation whether in full or in part may take place without reference to them or mention of their name.
- e) Contributors are allowed to continue to use unique contributions provided that:
  - they existed prior to commencement or arose during the collaborative process of developing the standard; and
  - the use of copyrightable material does not adversely affect the promulgation or exploitation of the Standards by the Institution.

f) Other than as stated in e) above, reproduction in any form of materials published by the Institution is subject to approval in advance by the Institution. Where such permission is granted an appropriate reference and acknowledgement to the standard as the source shall be made.

#### 5.6 OTHER WORK UNDERTAKEN BY IGEM TECHNICAL SERVICES

IGEM either tender for technical work to act as secretariat for gas industry bodies such as HSE, Gas Safe Register and Ofgem or volunteer to act on behalf of industry to provide technical services.

The scope of the work shall be agreed in writing between the parties and a contract prepared and agreed as required if appropriate.

Terms of reference and membership of the working group shall be agreed and principles outlined in Sub-section 5.3 may be taken into consideration.

## 6. TCC, SUB-COMMITTEE, SUB-COMMITTEE WORKING GROUP AND PANEL PROCEEDINGS

## 6.1 GENERAL STRATEGY, POLICY AND COMMUNICATIONS OTHER THAN IGEM STANDARDS

Decisions shall be taken by majority consensus. In cases of clear division, matters shall be referred to the relevant Sub-Committee, to TCC or to Council, as appropriate.

#### 6.2 DRAFTING PROCESS – IGEM-OWNED STANDARDS

The drafting process shall be as outlined in Figure 2.

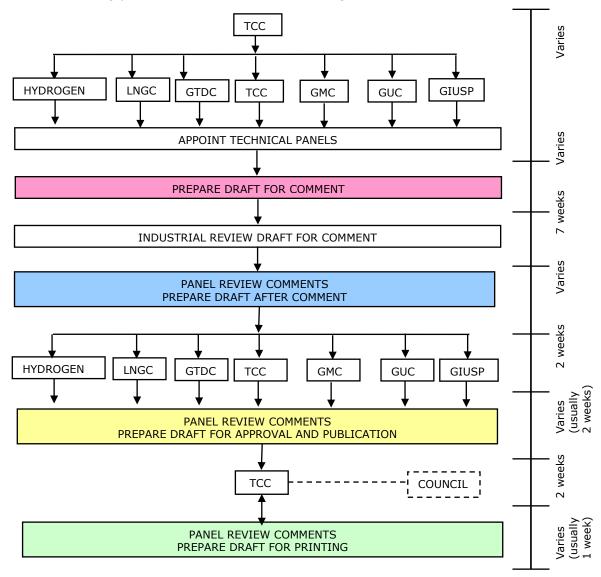


FIGURE 2 - DRAFTING PROCESS. IGEM OWNED STANDARDS.

#### 6.2.1 Initiation of a Guidance or Standard document

- a) New documents
  IGEM is approached with request for a new document. This maybe though
  a consultation, Committee members or by an approach from industry.
- b) Existing documents
  Through the age of the document around five years old or request for review because of changes in legislation or technology (see Section 10).

#### 6.2.2 Document creation

a) New document A draft document, entitled 1<sup>st</sup> Working draft will be created by either IGEM secretariat, by the Panel, an expert on the subject or an industry body. b) Existing document (see Section 10)
A draft document, entitled 1<sup>st</sup> Working draft will be created by either IGEM secretariat, by the Panel or a member of the existing Panel.

The 1st Working draft will be sent to the Panel before the first meeting and members actively invited to make comments ready for the review. The 1<sup>st</sup> working draft may also be sent out to all the relevant consultees and invited to actively support the work. They will be requested to supply initial comment on the document, seeking views on subjects to be added or details included or excluded on the subjects already included in the draft. This period for comment will be four weeks.

At this time, a Chairman for the Panel will be sought if the document is new work or the Panel Chairman has retired or discussions will have taken place with the existing Panel Chairman about the review and the changes that were known to be required.

A Panel Chair can be recruited by several means. IGEM would seek a volunteer by nomination from an organisation knowing that the creation or review is underway or enlisting an industry expert. The nomination of all Panel Chairs will be referred to the relevant Committee for approval.

#### 6.2.3 Technical Panel work.

Decisions on technical content shall be taken by overwhelming majority consensus of the Technical Panel. In cases of significant division, matters shall be referred to the relevant Sub-Committee, to TCC or to Council as appropriate (see Sub-Section 6.3)

The Panel chairman, with the nominated secretary will seek Panel members from across the relevant part of the industry and the Chairman is obliged to ensure that the make-up of the technical Panel represents the relevant industry sector. This maybe by looking for new members or confirming the retention of existing Panel members.

