

WORK OF ISO AND IEC

TECHNICAL COMMITTEES

“GLOBAL STANDARDS FOR THE OIL AND GAS INDUSTRY”

CONTENTS

- ▶ **ISO/IEC System**
- ▶ **Description of relevant Technical Committees (TC)**
- ▶ **Sub-Committees and Working Groups within a TC**
- ▶ **New Working Groups**
- ▶ **Conclusion**

ISO/IEC SYSTEM

- ▶ **Consensus-based**
- ▶ **Right to join any technical committee of commercial/technical interest**
- ▶ **Voting rights on all standards**
- ▶ **“one country, one vote”**
- ▶ **Market driven**
- ▶ **International technical expertise**
- ▶ **Voluntary, not mandated**
- ▶ **Meets requirements of WTO ‘Technical Barriers to Trade’**

ISO/IEC STANDARDS FOR OIL AND GAS INDUSTRY

Several technical committees cover “energy” (and related) sectors including:

- ▶ **ISO/TC 67 – Materials, equipment & offshore structures for the PPNGI**
- ▶ *ISO/TC 193 – Natural gas*
- ▶ *ISO/TC 28 – Petroleum Products*
- ▶ **IEC/TC 18 – Electrical installations of ships and of mobile and fixed offshore units**

TC 67 Chair receiving 2006 L.E. Award



Materials and Equipment ISO/TC 67

▶ TITLE:

“Materials, equipment and offshore structures for the petroleum, petrochemical and natural gas industries”

Excludes – aspects of offshore structures subject to IMO regulation (ISO/TC 8 “Ships and marine technology”). There is a MOU between TC 8 and TC 67.

▶ SCOPE

Standardization of the materials, equipment and offshore structures used in drilling, production, transport by pipelines and processing of liquid and gaseous hydrocarbons within the petroleum, petrochemical and natural gas industries.

ISO/TC 67 MEMBERS

▶ PARTICIPATING MEMBERS = 31

Argentina, Bahrain, Brazil, Canada, China, Denmark, Finland, France, Germany, Indonesia, Italy, Japan, Kazakhstan, Korea (Republic of), Iran, Libyan Arab Jamahiriya, Mexico, Netherlands, Nigeria, Norway, Portugal, Qatar, Romania, Russian Federation, South Africa, Spain, Sweden, Ukraine, United Kingdom, United States, Venezuela

▶ OBSERVING MEMBERS = 29

Australia, Austria, Azerbaijan, Belgium, Bulgaria, Colombia, Croatia, Cuba, Czech Republic, Ecuador, Egypt, Hong Kong, Hungary, India, Ireland, **Malaysia**, Moldova, Mongolia, Oman, Poland, Saudi Arabia, Serbia, Singapore, Slovakia, Switzerland, Thailand, Trinidad and Tobago, Viet Nam

ISO TC67 PARTICIPANTS

- ▶ Operators
- ▶ Service/supply companies
- ▶ Manufacturers
- ▶ Government regulators
- ▶ Consultants
- ▶ Academics
- ▶ **Note :** *Experts are nominated by their national standards body*

(e.g. DSM) to participate in work effort.

ISO/TC 67 STANDARDS

▶ MISSION

- To create value-added standards for the oil and natural gas industries

▶ VISION

Global standards used locally worldwide

- ▶ TC created in 1947, reactivated 1987
- ▶ Secretariat – API on behalf of ANSI
- ▶ 135 published standards
- ▶ 50% adopted by API,
- ▶ 90% adopted by CEN or other Regional organisations,
- ▶ More than 45% adopted by CEN and API
- ▶ More than 70 on-going projects (60% ‘revising an existing document’, 40% ‘new document’)

- ▶ Standards made by our Industry for our Industry.

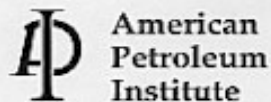
VISION OF GLOBAL STANDARDS

API Adopt-back of ISO 13706, as ANSI/API 661

Air-Cooled Heat Exchangers for General Refinery Service

API Standard 661, Fifth Edition
March 2002

ISO 13706: 2000, Petroleum and Natural Gas
Industries—Air-cooled Heat Exchangers



Helping You
Get The Job
Done Right.™



European Standard (adoption of ISO 13706 via Vienna Agreement)

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 13706

April 2000

ICS 75.180.20

English version

Petroleum and natural gas industries - Air-cooled heat
exchangers (ISO 13706:1998)

Industries du pétrole et du gaz naturel - Echangeurs de
chaleur refroidis à l'air (ISO 13706:1998)

Erdöl- und Erdgasindustrien - Luftgekühlte Wärmehauser
(ISO 13706:1998)

This European Standard was approved by CEN on 15 April 2000.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Central Secretariat: rue de Steuart, 36 B-1050 Brussels

© 2000 CEN All rights of exploitation in any form and by any means reserved
worldwide for CEN national Members.

