Presentation to
International Regulators Forum,

Miami, 7 December 2007

Moving towards global standards for the benefit of the oil and gas industry

Alf Reidar Johansen,
StatoilHydro, Norway
Chairman, OGP Standards Committee

IRF Conference theme:

”Improving offshore safety by international co-operation”

Goes well together with ISO/TC67 vision:

OGP Standard Committee membership

Members [1]	Company	Country	Other functions
Wilson Barbosa de Oliveira	Petrobras	Brazil	
Anatoly Baryshnikov	Eni	Italy	CEN/TC12 AH8 chair
Gail Baxter	Marathon	USA	
Felicia Decusara	Petrom	Romania	
Alf Reidar Johansen (Chair)	StatoilHydro	Norway	
Joachim G. Koenig	OMV	Austria	
Tom Kelleher	Petro-Canada	Canada	
Alain Loppinet	CEN	France	CEN/TC12 Chair
Martin Maeso	Energy Institute	UK	
David Miller	API	USA	API Std. Progr. dir.
Saif S Al Naimi [4]	Qatar Petroleum	Qatar	
Abdullah Humaid [5]	Saudi Aramco	Saudi Arabia	
Manuel Paga Costellanos	RepsolYPF	Spain	
Terry Qin [2]	CPSC	China	
Neil Reeve	Shell	Netherlands	IFAN President
Daniel Rioche	Total	France	
Alain Samne	ISO	Switzerland	Technical group mgr.
Cheryl Stark	BP	USA	ISO/TC67 Chair
Mike Swidzinski	ConocoPhillips	UK	
Richard Torgersen [3]	ExxonMobil	USA	

Notes: [1]) Plus corresponding members from: BG, Chevron, Mærsk and Premier.
Alternates: [2]) Du Delin & Xiaohong Chen, CPSC [3]) Nikolaus Gromes, EMI, Germany [4]) Muayyad Ajjawi [5]) Fathi Abughaban