The Panel will then review the document, considering in the first instance the initial comment received from the consultees to bring it to a version entitled 'Draft for comment'.

This will be sent out to all industry consultees for a period of six weeks. All comments will be collated and reviewed by the Panel who will agree responses. The document drafts are then entitled '1st Working draft after comment' etc.

When the Panel has agreed all responses, the document is sent for approval to the parent Committee for a period of two weeks. The document is then entitled 'Draft after comment v1 etc'.

Subject to the receipt of comment by the Committee, which needs to be resolved by the Panel and accepted by the Committee, the document is then sent to TCC now entitled 'Draft for Approval and Publication' for two weeks. Finally and subject to comment by TCC, which has to be resolved by the Panel and accepted by TCC the document is reviewed for editorial and IGEM style conformance then sent for publishing.

#### 6.3 DRAFTING PROCESS – IGEM-ADMINISTERED STANDARDS

The drafting process shall be as outlined in Figure 3. Decisions on technical content shall be taken by overwhelming majority consensus of the Technical Panel. In cases of significant division, matters shall be referred to the pre-selected Sub-Committee Working Group.

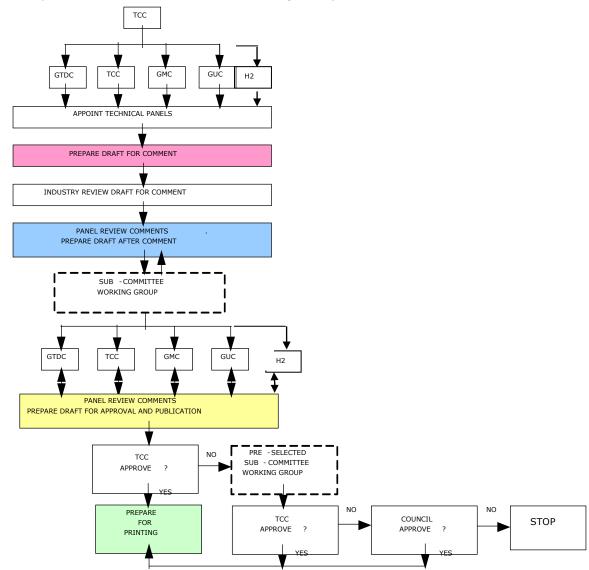


FIGURE 3 - DRAFTING PROCESS. IGEM ADMINISTERED STANDARDS. FLOWCHART

## 6.4 APPROVAL REQUIREMENTS FOR ALL DRAFT STANDARDS AND OTHER DOCUMENTS

6.4.1 In general, all drafts shall be approved by unanimous consensus at all stages. However, provided the majorities shown in Table 1 or Table 2 as appropriate are achieved, drafts may proceed to the next stage in which case all comments (not including industry comments) that remain unresolved shall be conveyed to the approving Committee for consideration.

For Drafts for Approval and Publication, all outstanding comments shall be resolved by TCC. If this cannot be achieved by correspondence the matter shall be addressed at a TCC meeting. The majorities shown in Table 1 or Table 2 as appropriate shall always be achieved. Any comments not accepted by TCC shall result in a formal notification of TCC decisions to the Sub-Committee(s)/Panel Member(s) concerned. However, for IGEM administered Standards, publication is not permitted without the consent of the relevant Sub-Committee Working Group.

- **6.4.2** All "nil response" shall be assumed as "approved unconditionally".
- **6.4.3** When approval is sought by correspondence, members' responses shall be classified by the Committee/Panel Secretary as:
  - (a) Approved unconditionally
  - (b) Approved subject to consideration of proposed amendment
  - (c) No comment (taken to be "approval")
  - (d) Rejected subject to amendment
  - (e) Rejected.

Note: Rejection under (d) and (e) assumes it is accompanied by the reason(s) for rejection and preferably, alternative suggestions.

Any Draft after Comment shall be approved by the Panel Chairperson(s) and where applicable Sub-Committee Working Group Chairperson(s) before proceeding.

Any Draft for Approval and Publication shall be approved by the relevant Sub-Committee Chairperson(s) before proceeding.

