

A stylized graphic of a globe is positioned on the left side of the slide. It consists of several overlapping, light blue curved lines that represent the latitude and longitude of a sphere, creating a wireframe effect.

**Development and use of  
International Standards  
for the oil and gas industry**

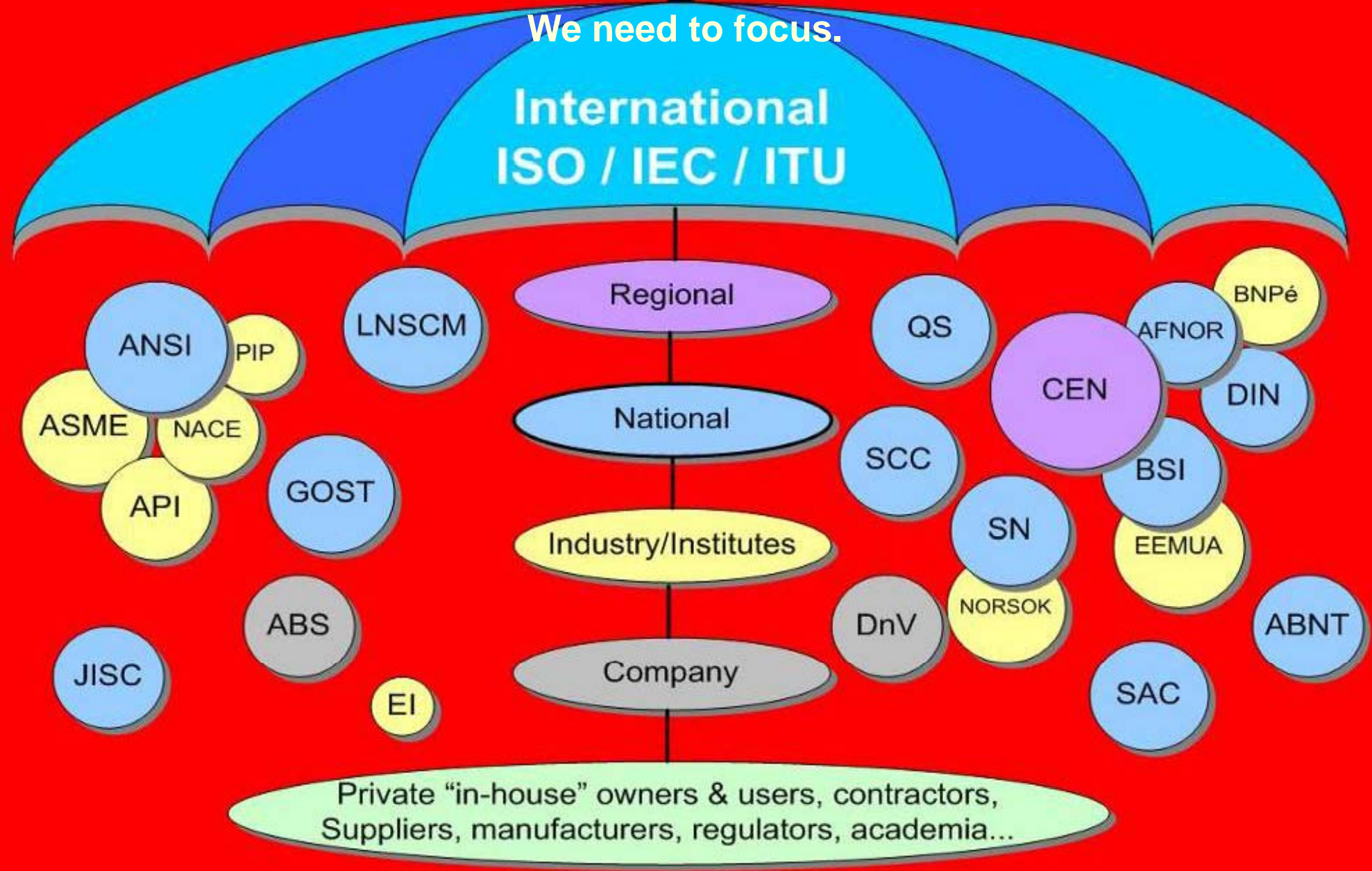
**Alf Reidar Johansen  
OGP Standards Manager**

# Oil & gas standards history



- Historically, the American organisations like API, ANSI, ASME, ASTM & AWS etc. developed the standards frequently used by the worldwide upstream oil & gas industry.
- North Sea operating companies developed in the 80's lots of in-house and project related specifications to fit their needs not covered by the American standards.
- Growing EU interest for developing European upstream standards emerged mid 80's in view of EU's "new approach" to writing directives with general safety requirements to be supported by technical standards.
- **A change in developing oil & gas standards and company specifications was required.**

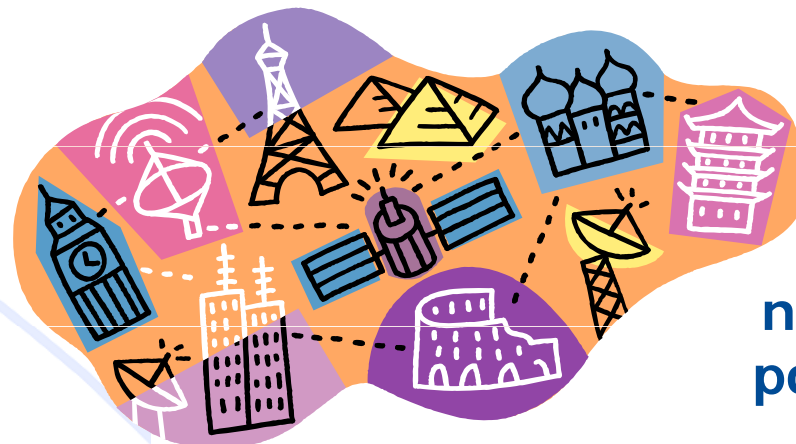
There are 600.000+ standards out there for our use.  
We need to focus.