Ref. No. EN ISO 13706:2000 E

ISO/TC 67 MANAGEMENT COMMITTEE

- ▶ Representative from each “P” country
- ▶ Coordinates TC67 activities with ISO Central Secretariat
- ▶ Prepares organisation/structure adaptations whenever needed for relevant body (e.g. TC, ISO/TMB) approval.
- ▶ Seeks resources for SC – technical experts, editing funds, etc.
- ▶ Publishes the Business Plan (requirement of ISO Technical Management Board)
- ▶ Maintains Management Tools (N435, N654, and N731)
- ▶ Closely monitors progress of projects and publication targets, and works towards guiding document through DIS and FDIS.

ISO TC67 MANAGEMENT COMMITTEE

▶ CURRENT REPRESENTATIVES

- Brazil, Canada, China, France, Italy, Japan, Netherlands, Norway, Qatar, United Kingdom, United States

▶ LIAISONS

- OGP, IADC and CEN/TC 12

TC67
Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries



Management Committee

SC 2
Pipelines



SC 3
Drilling and workover fluids, and cements



SC 4
Drilling and production equipment



SC 5
OCTG



SC 6
Refinery equipment



SC 7
Offshore structures



WG 2
Conformity Assessment



WG 4
Reliability engineering & technology



WG 5
Aluminium alloy pipe



WG 7
Materials for use in H2S containing environments



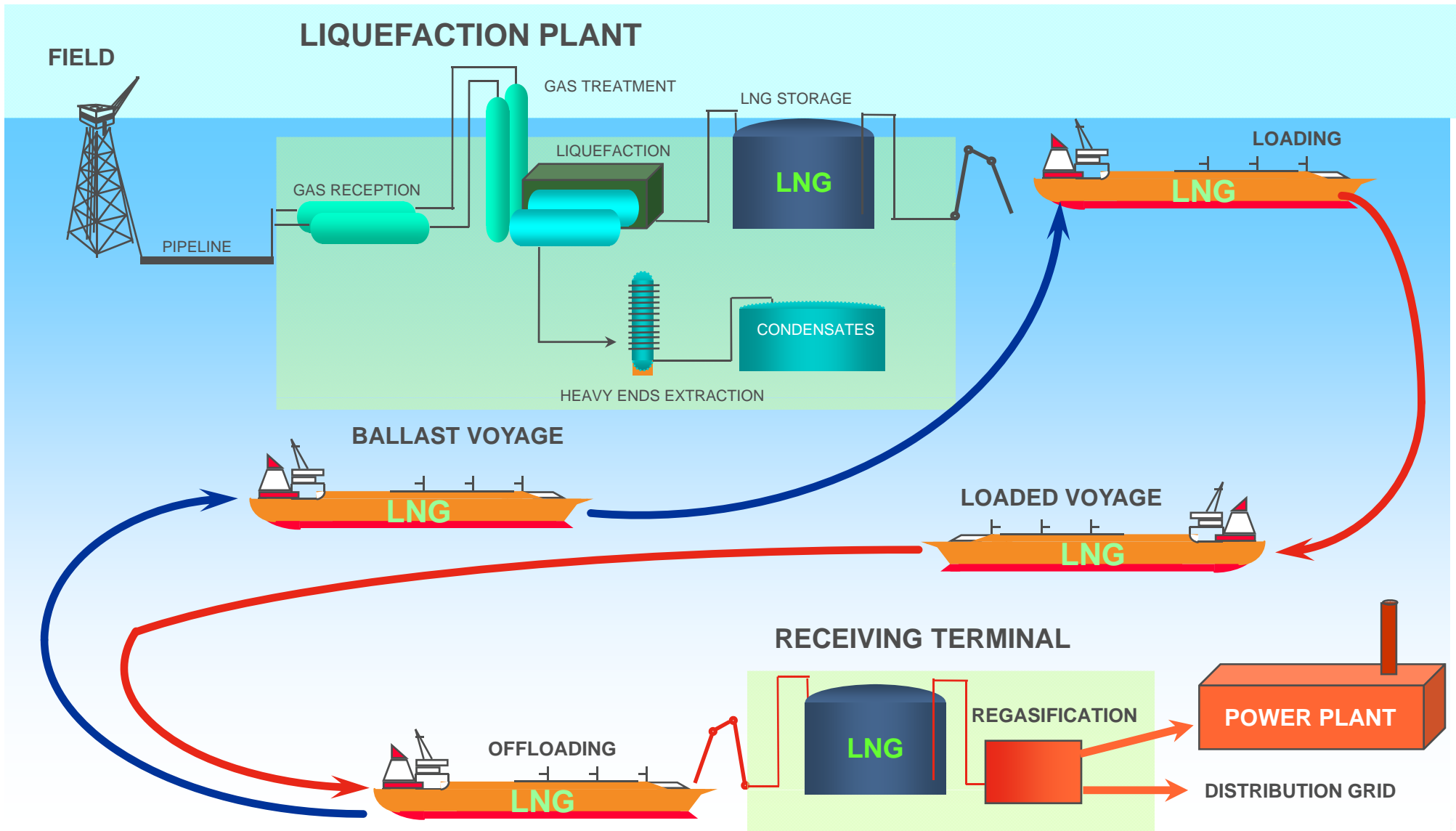
WG 8
Materials, welding, etc.