DRAFT	ву	APPROVAL AT MEETING	APPROVAL BY CORRESPONDENCE*
FOR COMMENT or REJECTED DRAFT AFTER COMMENT or REJECTED DRAFT FOR APPROVAL AND PUBLICATION	PANEL	AT LEAST 75% PRESENT	AT LEAST 75% RESPONDENTS OTHERWISE A MEETING SHALL BE CONSIDERED
AFTER COMMENT	SUB-COMMITTEE	AT LEAST 75% PRESENT	AT LEAST 75% RESPONDENTS
FOR APPROVAL AND PUBLICATION	TCC	AT LEAST 75% PRESENT	100% RESPONDENTS OTHERWISE A MEETING SHALL BE CONSIDERED
FOR PRINTERS	SECRETARIAT	-	-

<sup>\*</sup> All "nil response" are assumed as "approved unconditionally".

TABLE 1 - REQUIREMENT FOR APPROVAL OF DRAFT IGEM OWNED STANDARDS

DRAFT	ву	APPROVAL AT MEETING	APPROVAL BY CORRESPONDENCE*
FOR COMMENT or REJECTED DRAFT AFTER COMMENT or REJECTED DRAFT FOR APPROVAL AND PUBLICATION	PANEL	AT LEAST 75% PRESENT	AT LEAST 75% RESPONDENTS OTHERWISE A MEETING SHALL BE CONSIDERED
ALL	SUB-COMMITTEE WORKING GROUP	AT LEAST 75% PRESENT	100% RSPONDENTS OTHERWISE A MEETING SHALL BE HELD
AFTER COMMENT	SUB-COMMITTEE	AT LEAST 75% PRESENT	AT LEAST 75% RESPONDENTS
FOR APPROVAL AND PUBLICATION	тсс	AT LEAST 75% PRESENT	100% RESPONDENTS OTHERWISE A MEETING SHALL BE CONSIDERED
FOR PRINTERS	SECRETARIAT	-	-

<sup>\*</sup> All "nil response" are assumed as "approved unconditionally".

#### TABLE 2 - REQUIREMENT FOR APPROVAL OF DRAFT IGEM-ADMINISTERED STANDARDS

- 6.4.4 To assist compliance with Table 1, TCC and Sub-Committees as appropriate shall identify in advance of receiving relevant drafts those Committee Members having specific expertise in the relevant subject, and obtain the agreement of those Members to review and approve/comment upon the drafts.
- **6.4.5** Drafting Panels shall identify on all Drafts after Comment, those areas which were subject to varying industry views or which have been demonstrated to be potentially controversial, for example if industry would incur significant additional costs as a result.
- 6.5 APPROVAL REQUIREMENTS FOR FORMAL COMMITTEE COMMUNICATIONS (other than Standards)

All formal Committee communications, not agreed previously at Committee level, shall be pre-approved before circulation by the Chairperson of the relevant Committee before wider circulation.

## 6.6 APPROVAL REQUIREMENTS FOR OTHER THAN FORMAL COMMITTEE COMMUNICATIONS AND STANDARDS

All Committee communications other than those under 6.4 and 6.5 shall be approved by HTS or TO as appropriate.

## 6.7 APPROVAL REQUIREMENTS FOR URGENT AMENDMENTS TO IGEM STANDARDS

Where the need for an urgent amendment to an IGEM Standard is identified:

- the urgency shall be assessed by the HTS. Where the amendment is not considered urgent, the matter shall be referred to the appropriate Technical Sub-Committee or TCC as appropriate. Otherwise the TSM shall consult the CEO. Thereafter if determined not urgent the matter shall be referred to the appropriate Sub-Committee or TCC as appropriate.
- where determined as urgent, a meeting shall be called (which may be via a conference call) of the Chairpersons of the respective Committee(s) and Panels, the HTS and representatives of the Committees and Panels who are key in the urgent issue.
- suitable action, which may include issue of an amendment shall be determined and implemented. The procedures as in Section 6 above shall be motioned as seen as practicable but approval for the chosen action and amendment may if necessary, be sought/given after formal issue of an amendment.

Note: "Urgency" would be categorised according to potential adverse effects on safety, financial, political or social grounds.

#### 7 OWNERSHIP AND LIABILITY FOR ALL FORMAL DOCUMENTS

#### 7.1 IGEM OWNED STANDARDS AND OTHER DOCUMENTS

IGEM accepts legal ownership and any liability for the content of IGEM owned documents. The copyright and intellectual property of any content shall be solely owned by IGEM except where material donated by another party is acknowledged as solely owned by that other party or jointly owned by that party and IGEM.

#### 7.2 IGEM ADMINISTERED STANDARDS

IGEM accepts custodianship of all such documents on behalf of a 3<sup>rd</sup> party organisation but does not accept legal ownership and therefore does not accept liability for any content of such documents.