# Why make global ISO and IEC standards - 1?

**OGP**

- Create common understanding.
- Facilitate global trade / availability of material and equipment.
- Reduce design work, retooling and inventory.
- Accelerate product development and delivery.
- Global competition will reduce cost.
- ISO & IEC offer a global arena for standards work and global experts.
- Fair directives for the work.



**Great  
networking  
possibilities**

## Why make global ISO and IEC standards - 2?

**OGP**

- Transfer international experience.
- Maintain best practices and codification of knowledge for improved solutions that ensures HSE compliance.
- Voluntary participation and use of ISO & IEC standards.
- Reduce need for company specifications.
- Can support national regulations and reduce text of national regulatory documents.

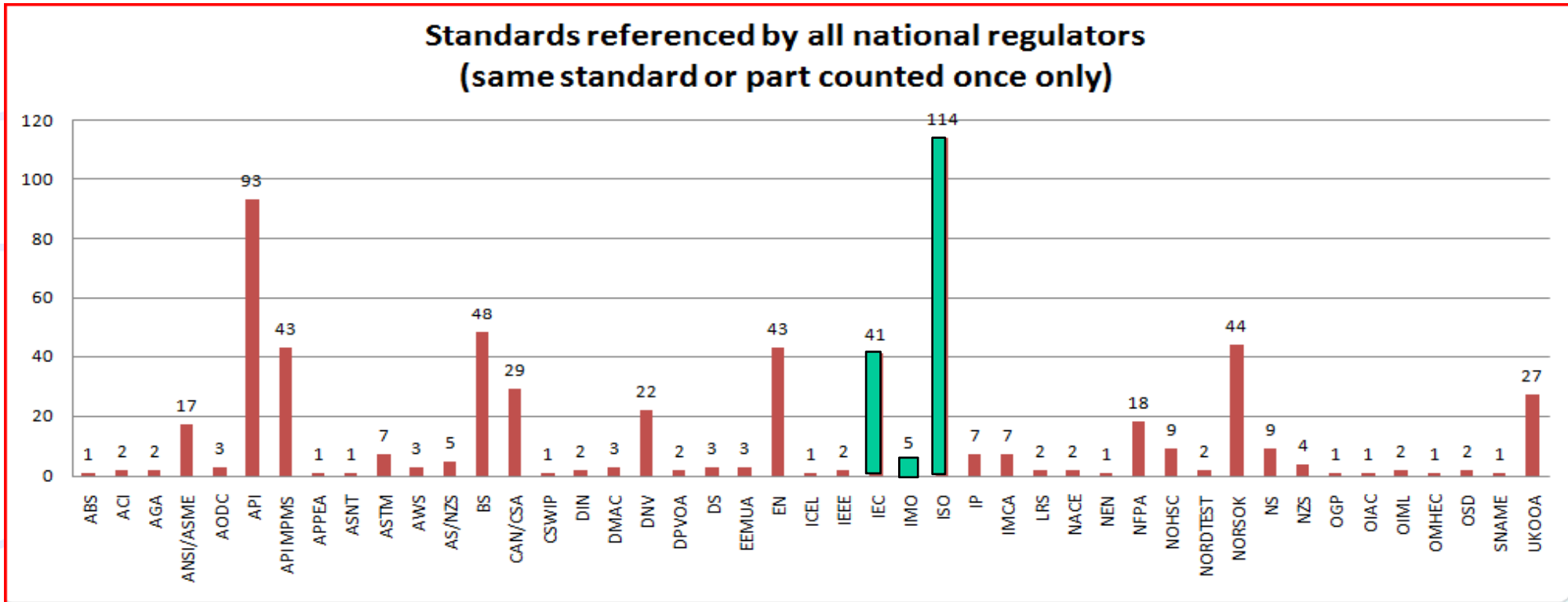
**Therefore ISO/TC67 was reactivated 1989  
Made for & made by the industry  
Hence, OGP takes an interest in standards**

## ISO initiative & OGP support



- OGP supported the ISO initiative in 1987 to reactivate ISO / TC67 to develop ISO standards for the upstream – the petroleum & natural gas -industry.
- This created a global arena for standards development, where all ISO members and nations concerned have a role to play.
- ANSI, USA were offered and accepted responsibility for the ISO / TC67 secretariat.
- First meeting of ISO / TC67 in Paris 1989.
- A new era in the global upstream industry standardisation had started.