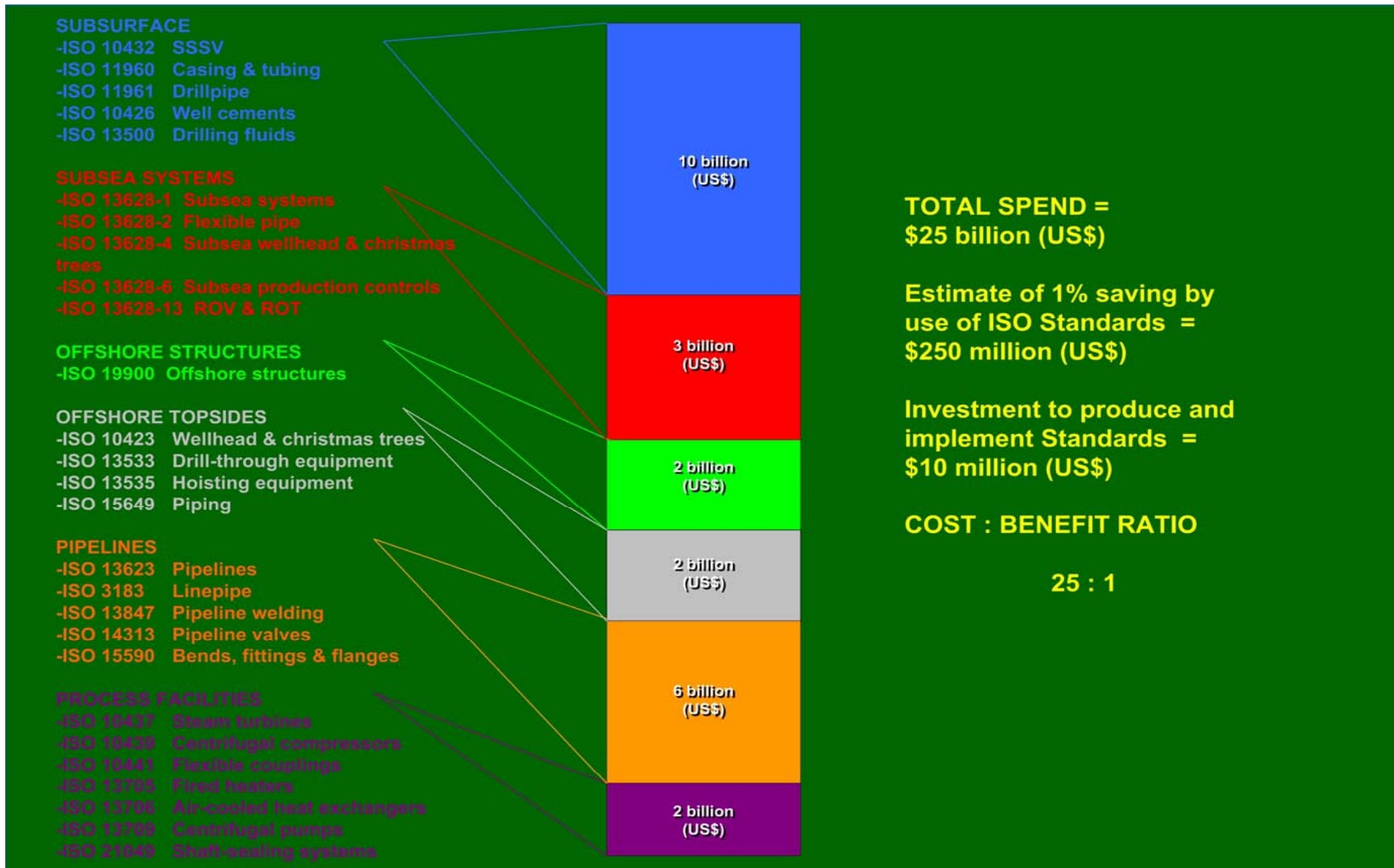
WG 10
LNG equipment and facilities



LNG Chain



ISO/TC 67 : Estimated cost savings with 30 standards



ISO/IEC STANDARDS FOR OIL AND GAS INDUSTRY

Several technical committees cover “energy” (and related) sectors including:

- ▶ ISO/TC 67 – Materials, equipment & offshore structures for the PPNGI
- ▶ **ISO/TC 193 – Natural gas**
- ▶ *ISO/TC 28 – Petroleum Products*
- ▶ IEC/TC 18 - Electrical installations of ships and of mobile and fixed offshore units

ISO/TC 193 NATURAL GAS

created in 1988

Scope: standardization of terminology, quality specifications, methods of measurement, sampling, analysis and test for natural gas and natural gas substitutes (gaseous fuel), in all its facets from production to delivery to all possible end users

Vision:

- Global standards used locally worldwide

Mission:

- to create value-added International standards for Natural Gas to support the liberalization of the gas markets, the energy efficiency, the environment protection and safety

Key Values:

- Harmonization of quality requirements: clear agreements about the measurements of volume and quality (e.g. calorific value) of the gas; accuracy of measurements