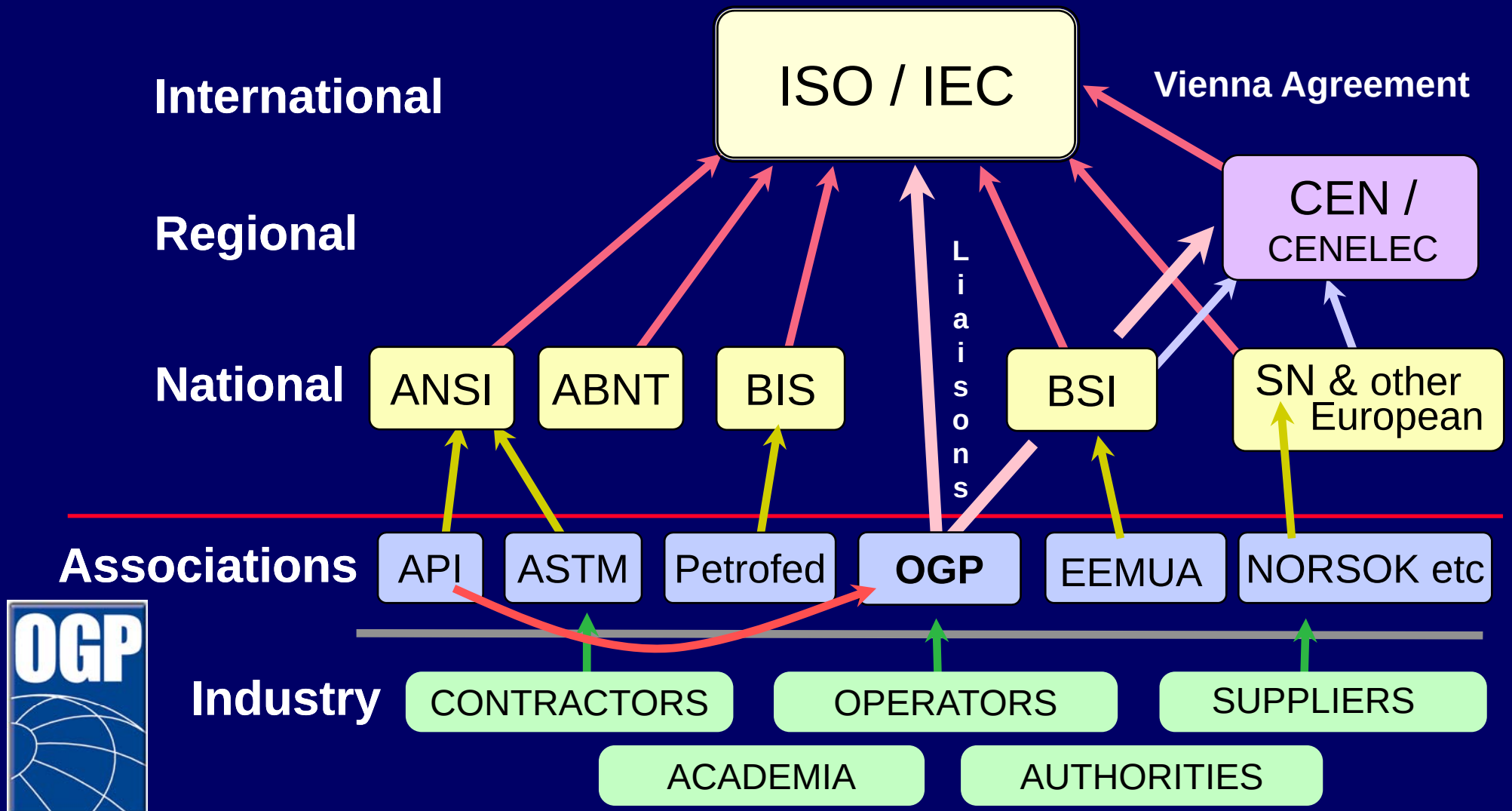
OGP position on standards

The OGP has been a catalyst for change in industry 's approach to standards and strongly supports the internationalisation of key standards used by the Petroleum and Natural Gas Industries. OGP's **reconfirmed position** on standards is:

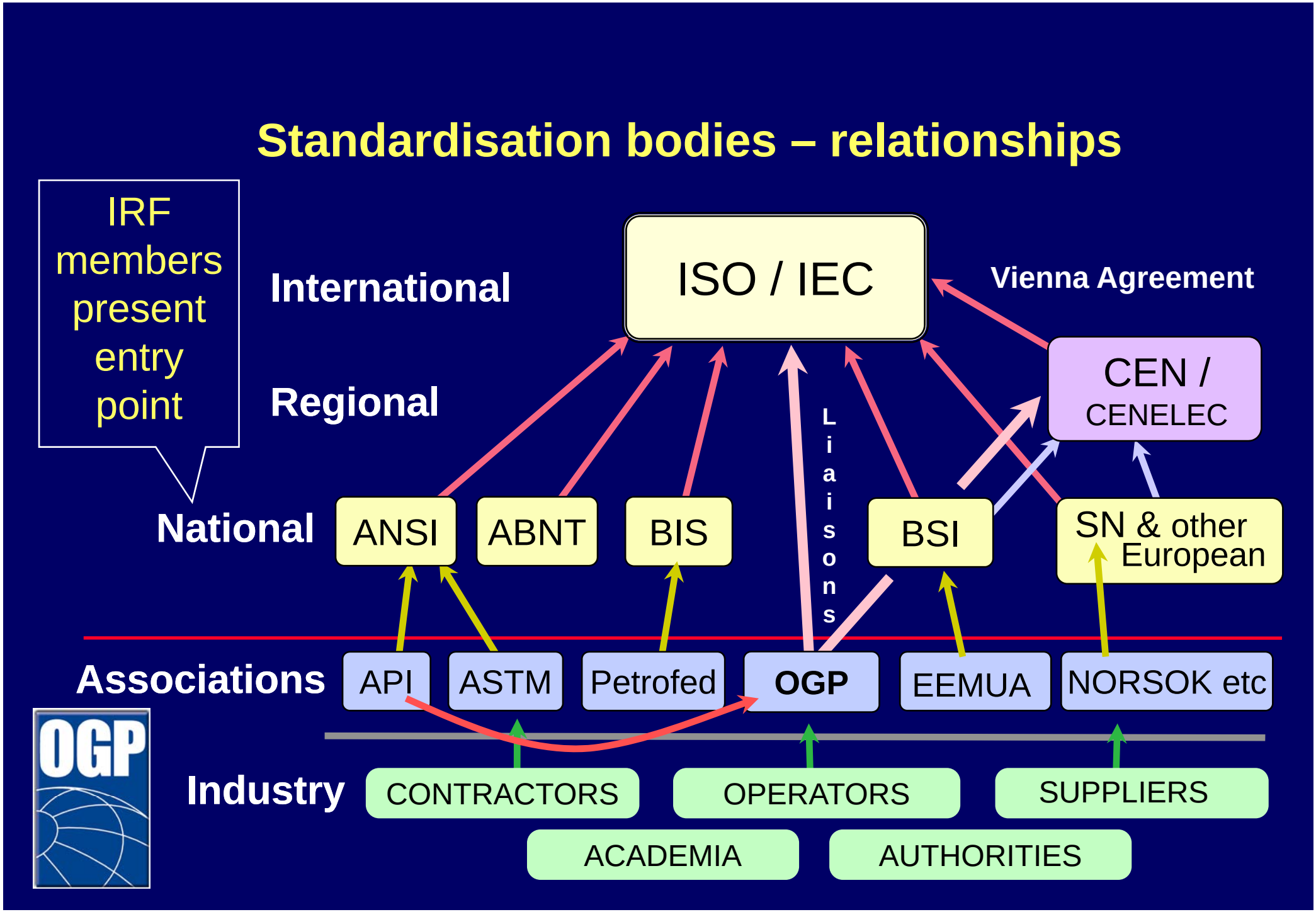
- development and use of ISO and IEC standards should be promoted
- development of standards should be based on a consensus of need
- "users" should be represented on standards work groups
- duplication of effort should be avoided
- standards should be simple and fit for purpose
- International standards should be used without modification wherever possible
- company specifications should be minimised and written, where possible, as functional requirements.