#### 8 DOCUMENTATION

Secretariat responsibilities in support of the technical Committees, Working Groups and technical Panel are:

- the point of contact for all correspondence in relationship to the work of that group
- arrange all the meetings and book meeting rooms
- arrange refreshments and catering
- attend all the meetings and take the Minutes or Notes
- coordinate and facilitate the completion of agreed actions of the group
- take all necessary steps to expedite the work of the group
- make amendments to the document as agreed and supplied by the Panel
- maintain the integrity of the document throughout the review process
- coordinate with the Communications team on the work of the group to enable dialogue with IGEM membership and community through the Flame and Journal
- coordinate with the Events team for seminars and training events as the result of work by the technical groups.

#### 8.1 COMMITTEE MINUTES AND PANEL NOTES

Minutes of Committee and Notes of Panel meetings preferably shall be issued within 2 weeks of the meeting and in any event as soon as practicable.

#### 8.2 ACTIONS

All actions will be recorded on the meeting Minutes/Notes and the secretariat will facilitate the actions for completion ensuring any actions are done.

#### 8.3 INDUSTRY AND COMMITTEE COMMENTS

- **8.3.1** A standard Comment Submission Form shall be issued with every Draft for Comment (Form TS/C/1A) and unless otherwise decided by TCC the period allowed for return of comments will be 6 weeks. Normally industry comments will only be accepted if submitted on this form.
- **8.3.2** A standard Approval Form (Form TS/AP/1) shall be issued with every Draft after Comment and Draft for Approval and Publication. Unless otherwise decided by TCC, the period allowed for return of completed forms will be 2 weeks.

#### 8.4 RESPONSE TO INDUSTRY COMMENTS

All comments shall be consolidated by Secretariat on a Form TS/C/1B for Panel consideration. Consolidated comments and the agreed responses will remain available on request to the Technical Services Team.

## 9 RESOURCING THE DRAFTING AND PRODUCTION OF IGEM OWNED AND IGEM ADMINISTERED STANDARDS AND OTHER DOCUMENTS

#### 9.1 IGEM OWNED

A business plan shall be prepared for each proposed item of work and this shall assume:

 all associated expenditure by IGEM is to be recovered by income from subsequent sales of the documents and if applicable associated Technical Seminars.

Note: It is acceptable for the income from one or more document(s) to subsidise the expenditure on one or more other Standards/document(s) at the discretion of TCC.

 the input by all relevant Committee and Panel Members is provided on a voluntary basis.

Note: It is acceptable to pay one or more members a fee provided the project has been sufficiently subsidised by a party other than IGEM, for example by sponsorship.

 where application is made travel and if unavoidable, accommodation expenses may be payable for individual relevant Committee and Panel Members.

Note: Normally such expenses will be covered by the organisation or company represented.

#### 9.2 IGEM ADMINISTERED

A business plan shall be prepared for each project or individual proposed item of work as applicable and this shall assume:

- all associated expenditure by IGEM is to be covered by income from fees payable in advance by the owner(s) of the documents and from subsequent sales of the documents. Cross subsidy from income from any other source in particular from 9.1 above is not permitted at any point
- the input by all Panel members representing the owners of the documents is provided on a voluntary basis and no expenses will be payable
- the input by all Panel members not representing the owners of the documents is provided on a voluntary basis unless requested by/agreed with the owners of the document
- where application is made for Panel members not representing the owners of the documents travel and if unavoidable, accommodation expenses may be payable and this would represent "associated expenditure" (see above).

#### 10 REVIEW OF IGEM STANDARDS

- **10.1** The month of publication of any Standard is recorded.
- **10.2** Every Standard shall be reviewed no more than 5 years after publication.
  - a) If 5 years has lapsed the Standard is reviewed at a high level (usually within a 6 month period prior to the due date) by a limited number of experts (including the Chairman of the Panel that drafted it if still active). A report shall be made to the parent Technical Sub-Committee which then decides on one of these actions;
    - (i) Set up a Panel to revise the Standard to the next edition or
    - (ii) Agree updates for either a new edition or amendment of existing edition or
    - (iii) Confer a further period of approval for the existing edition (usually, this is 1, 2 or 3 years) after which time the high level review is repeated or
    - (iv) Confer "obsolescence" with no replacement or
    - (v) Confer "obsolete" with a replacement.

Once option (i) or (ii) is selected, the Standard is considered "under review" and no time limits are set for completion, although clearly there are ideal deadlines set. Such Standards are continually under review by the parent Sub-Committee which will determine any need for urgent amendment of the existing edition while work on the new edition is being carried out.