- The development and maintenance of the standards for allocation of the presence of solids and liquids in the gas (for the upstream industry)
- ISO/TC 193 standards - supporting tools for delivery contracts of natural gas.
- ISO/TC 193 standards - supporting tools for regulations in the field of natural gas.

Members of ISO/TC193 Natural Gas

24 Participating (P) Members:

Austria (ON), Belgium (NBN), China (SAC), Czech Republic (CNI), Egypt (EOS), France (AFNOR), Germany (DIN), Hungary (MSZT), India (BIS), Italy (UNI), Kazakhstan (KAZMEMST), Kenya (KEBS), Korea (KATS), Norway (SN), Qatar (QS), Poland (PKN), Russian Federation (Rostechregulirovanie), Spain (AENOR), Thailand (TISI), Trinidad and Tobago (TTBS), USA (ANSI), Ukraine (DSSU), United Kingdom (BSI)

29 Observer (O) Members:

Argentina (IRAM), Bosnia and Herzegovina (BAS), Brazil (ABNT), Canada (SCC), Chile (INN), Croatia (HZN), Cuba (NC), Côte-d'Ivoire (CODINORM), Denmark (DS), Finland (SFS), Hong Kong, China (ITCHK SAR), Iraq (COSQC), Ireland (NSAI), Japan (JISC), Lithuania (LST), Malaysia (DSM), Moldova, Republic of (MOLDST), Mongolia (MASM), New Zealand (SNZ), Oman (DGSM), Portugal (IPQ), Serbia (ISS), Singapore (SPRING SG), Slovakia (SUTN), Sweden (SIS), Switzerland (SNV), Tunisia (INNORPI), Turkey (TSE)