The adoption of this approach is expected to minimise barriers to trade, enable more efficient worldwide operations, and improve the technical integrity of equipment, materials, and offshore structures used by the Petroleum and Natural Gas Industries. **OGP Report 381, May 2007**

Standardisation bodies – relationships



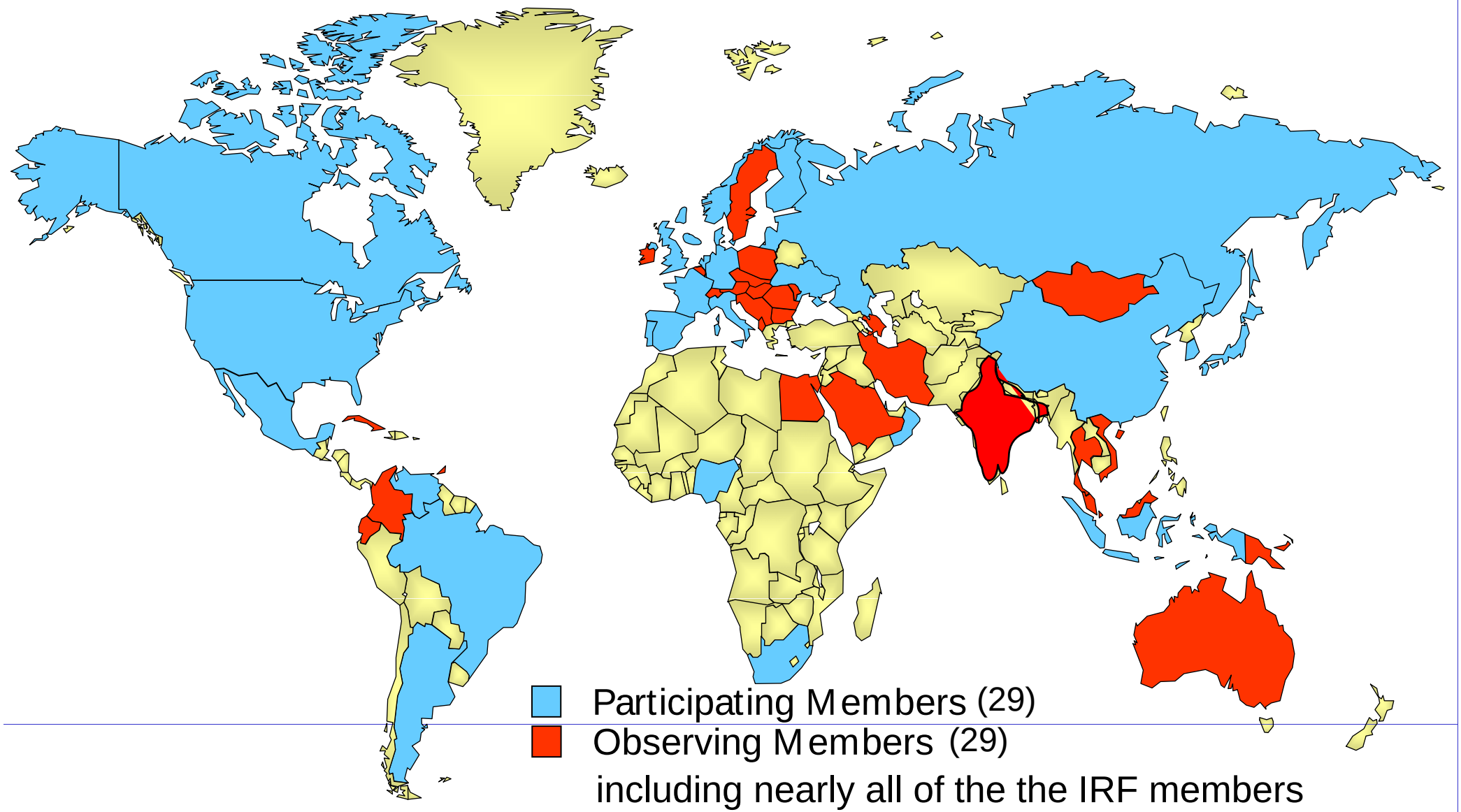
Standardisation bodies – relationships



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

- Secretariat – API on behalf of ANSI
- Created – 1947, reactivated 1987
- 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.
  - Excluded: aspects of offshore structures subject to IMO regulations (TC8 – “Ships and marine technology”)