A period of up to 6 months beyond the 5 year Review date is allowed to implement steps (iii), (iv) or (v).

(b) At any time in the life of a Standard, its parent Sub-Committee may consider representations for amendment or revision to a new edition which if agreed would then follow either step 10.2(a)(i) or 10.2(a)(ii), or could result in step 10.2(a)(iv) or 10.2(a)(v).

#### 10.3 Amendments to Standards, guidance or specifications

Representations to amend IGEM documents may be made through technical enquiries, by Committee or Panel members or requests from industry.

All such requests are to be entered on an industry revision table (TS/C/1D) and the enquiry/request is to be sent to the relevant Panel Chair or Technical Committee Chairman in the absence of a Panel Chairman.

If the enquiry/request is seen to be justified, then proposed text should be proposed by the appropriate Panel member and circulated to the Panel for approval.

Subject to approval and acceptance by the Chairman of the relevant Technical Committee an amendment to the document is to be drafted by the Panel secretary and published.

**10.4** Every decision made with respect to 10.2 above is recorded in Meeting Minutes or agreed papers of the respective parent Sub-Committee.

#### 11 HYDROGEN KNOWLEDGE CENTRE (HKC)

IGEM provides a Hydrogen Knowledge Centre service via the Secretariat. The HKC is a digital repository of research, data and other resources for the purpose of advancing hydrogen knowledge across the breadth of technologies and industry applications. The service provides a searchable library of information, intended to support user's learning, research and development efforts.

The service is accessible to Members of IGEM via the IGEM website.

The HKC software platform is provided by Ingenta Edify, which is connected to the IGEM website via a secure link.

- The scope of the HKC has been set out in its Collection Development Policy. The policy is published on the HKC website.
- The HKC's Content Inclusion Process provides detailed instructions for HKC Administrators, responsible for assessing, cataloguing and uploading content into the HKC. The Process is outlined in the HKC's Content Inclusion Manual, and describes the steps undertaken from the point of content receipt to being uploaded into the HKC repository.

New content for the Hydrogen Knowledge Centre will undergo a series of checks for relevance, quality and copyright rules before being added to the repository. The detailed requirements for these checks are outlined in the Content Inclusion Manual.

Staff with HKC Administrator status are authorised to upload content to the HKC using their assigned administrator log-in profiles. Names of HKC Administrators are detailed within the Content Inclusion Manual.

The HKC Administrators will meet weekly to review new content.

All content metadata must be recorded on the Content Tracker.

All content checks for relevance, quality and copyright must be recorded on the Content Tracker.

All new externally produced/owned content must be approved by the HKC Administrators. Any uncertainty over content inclusion must be escalated to the HTS.

All new content produced/owned by IGEM must be approved by IGEM's Hydrogen Committee before it can be uploaded to the HKC.

- Management and governance of the HKC is overseen by the HTS. Day to day management of the HKC, its content and user enquiries is provided by the Information & Records Coordinator.
- The HKC policies and processes are made available to members of the Technical Services team on the IGEM shared computer drive.

#### 12 TECHNICAL ENQUIRES

IGEM provides a technical enquiry service via the Secretariat. Enquiries are received via IGEM's Website, email, or letter.

This service only applies to IGEM publications with matters not related to IGEM being referred to the relevant organisation e.g., Gas Safe Register, BSI etc.

All technical enquiries about IGEM Standards or a related gas engineering subject must be submitted in writing.

The TO responsible for the enquiry will, if necessary pass the enquiry onto an appropriate Consultant/Panel member who will respond to the TO. The TO responsible for the enquiry will then pass the response to the enquirer.

Any subject regarded as being potential controversial must have the reply approved by IGEM through the CEO prior to release.

There is a detailed procedure for processing technical enquires, see QAP16.

#### 13 RECOGNITION OF TRAINING

- The gas industry document IGEM/IG/1 "Standards of training in gas work", referenced in L56 paragraph 87 was prepared by a Working Group which included representatives from the Strategic Management Board (SMB) and Standards Consultation Forum (SCF) facilitated by IGEM and Energy & Utility Skills with industry stakeholder support.
- IGEM/IG/1 provides criteria and guidance to training providers, trainee gas engineers and employers on the scope, standards and quality of training required to enable a gas engineer to achieve competence. The training provider is required to design and develop training programmes to meet the needs of the trainee, taking account of their level of skill, knowledge and experience of gas work.
- The objective of IGEM/IG/1 is to provide the gas utilisation industry with an agreed training structure for those entering the industry, along with those providing training, a clear, robust route to achieve well trained and knowledgeable persons able to work safely within the UK gas utilisation sector. In order for the industry to implement the intent of IGEM/IG/1 the SMB has created a governance structure to enable recognition of the training for new entrants to the industry to be managed.