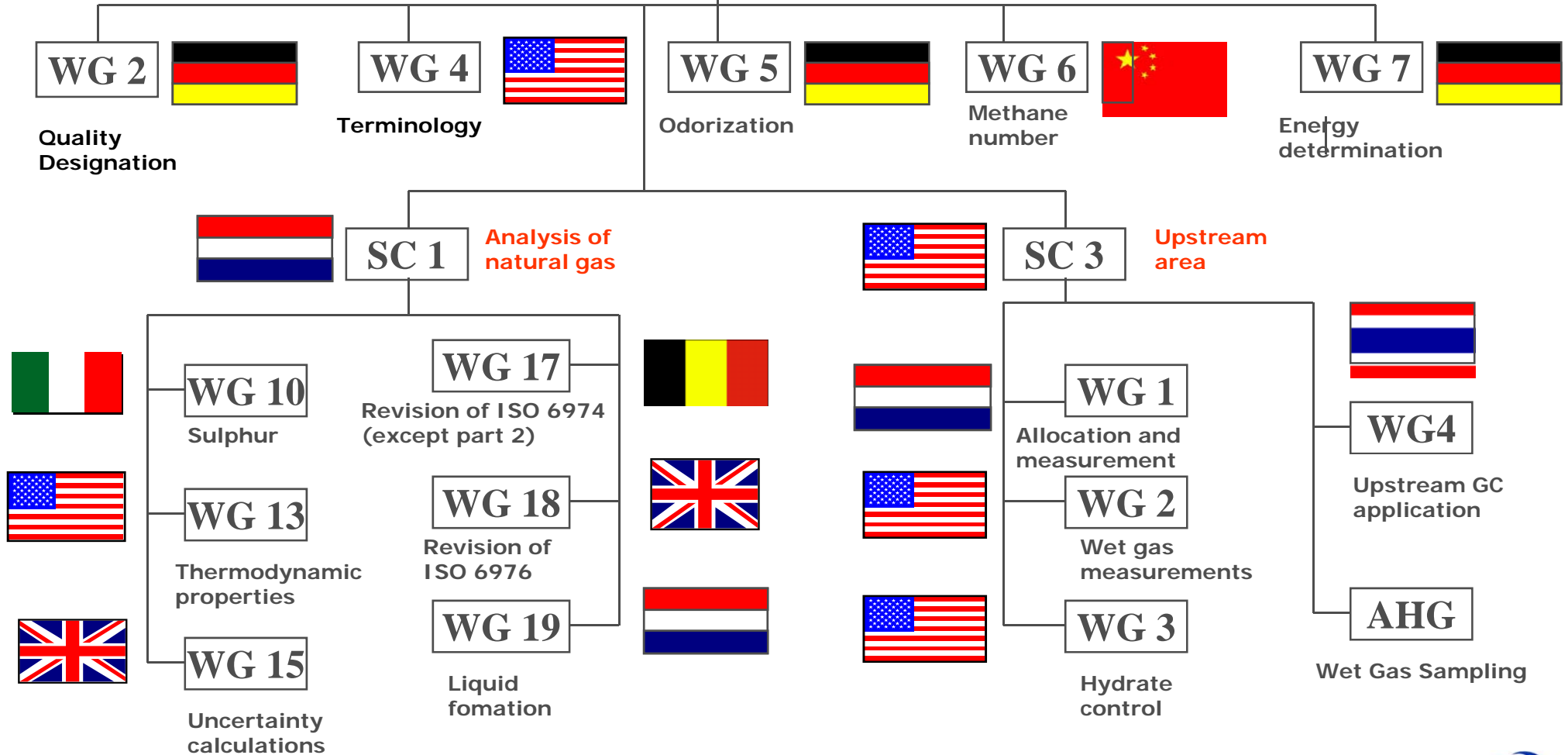
ISO/TC193 Natural Gas



ISO/TC193

Chairman: Mr. Lex Scheers

Secretariat: Mr. Pim Bijl (NEN)