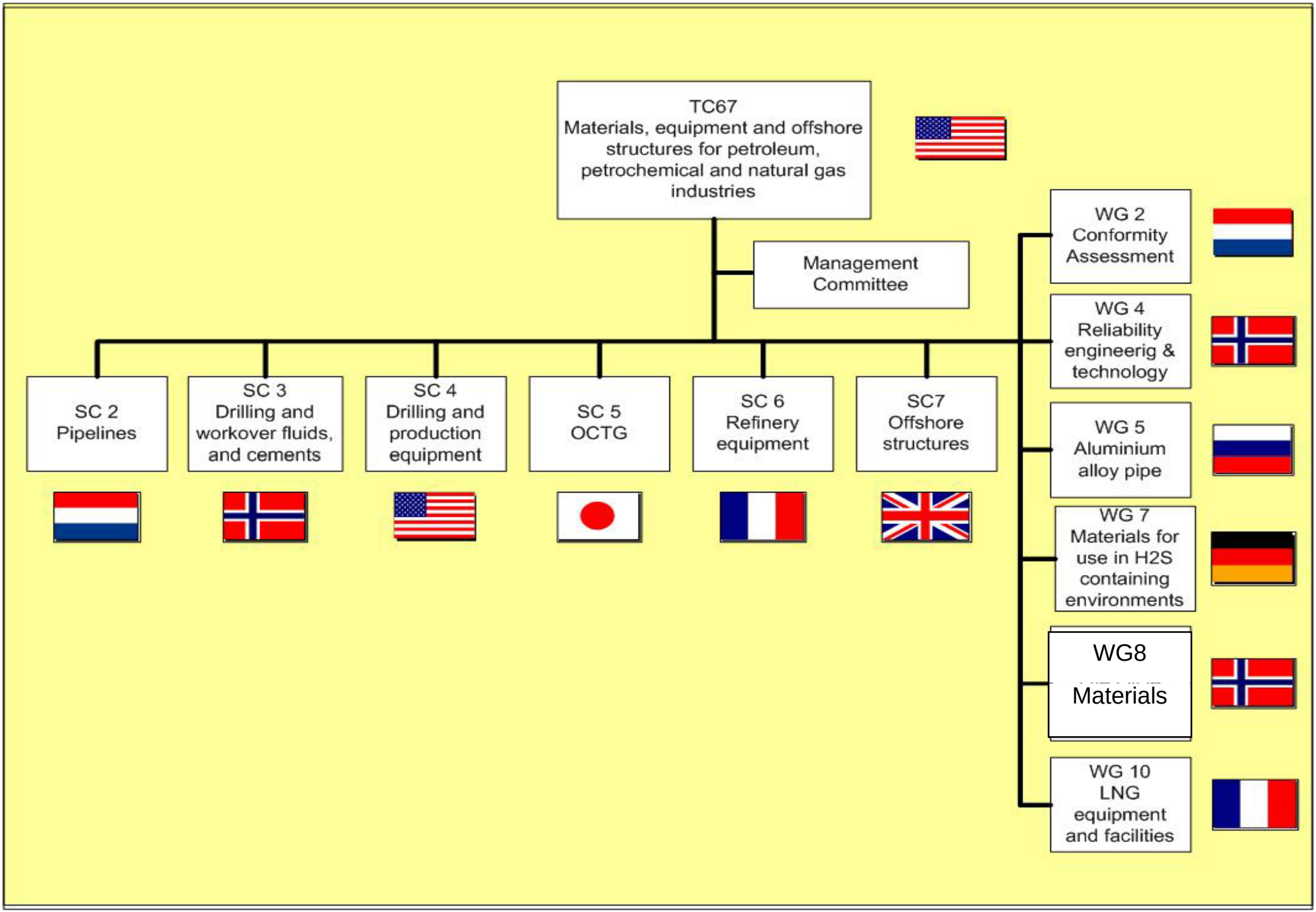
TC67 COUNTRY MEMBERS



Participating Members (29)

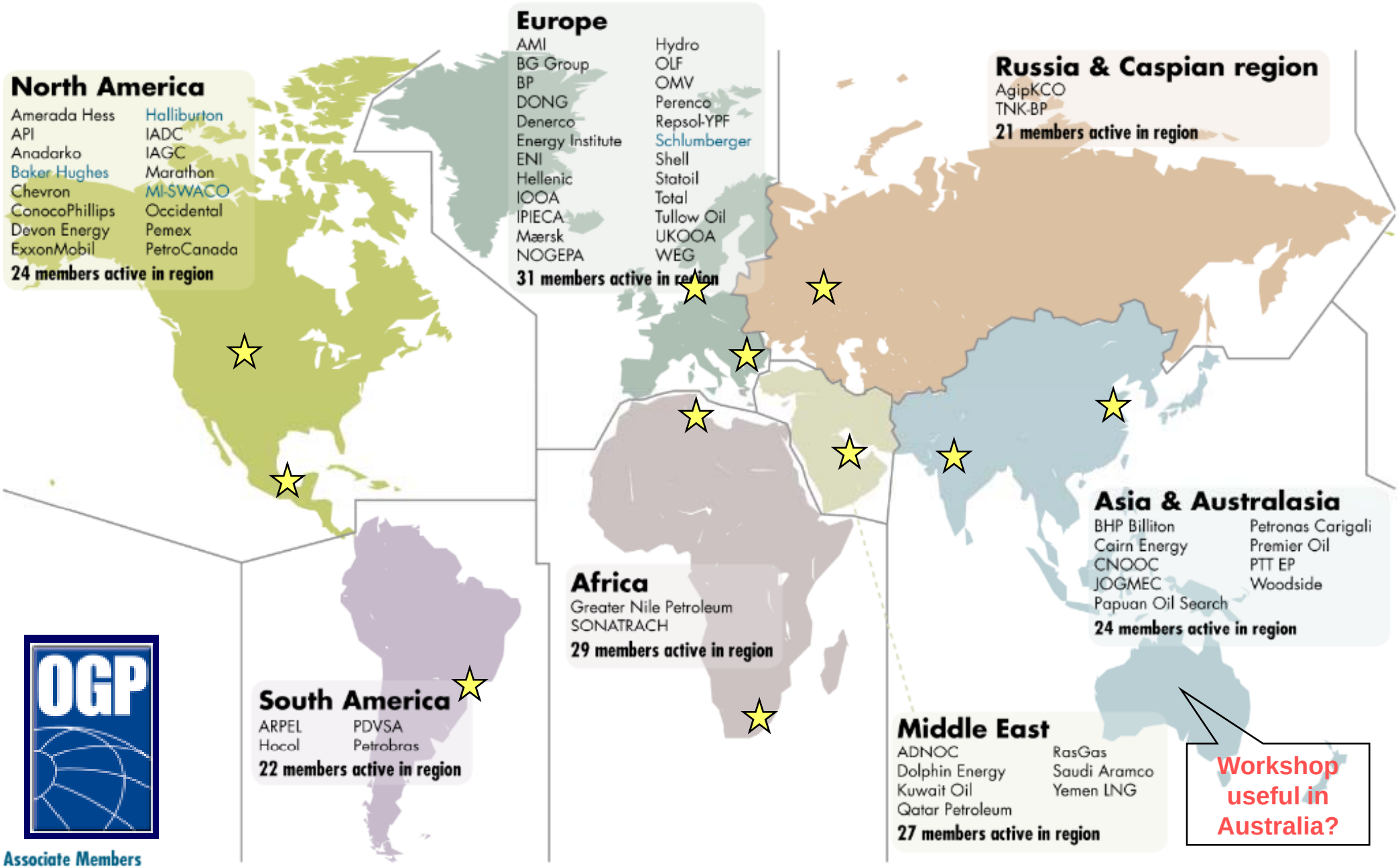
Observing Members (29)