# Regulators use of standards

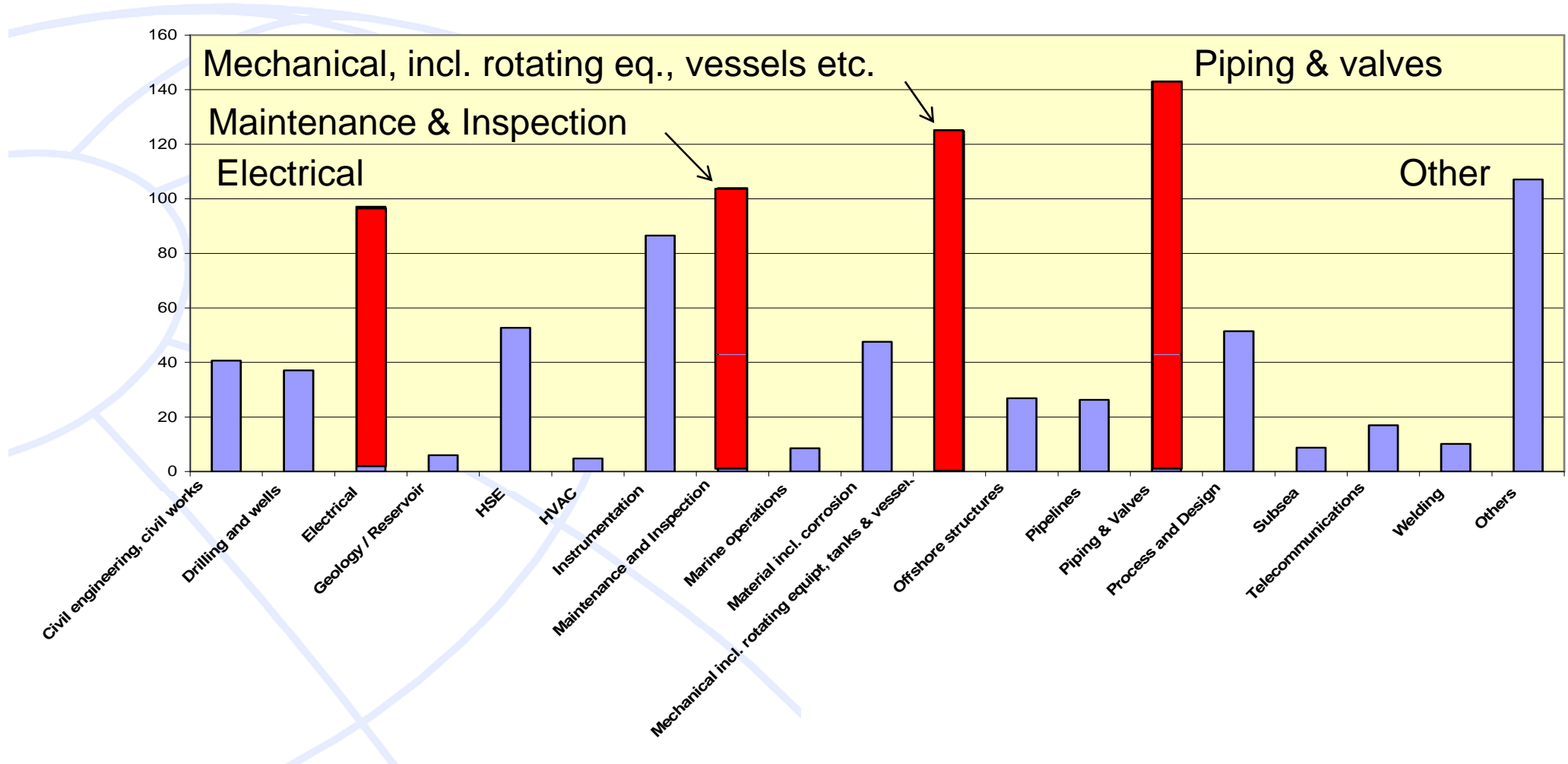


**This graph (from an OGP study of twelve offshore regulators around the globe) suggests that there is ample room for increased development and use of International Standards.**

# Company specifications



Average number of specifications - Draft - OGP Benchmark survey 2008



# OGP Standard Committee



## Members <sup>1)</sup>

Wilson Barbosa de Oliveira  
Anatoly Baryshnikov  
Gail Baxter  
Felicia Decusara  
Joachim G. Koenig  
Tom Kelleher  
Alain Loppinet  
Martin Maeso  
David Miller  
Saif S Al Naimi <sup>4)</sup>  
Ziyad Ghulam (vicechair)  
Manuel Paga Costellanos  
Terry Qin <sup>2)</sup>  
Neil Reeve (chair)  
Daniel Rioche  
Trevor Vyze  
Ross Smith  
Mike Swidzinski  
Richard Torgersen  
Helge I Vestre <sup>3)</sup>

## Company

Petrobras  
Eni  
Marathon  
Petrom  
OMV  
Petro-Canada  
CEN  
Energy Institute  
API  
Qatar Petroleum  
Saudi Aramco  
RepsolYPF  
CPSC  
Shell  
Total  
ISO  
BP  
ConocoPhillips  
ExxonMobil  
StatoilHydro

## Country

Brazil  
Italy  
USA  
Romania  
Austria  
Canada  
France  
UK  
USA  
Qatar  
Saudi Arabia  
Spain  
China  
Netherlands  
France  
Switzerland  
USA  
UK  
USA  
Norway

## Other functions

CEN/TC12 AH8 chair  
  
CEN/TC12 Chair  
API Std. Progr. dir.  
  