ISO/TC 193 Standards **Work in Progress**

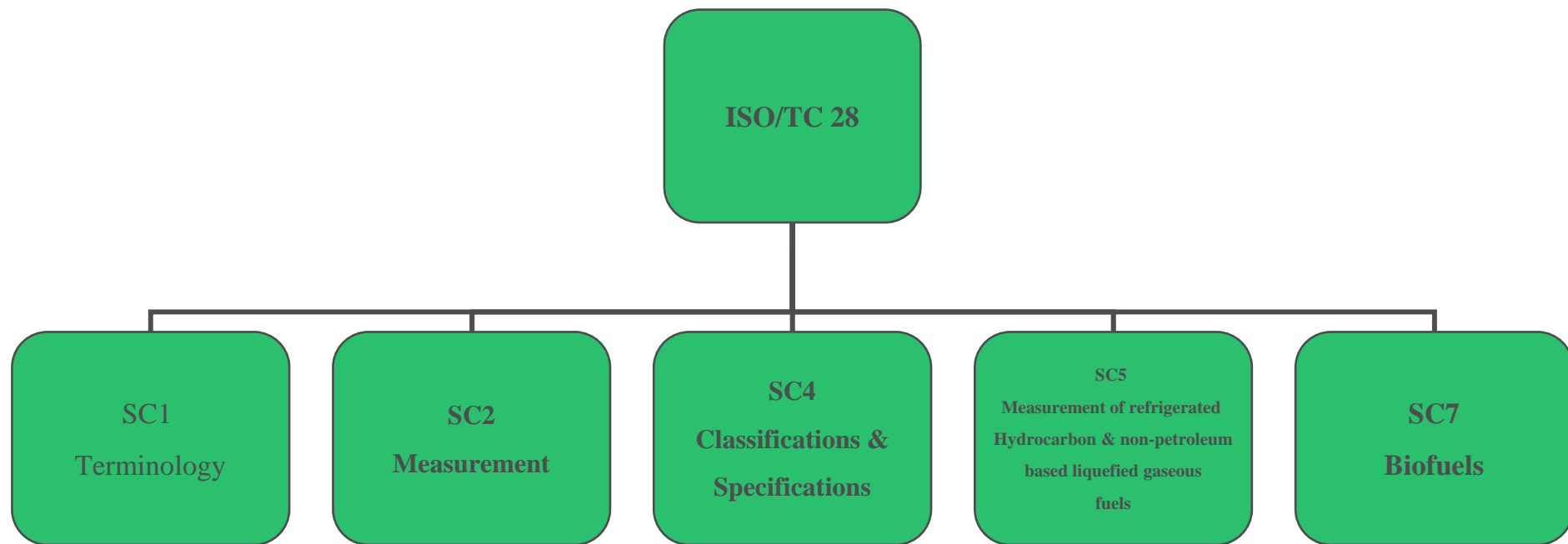
- **Total** number of published ISO/TC193 standards : **37**
- Number of published ISO standards under the direct responsibility of the ISO/TC193 Secretariat: **7**
- Number of published ISO standards under the responsibility of SC1 Analysis of natural gas: **30**
- Number of published ISO standards under the responsibility of SC3 Upstream area: **1** Allocation of gas and condensate
- **Total** number of work-in-progress items (incl. “in-revision”): **27**
- Number of work-in-progress items (incl. “in-revision”) under the direct responsibility of ISO/TC 193: **8**
- Number of work-in-progress items (incl. “in-revision”) under the responsibility of SC1: **14**
- Number of work-in-progress items under the responsibility of SC3: **4** including wet gas measurements

ISO/IEC STANDARDS FOR OIL AND GAS INDUSTRY

Several technical committees cover “energy” (and related) sectors including:

- ▶ ISO/TC 67 – Materials, equipment & offshore structures for the PPNGI
- ▶ *ISO/TC 193 – Natural gas*
- ▶ **ISO/TC 28 – Petroleum Products**
- ▶ IEC/TC 18 - Electrical installations of ships and of mobile and fixed offshore units

ISO/TC 28 : PETROLEUM PRODUCTS



ISO/TC 28

SCOPE :

Terminology, classification, specifications, methods of sampling, measurement, analysis and testing for :

- ▶ Petroleum
- ▶ Petroleum products
- ▶ Petroleum based lubricants and hydraulic fluids
- ▶ Non-petroleum based liquid fuels
- ▶ Non-petroleum based lubricants and hydraulic fluids.

ISO/TC 28

METRICS :

- ▶ **P- Members : 30 countries**
- ▶ **O- Members : 56 countries (e.g. Malaysia)**
- ▶ **Number of ISO standards published : 232**
(out of which 118 are under direct responsibility of TC)
- ▶ **6 active Working Groups reporting directly to TC**

IEC/TC 18

- ▶ This Technical Committee deals with :

“Electrical Installations of ships and of mobile and fixed offshore units”

IEC/TC 18 has 19 Participating members, and 9 Observing members.

- ▶ More specific to our industry is one standard **IEC 61892 : “Electrical installations – Mobile and fixed offshore units”**.

- ▶ This standard is in 7 parts such as :

- System design
- Equipment
- Cables

IEC/TC 18 MT 18

- ▶ A Maintenance Team, MT 18 is in charge of revising whenever needed the seven parts of IEC 61892.
- ▶ Presently, MT 18 is working on part -1 and on part -5.
- ▶ Other parts will be addressed later on.

CONCLUSION

**In various Technical Committees,
the global standards needed by our Industry are
prepared by our Industry
and published for all to use.**

Thank you for your attention

www.tc67.net

www.iso.org

THANK YOU FOR YOUR ATTENTION