#### 13.3 AUTHORISER FOR THE RECOGNITION OF TRAINING

- 13.3.1 IGEM was appointed as the Authoriser for the Recognition of training by the SMB on 28th September 2017. The SMB's Governance for the Recognition of training is available on Energy & Utility Skills website www.euskills.co.uk and the requirements for the Authoriser are detailed within the document. In order to manage the requirement of this position the following governance has been implemented.
- **13.3.2** The Training Working Group has been established reporting to TCC.
- **13.3.3** Terms of Reference

Reporting to TCC, the daily management of the task is delegated to Head of Technical Services. Composition of the group as detailed below:

- Chairperson of TCC
- Chairperson of GTDC; GMC and GUC
- Representative of Energy & Utility Skills
- Chairperson of Standards Consultation Forum (SCF)
- where appropriate invited industry representatives.
- **13.3.4** Meetings shall be supported by at least one of: IGEM HTS IGEM TO.
- **13.3.5** Quorum: Three, including the Chairperson (unless an alternative is prenominated and accepted by the Committee).

#### 13.4 Application Process

- 13.4.1 The Authoriser is required to have procedures and a set of parameters along with trained personnel to effectively and consistently review applications from the Recognisers of training, Independent Training providers or organisations developing training courses.
- 13.4.2 The Authoriser shall review the application from the Recognisers of training, Independent Training providers or organisations developed training course(s) and either:
  - accept the application as initial recognition
  - accept the application subject to amendments to the procedure or parameters provided
  - withhold initial recognition pending site audit (for instance; if the application is from a new training provider and there is concerning over the provision of the necessary resources that are required to deliver the training). This audit may also cover the requirements set out in clause 12.5.4
  - reject the application providing clear reasons for the decision.
- 13.4.3 The Authoriser shall notify the SMB and Energy & Utility Skills in writing of the acceptance of the Recogniser of training's, Independent Training provider's or organisation's developed training course(s) initial recognition.
- **13.4.4** Subsequently, the Authoriser shall audit the Recognisers of training or Independent Training providers at their premises to confirm that the on-site conditions and activities match those submitted in writing and either:

- accept the application as full recognition
- accept the application subject to amendments to the procedure or parameters provided
- reject the application providing clear reasons for the decision.
- **13.4.5** The Authoriser shall notify the SMB and Energy & Utility Skills in writing of the acceptance of the Recogniser of training's or Independent Training provider's full recognition.
- 13.4.6 The Authoriser shall undertake a surveillance audit to the Recogniser of training" or "Independent Training provider" at least yearly to verify that the conditions of the recognition remain satisfactory and either:
  - confirm the status of full recognition
  - confirm the status subject to amendments to the procedure or parameters provided
  - suspend the status providing clear reasons for the suspension.
- **13.4.7** The Authoriser shall notify the SMB and Energy & Utility Skills <del>SSB</del> of the suspension of the recognition status.
- 13.4.8 The Authoriser shall accept appeals and complaints and manage them within its appeals and complaint procedure, see Section 15. This procedure is aligned to that detailed in the SMB governance document.

#### 13.5 The Authoriser's procedures

- **13.5.1** IGEM/IG/1 and the industry training specifications gives the auditor a useful explanation of standards and expectations of courses, course design, course content, structure and balance, admission guidelines for recognised courses.
- 13.5.2 The Course provider shall be asked to formally submit to IGEM full details of the courses offered for which recognition is required. The Training Working Group will use the course provider's submission as the basis of their recognition assessment.
- 13.5.3 IGEM provides a full administrative and secretarial service to the Training Working Group. This may include facilitating any training required by an auditor, routine correspondence with the course provider, taking of accurate minutes for meetings, accurate transcription of the recognition visit, and the transposition of those notes into a recognition report.
- **13.5.4** IGEM may wish to take specialist advice or co-opt a specialist for the visit. Ideally, a programme for the visit should initially be agreed with the training provider, and the schedule should allow a chance to privately question those trainees who have recently completed the course.
- **13.5.5** *Auditor*
- **13.5.5.1** IGEM will appoint suitably qualified and experienced auditor(s) to undertake auditing of "Recognisers of Training"/"Independent Training Providers"/"Training Providers" and training course developers.
- **13.5.5.2** Auditors should be registered, as a minimum an Engineering Technician Member with IGEM, hold a Level 3 qualification in Teaching/Training and have evidence of Auditor training.