Act. Chair ISO/TC67  
Techn. group mgr.

Notes: <sup>1)</sup> Plus corresponding members from: BG, Chevron, Mærsk and Premier. Alternates: <sup>2)</sup> Du Delin & Xiaohong Chen, CPSC <sup>3)</sup> Per Eirik Fosen <sup>4)</sup> Muayyad Ajjawi

OGP SC meets twice a year. Meet last 03 Feb 2009

**OGP strongly supports the internationalisation of key standards.**

**OGP 's position on standards is among others:**

- **Development and use of ISO and IEC standards should be promoted, ISO or IEC should publish them.**
- **International standards should be used without modification wherever possible, but have flexibility to recognise regional variations.**
- **Available resources should be used efficiently, avoiding duplication of effort.**
- **Company specifications should be minimised.**

## OGP Position - conclusion

OGP

- For full position, see OGP report No. 381, April 2007, 3<sup>rd</sup> edition.
- 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, Petrochemical, and Natural Gas Industries.




# OGP Membership

**North America**

Anadarko	IADC
API	IAGC
Baker Hughes	Marathon
Chevron	MISWACO
ConocoPhillips	Nexen
Devon Energy	PetroCanada
ExxonMobil	Schlumberger
Halliburton	Talisman
Hess	

**27 members active in region**

Possibly  Sept 2009

**Europe**

AMI	Oil & Gas UK
BG Group	OLF
BP	OMV
Calm	Perenco
DONG Energy	Premier Oil
Energy Institute	Repsol-YPF
ENI	Shell
GDF Suez	StatoilHydro
IOGA	Total
IPIECA	Tullow Oil
Maersk	WEG
MOL	Wintershall
NOGPA	

**35 members active in region**

 **Standards Workshops**

**Russia & Caspian region**

TNK-BP  
**17 members active in region**

**Africa**

Greater Nile Petroleum  
**29 members active in region**

Happening now!

**Asia & Australasia**

BHP Billiton	Papuan Oil Search
CNOOC	Petronas Carigali
Inpex	PTT EP
JOGMEC	Woodside
ONGC	

**28 members active in region**

**South America**

ARPEL	Hocol
CSC	Petrobras

**21 members active in region**

**Middle East**

ADNOC	Qatar Petroleum
Dolphin Energy	RasGas
Kuwait Oil	Saudi Aramco
Persian LNG	SEPOC
Petropars	Yemen LNG

**32 members active in region**



# OGP

International Association of Oil & Gas Producers

## Standards Bulletin

### EXECUTIVE SUMMARY

A set of international standards for a wide selection of vital oil and gas

### GULF STATE COMPANIES FOCUS ON ISO STANDARDS



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

Report No. 362  
January 2005

publications in 2006. A further 16 are planned for publication this year. The

time a standards workshop had been held in this area. The number of workshop delegates

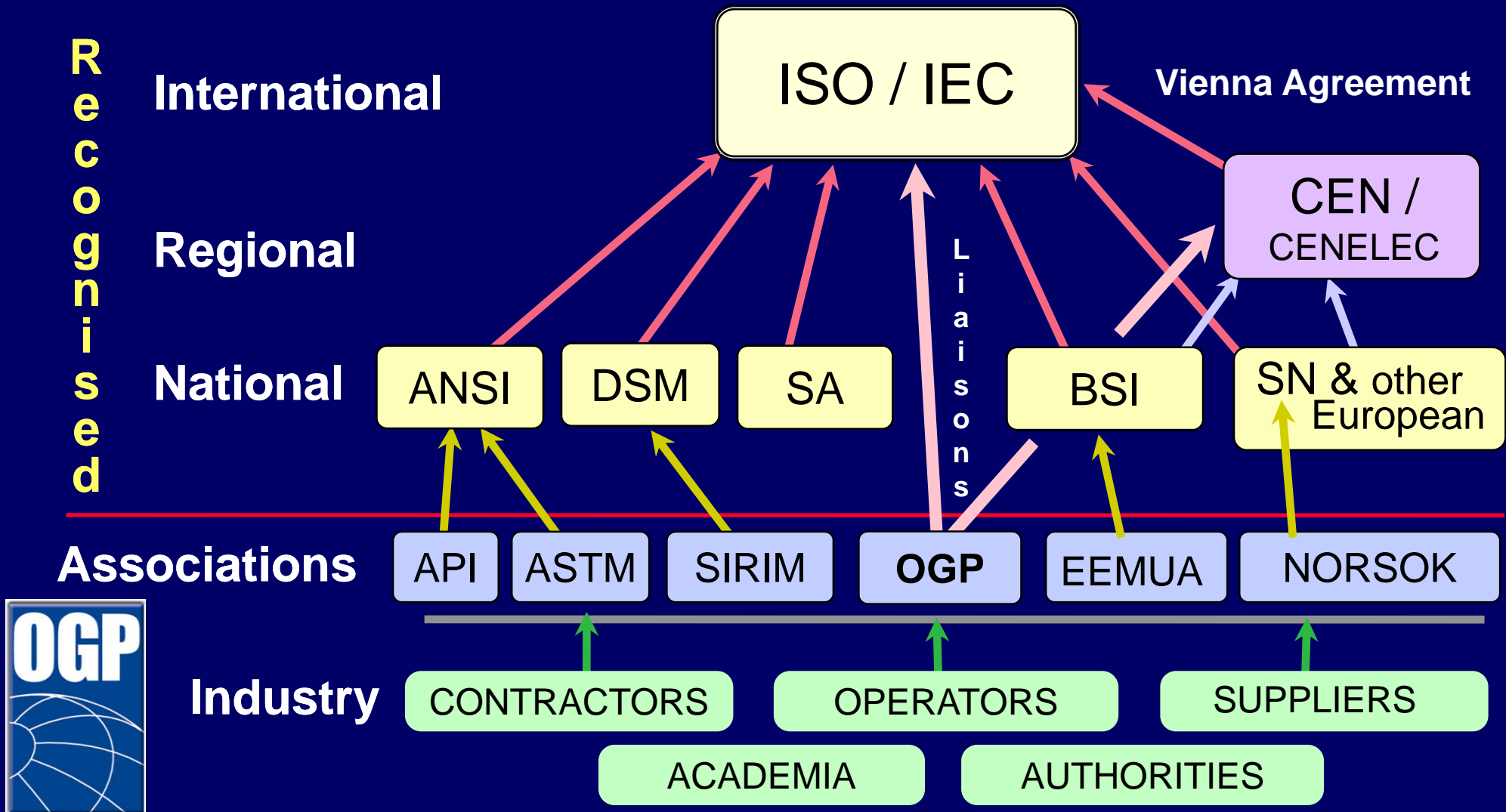
, under the Bin Hamad time Minister Industry – and an international April 2006 in shop was to of standardisation ctor and increase & gas companies anisations in the gion. It is the first