including nearly all of the the IRF members


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
SC7
Offshore structures
WG 2
Conformity Assessment
WG 4
Reliability engineerig & technology
WG 5
Aluminium alloy pipe
WG 7
Materials for use in H2S containing environments
WG8
Materials
WG 10
LNG equipment and facilities

Base region of Members

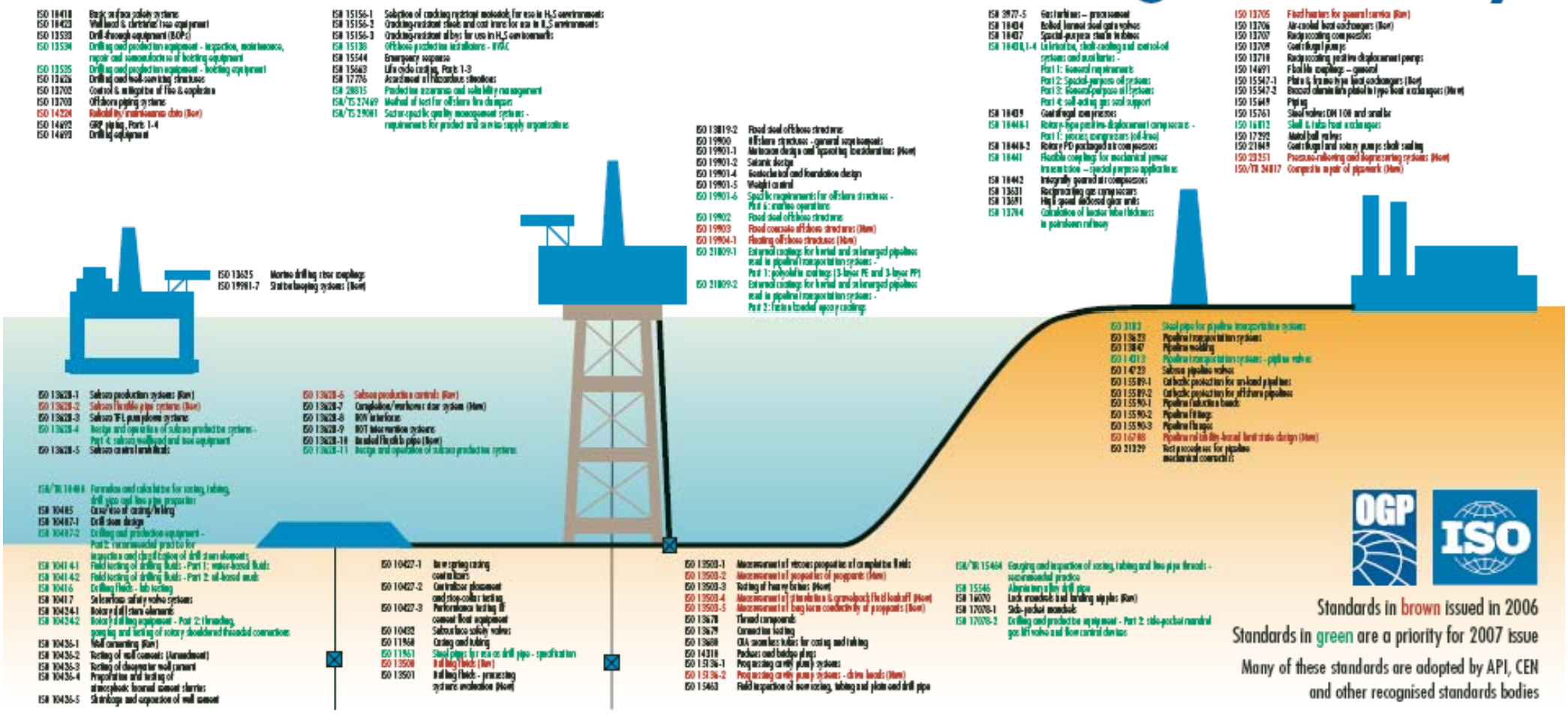
★ Standards Workshops



OGP

Associate Members

ISO Standards for use in the oil & gas industry



Standards in brown issued in 2006

Standards in green are a priority for 2007 issue

Many of these standards are adopted by API, CEN and other recognised standards bodies