- 13.5.5.3 Training of new recognition auditors shall be provided through a "shadowing" induction process that requires them to attend recognition visits initially as observers with increasing subsequent participation. Established auditors should receive material and presentations, as appropriate, on relevant recognition matters.
- **13.5.6** *Audit plan*
- **13.5.6.1** There is to be an audit plan to provide a three year rolling annual audit programme for those wishing to become an Authorised Recogniser of training and those currently Authorised.
- **13.5.6.2** Contact will be made with each organisation, requesting three possible dates for each "Recogniser of training" audit and three possible dates for the Training provider audit. If the audit is for an Independent training provider then only one day will be required.
  - the proposed dates will be reviewed by the independent auditor for availability
  - if the proposed dates are suitable then a confirmation of the dates will be advised.
- **13.5.6.3** If the dates given are not suitable then there will be further negotiations to obtain a suitable date for the "Recogniser of training" or Independent Training provider and the independent auditor.
- **13.5.7** Audit criteria and report
- **13.5.7.1** The Auditor shall be provided with all the necessary documentation and the Recogniser of training/ (Independent) Training provider shall be advised of the Auditor and if appropriate, should be provided with their brief biographical details.
- **13.5.7.2** Documentation necessary for the audit will include as a minimum an audit plan, audit checklist, the name and contact details of the auditor. The Auditor's CV will also be available on request.
- **13.5.7.3** The audit shall be arranged in consultation with the Recogniser of training/(Independent) Training provider and take place normally within 4-6 weeks of the receipt of the application or as agreed when the first training is in progress following the receipt of initial recognition of that training.
- **13.5.7.4** At the end of the audit, the auditor shall meet with the Recogniser of training/(Independent) Training provider to discuss the audit. The auditor shall not disclose the conclusions or recommendations but the training organisation will be advised of the general views and, in the event of any concerns and queries, they will have the opportunity to discuss and clarify these.
- **13.5.7.5** The auditor's report and recommendation/s shall be prepared immediately after the audit, in the following stages:
  - the first draft report, excluding recommendation shall be sent to the Recogniser of training/(Independent) Training provider for confirmation of and accuracy of factual statements
  - the final report, signed by the head of the Authoriser/Recogniser of training organisation shall be sent to the Recogniser of training/ (Independent) Training provider and retained as a record.

- **13.5.7.6** The Recogniser of training/ (Independent) Training provider shall be advised in writing, normally within 10 working days of the outcome of the visit and recommendation which will be either:
  - Accept the status of full recognition
  - Accept the status subject to amendments to the procedure or parameters provided
  - Reject the status providing clear reasons for the denial.
- **13.5.7.7** The Authoriser shall notify the SSB in writing of the acceptance of the Recogniser of training's or Independent Training provider's full recognition. This shall be within 3 working days of notifying the Recogniser of training organisation
- **13.5.7.8** The Recogniser of training shall notify the Authoriser and SSB in writing of the acceptance of the Training provider's full recognition. This shall be within 3 working days of notifying the Training organisation.
- **13.5.7.9** For those applications that are rejected there is a complaints process that shall be followed (see Section 15).

#### 14 COMMITTEE AND PANEL MEMBERSHIP (Volunteers)

- 14.1 IGEM has an obligation and is committed to support engineer's continual professional development. One of the ways in which this is achieved is the participation with IGEM's technical Committees and Panels.
- Membership of Committee and Panels is an essential part of the industries participation in contributing to the safety and excellence of the engineering practice carried out throughout the UK's Natural Gas and LPG sector.
- The Secretariat, on behalf of the Committee or Panel is responsible to ensure that all parts of the industry are invited to send a representative (volunteer), as appropriate to take an active part in such discussions and drafting of new or revised technical Standards or Guidance.
- In order to acknowledge participation with Committees and Panels, a record of attendance maintained. For the Committees a CPD certificate is provided annually to cover engagement during the previous year and for Panels a letter of thanks along with a CPD certificate and a copy of the Standard/Guidance document is provided.

#### 15 SECRETARIAT PROCEDURES

- Procedures governing the work of the Technical Services secretariat team are developed by the team to manage the processes described in this manual and in compliance with the requirements of the Governance manual CD4.
- **15.2** These procedures are reviewed and approved by the HTS.
- **15.3** These procedures have version control and are reviewed and updated as necessary.
- These procedures are made available to the members of the Technical Services team on the IGEM IT system at S:\1 Working Area\(A.04.) Operative Manuals and IGEM Guidelines.