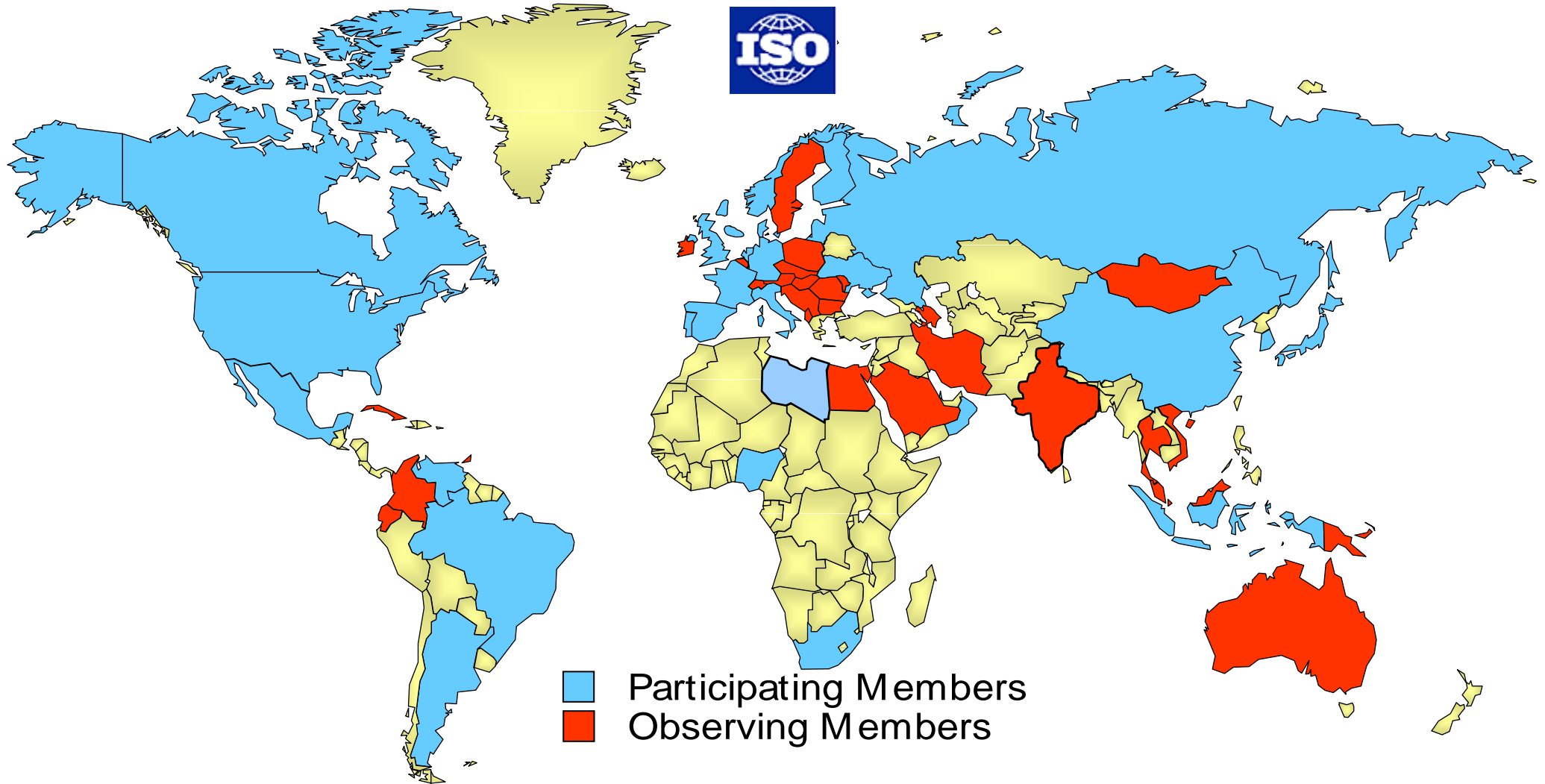
<http://info.ogp.org.uk/standards/>

**Saudi Aramco** (SA) organised its first International Standards forum and workshop on 28-29 November 2006, at the Le Gulf Meridien Hotel, Al-Khobar, Saudi Arabia. This knowledge sharing event was