- 134 standards, 19 publ this year, 15 revisions and 4 new.
- API has adopted 50+ of these as joint API / ISO standards.
- CEN has adopted 100+ of these as joint European EN ISO standards.
- China, India, Kazakhstan have also adopted many of these ISO standards

GLOBAL STANDARDS USED LOCALLY WORLDWIDE
ISO – CEN – API (rev 11)

Alain LOPPINET
CEN TC12 Chairman

LIST OF ISO TC67 STANDARDS
With the adoption in CEN and in API
+

On the 31st of July 2007

One resulting benefit:

OCTG parts and equipment for the oil & gas industry are now available according to globally relevant ISO standards

TENARIS ISO 11960 / API 5CT coupling

Catalogue of international standards used in the petroleum and natural gas industries

Report No. 362
January 2005

Includes references to 1.300 ISO standards and 700 IEC standards.

Potential & NWI for ISO/TC67

Resulting from OGP enquiry and discussion by OGP Standards Committee in Doha, April 2006 – Status per September 2007

- Hot-tapping on pipelines, piping and equipment – Hold
- Marine soil investigations – NWIP approved - In progress in SC7
- Ladders, platforms and handrails for process plant – Available?
- Pedestal cranes – Make API 2C an ISO std?
- Material selection – In progress in WG8 as ISO 21457
- Pipeline overpressure protection – Hold
- Protective coatings and linings for equipment – Workshop?
- Insulation and above-ground coating in relation to corrosion under insulation (CUI) (equipment and piping) – Workshop?
- Gastight cements formulation & testing – Ongoing in ISO..SC3
- Compact flanged connections –NWIP approved in ISO..SC4
- Standardization of expandable casing - Ongoing in API
- Well integrity in drilling and well operations

Lifetime extension standards

- ISO 19902 Fixed offshore steel structures (Nov 2007) includes some language on lifetime extension.
- API SC2 works on a Structural Integrity Management (SIM) standard that deals with lifetime extension. Draft expected 2008.
- ISO TC67 SC7 plans to adopt this API 2SIM standard when published.
- ISO TC67 SC2 works on a document for pipeline lifetime extension. Two drafts issued.

Using and referencing ISO and IEC standards for technical regulations – September 2007

- Document to convey to regulators the benefits of choosing to reference ISO and IEC standards for regulations.
- Standards from ISO and IEC have broad geographical reach and represent a wealth of technical, social and economic interests.
- These standards have been agreed by a consensus process (maybe including the regulators themselves) and are recognized, accepted and implemented around the globe.
- Regulators can save time and money by choosing ISO and IEC standards as solutions to technical issues.

http://www.iso.org/iso/standards_for_technical_regulations.pdf

Making use of the ISO standards

- Have we delivered to meet IRF members need?
- Are these ISO standards useful to IRF members?
- Are they adequate in technical content?
- Do you take advantage of the new ISO standards as references in your regulations or guidelines?

- OGP Benchmark in progress.
- Draft report on regulators use in preparation.
  Would IRF like to co-operate with OGP to complete the report?

OGP members support ..

…. IRF members
are invited to do likewise

Concluding note:

Join the ISO global standards work,
advice of your needs

&

Capture the value added by
making reference to
the new ISO standards for the oil &
gas industry

www.iso.org

Questions?

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What is a standard?

- **Standard:** document, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context.

  NOTE Standards should be based on the consolidated results of science, technology and experience, and aimed at the promotion of optimum community benefits.

- **Consensus**: General agreement, characterized by the absence of sustained opposition to substantial issues by any important part of the concerned interests and by a process that involves seeking to take into account the views of all parties concerned and to reconcile any conflicting arguments.

  NOTE Consensus need not imply unanimity.