#### 16 RECORDS

- **16.1** Records of all Committee, Working Group and Panel meetings shall be in paper and electronic format.
- All drafts of technical documents and the information provided from the Committee or Panel members shall be captured in a Technical Services Paper(s) or document appropriately referenced in the relevant Minutes or Notes and retained as an electronic record.
- **16.3** Archiving of all technical Committee, Working Groups or Panels is to be carried out in accordance with Technical Services Guidelines 14 and 14a.
- The management of Technical Services records is undertaken in accordance with the Records management manual.
- Technical records are to be retained indefinitely because the legal, safety, research and technical justification contained in IGEM's Guidance, Standards and Specification documents can confirm the basis of design and installation of gas systems for management of change and investigations on existing assets as well as providing an historical perspective on the development of the industry.

## 17 APPEALS AGAINST IGEM'S DECISIONS AND COMPLAINTS CONCERNING RECOGNITION OF TRAINING

#### (a) Appeals

In the case of conditional, provisional or deferred recognition the training organisation may appeal in writing to the CEO of the Institution. The Appeal will be referred to the Institution's Council who in consultation with the Chairman of the Training Working Group and CEO may decide whether:

- the decision not to accredit shall be upheld
- the application shall be re-considered by the Training Working Group
- to seek further evidence from the training organisation for further consideration.

#### (b) Complaints

In the case of a complaint concerning Recognition of training the training organization or new entrant may appeal in writing to the CEO of the Institution. The Appeal will be referred to the Institution's Council who in consultation with the Chairman of the Training Working Group and CEO may decide whether:

- the decision not to accredit shall be upheld
- the application shall be re-considered by the Training Working Group
- to seek further evidence from the training organisation for further consideration.

#### 18 GLOSSARY AND ACRONYMS

#### 18.1 GLOSSARY

**IGEM owned documents** Documents that are drafted by and

solely owned by IGEM.

**IGEM administered documents** Documents that are drafted, but which

are not owned, by IGEM.

unconventional gases
mostly methane gas produced from

anaerobic digestion, landfill sites, shale, coal beds and manufactured such as

town gas etc

#### 18.2 ACRONYMS

**AIGT** Association of Independent Gas Transporters

**AMO** Association of Meter Operators

**BESA** Building Engineering Services Association

CD controlled document CEO Chief Executive Officer

CIBSE Combustion Engineering Association
Chartered Institution of Building Services
CMAP Community of Meter Asset Providers

**CoGDEM**Council for Gas Detection and Environmental Monitoring
DEFRA
Department of the Environment, Food and Rural Affairs

**DESNZ** Department for Energy Security and Net Zero

**DNO** Distribution Network Owner

**EUA** Energy and Utilities Association (was SBGI)

**GIIGNL** International Group of Liquefied Natural Gas Importers **GIUSPWG** Gas Industry Unsafe Situations Procedure Working Group

GMC Gas Measurement Committee
GUC Gas Utilisation Committee

**GTDC** Gas Transmission and Distribution Committee

**HKC** Hydrogen knowledge centre **HSE** Health and Safety Executive

**HTS&P** Head of Technical Services and Policy **IGEM** Institution of Gas Engineers and Managers

**LNG** Liquefied Natural Gas

**LNGC** Liquefied Natural Gas Committee

**LPG** Liquefied Petroleum Gas **MEM** Meter Equipment Manager

NMRO National Measurement & Regulation Office
Ofgem Office of Gas and Electricity Markets

PIG Pipeline Industries Guild

**SIGTTO** Society of International Gas Tanker & Terminal Operators

**TCC** Technical Co-Ordinating Committee

**TO** Technical Officer

**YPN** Young Persons Network.

#### **APPENDIX 1 : PANEL SCOPING DOCUMENT**

#### **Technical Panel Review - scoping document**

	Title of standard			Reference No.	
	Authorising Committee				
	•			•	
	Name	Email contact details	Sponsoring organisation	Signature *	Date
Chair					
Secretary					
Panel members					
*	By signing this scoping agreement you are agr				
	copyright and intellectual property. In addition				
	contribute to IGEM any and all intellectual propurposes of the standard, be fully vested with		I rights of copyright in the materials and	I texts contributed shall, for	the
	purposes of the standard, be fully vested with	I IGEIVI.			
	Target project timeline and deliverables				
	First draft for comment				
	Issue for industry comment				
	Final draft for approval				
	Publication Summary article for publication to				
	membership				