designed to provide the participants with an opportunity to broaden their understanding of the

# Standardisation bodies – relationships

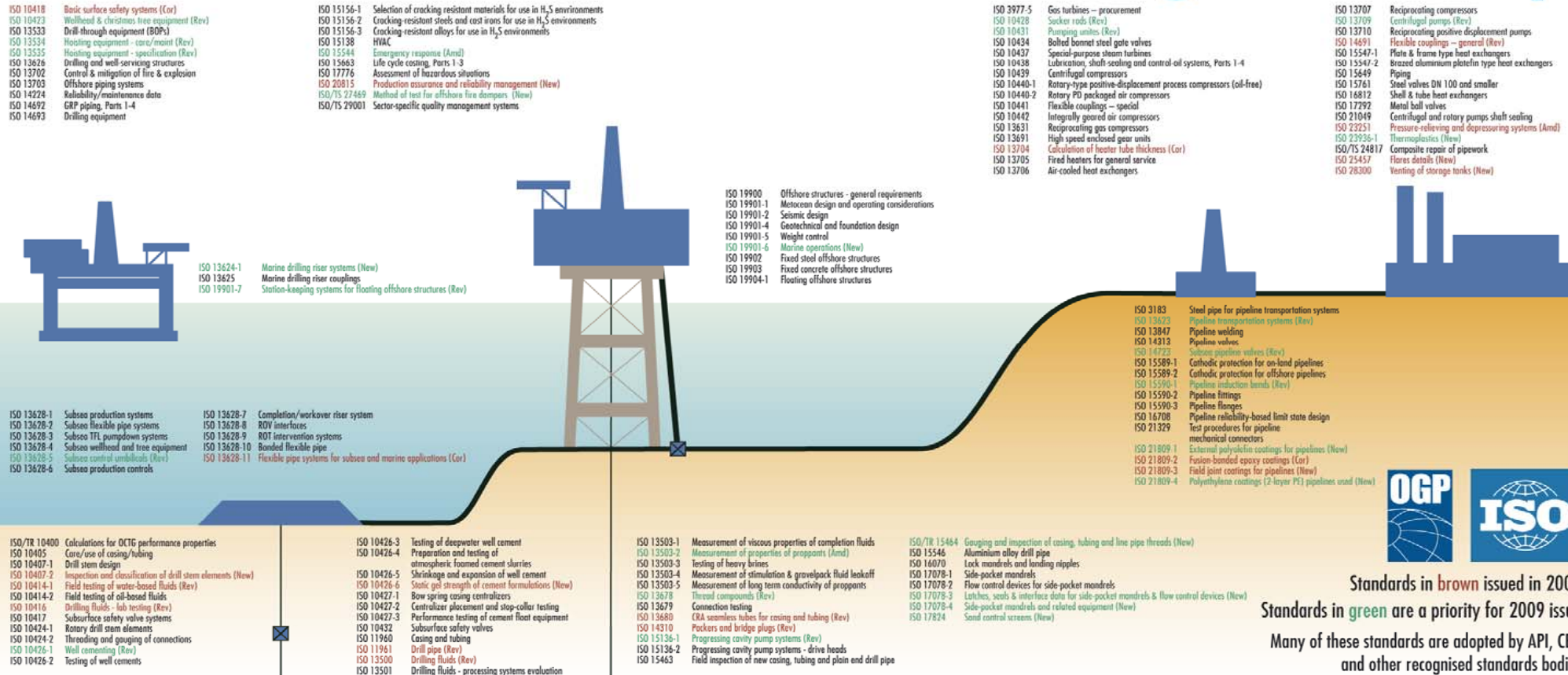


The oil & gas industry is global  
ISO/TC67 is one of the more important global committees



TC67 enjoy a wide base of member countries

# ISO Standards for use in the oil & gas industry

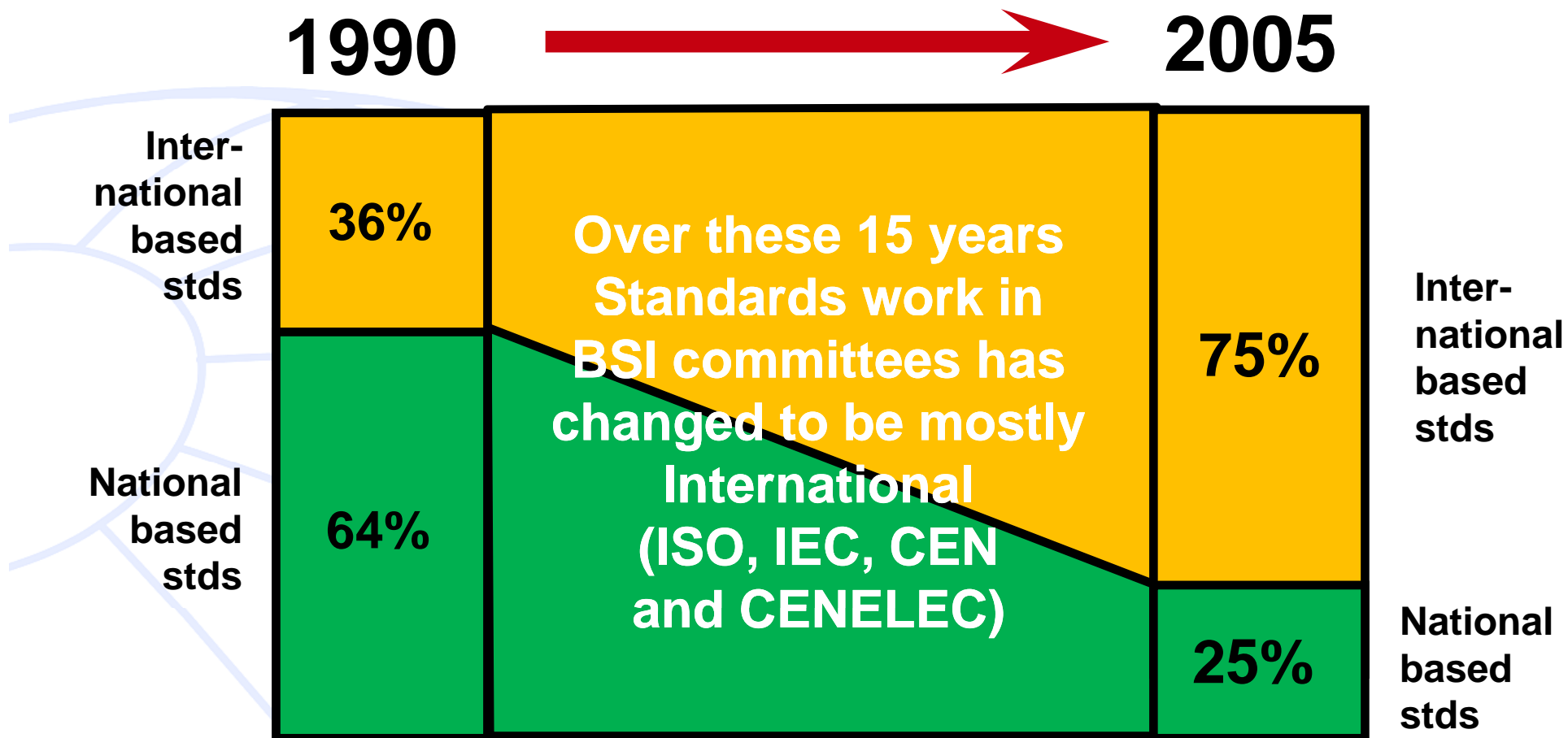


Standards in brown issued in 2008  
 Standards in green are a priority for 2009 issue  
 Many of these standards are adopted by API, CEN and other recognised standards bodies

- ISO TC67 has published **135** standards.
- API has adopted **68** of these as joint API / ISO standards.
- CEN has adopted **120** of these as joint European EN ISO standards.
- China, Gulf states, Kazakhstan have also adopted many of these ISO standards.
- Russia has a long term plan to adopt many of these ISO standards.

# Pattern of change – British Standards Institute

**OGP**



Source: UK DTI Report The Empirical Economics of Standards, June 2005

## Tenaris ISO 11960/API 5CT coupling

### 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 Casing coupling

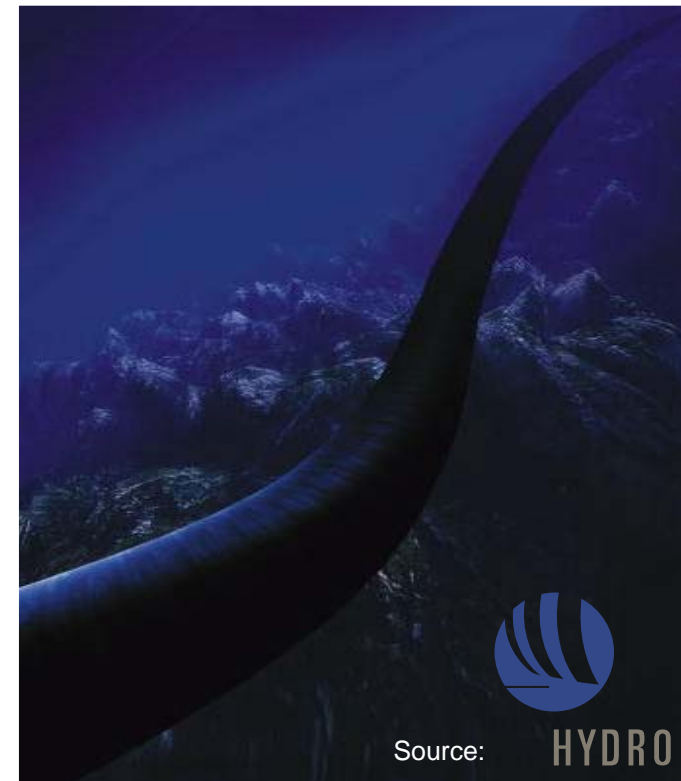
- Made in Mexico
- By Italian company
- For Middle East buyer



## ISO offers cost reduction

OGP

- ISO 15589-2 for cathodic protection is an example to show that prioritising ISO work offers good results.
- ISO standard developed by international consensus process.
- Use of this ISO standard 15589-2 offered 20 Mill \$ in cost savings in relation to using local NORSOK standard M-503 for the 1.200 km Lange pipelines.



# ISO offers new technology

OGP

- Hydro (now StatoilHydro) used ISO 13628-series for subsea production installations for the development of the Ormen Lange field (illustration below).
- These ISO standards developed on the NORSOK
- API works to back-of the ISO





- ❖ **Join the ISO/IEC**

**global  
standards work**

- ❖ **Capture the value added by making use of  
the new ISO/IEC standards for the oil & gas  
industry**

- ❖ **[www.iso.org](http://www.iso.org) / [www.iec.ch](http://www.iec.ch)**

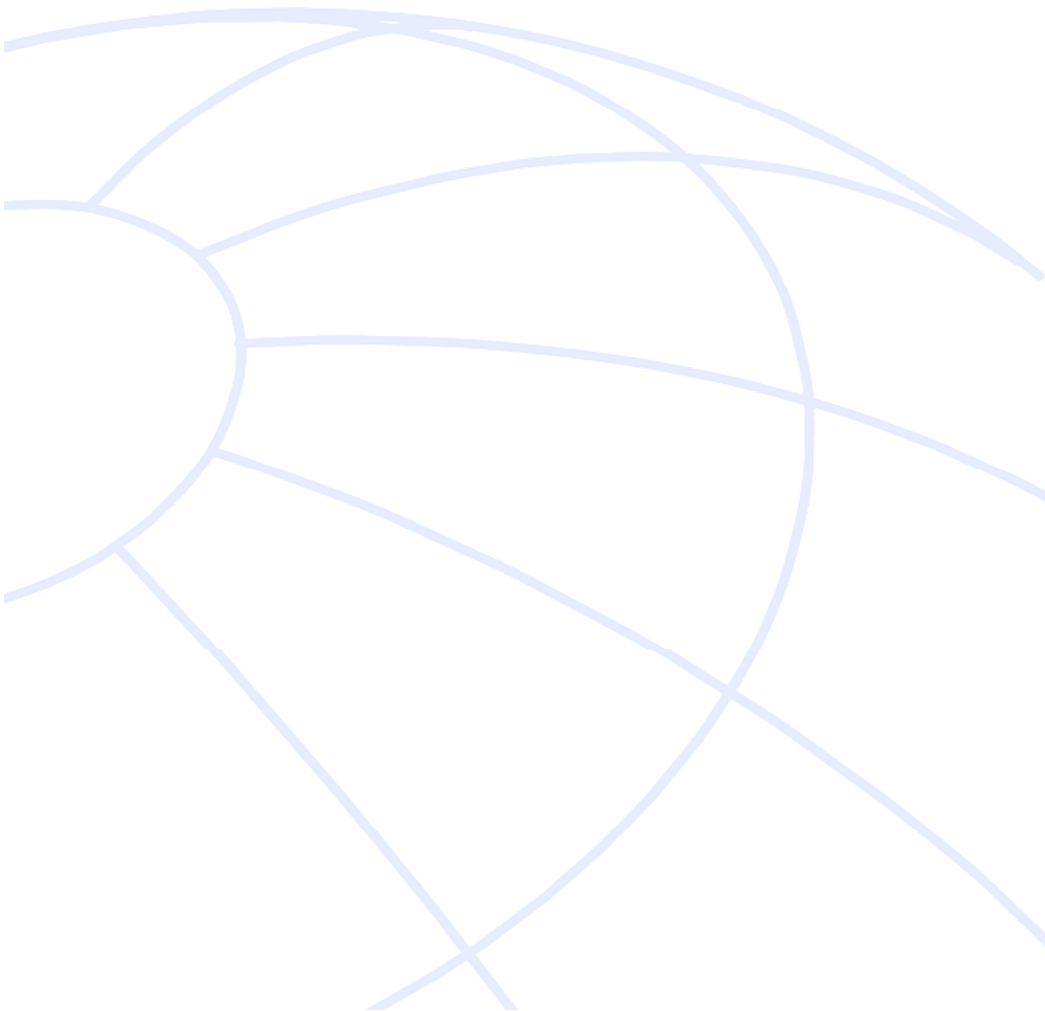


Global  
Standards  
Used Locally  
Worldwide

..... also for Malaysia!

Questions?

**OGP**



**Alf Reidar Johansen**  
**OGP Standards Manager**  
**Email: [arj@ogp.org.uk](mailto:arj@ogp.org.uk)**  
**Mobile: +47 95 029 079**