

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.

**International Standards
Workshop, Perth, Australia
19-20 February 2009**

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

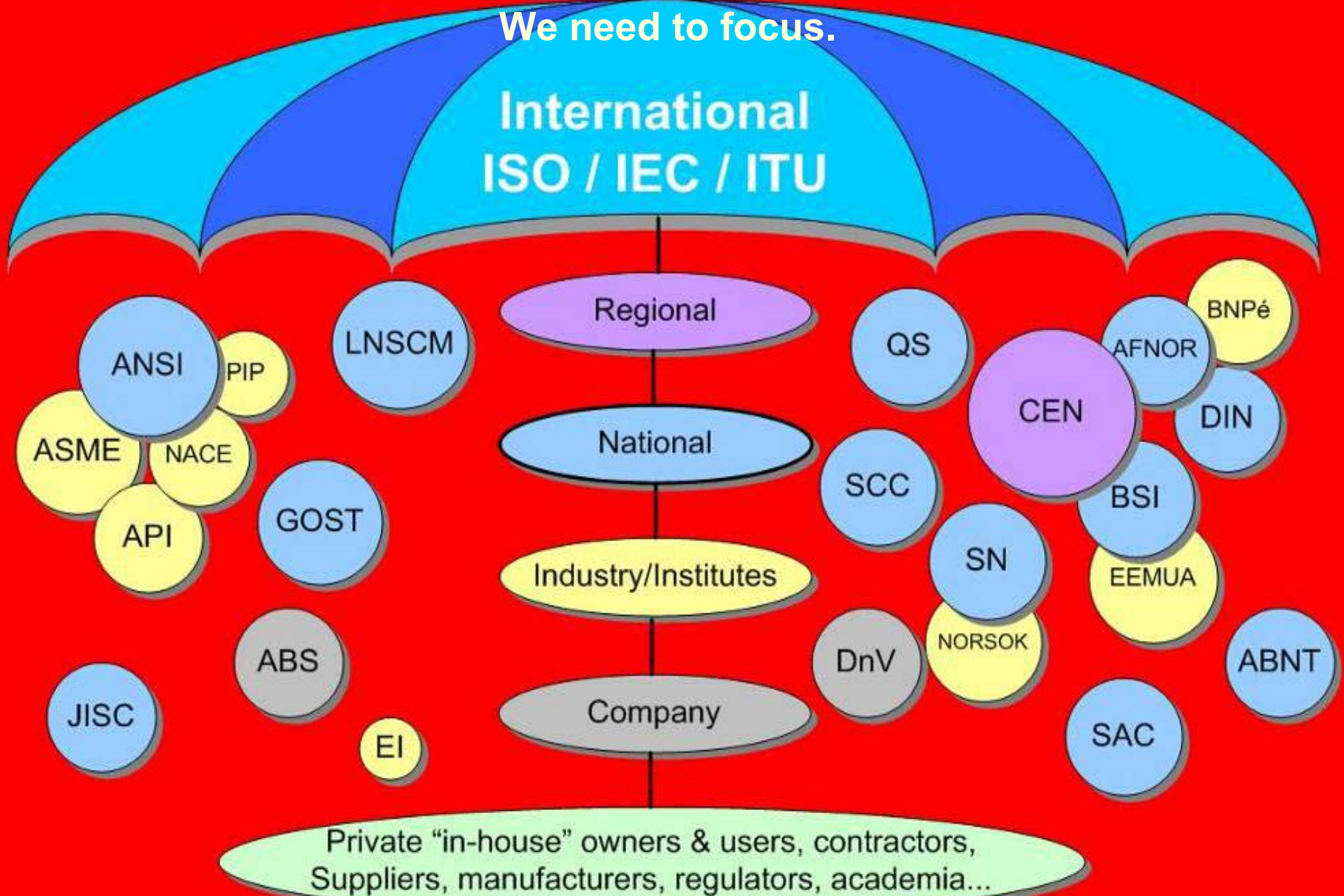
**Alf Reidar Johansen
OGP Standards Manager**

Oil & gas standards history

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- 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?

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- **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?

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- **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.**

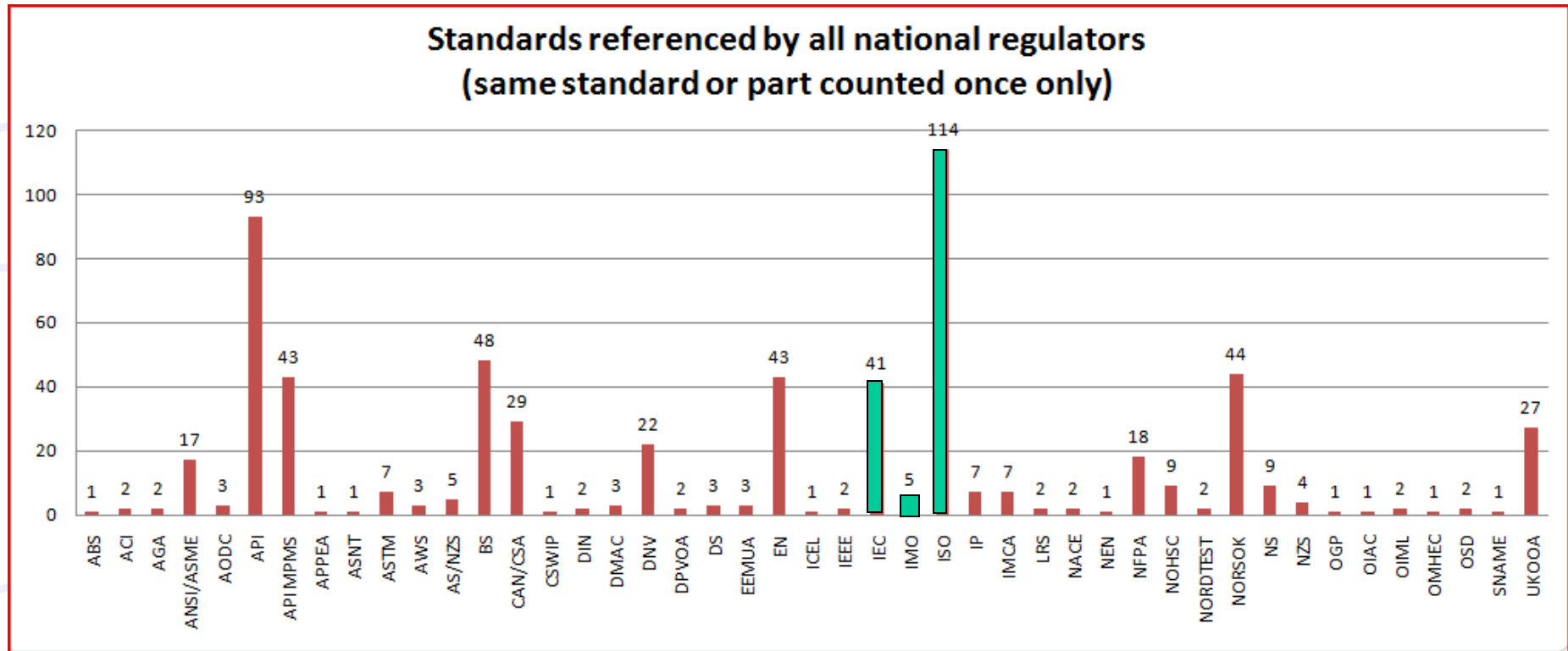
**Therefore ISO/TC67 was reactivated 1989
Made for & made by the industry
Hence, OGP takes an interest in standards**

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

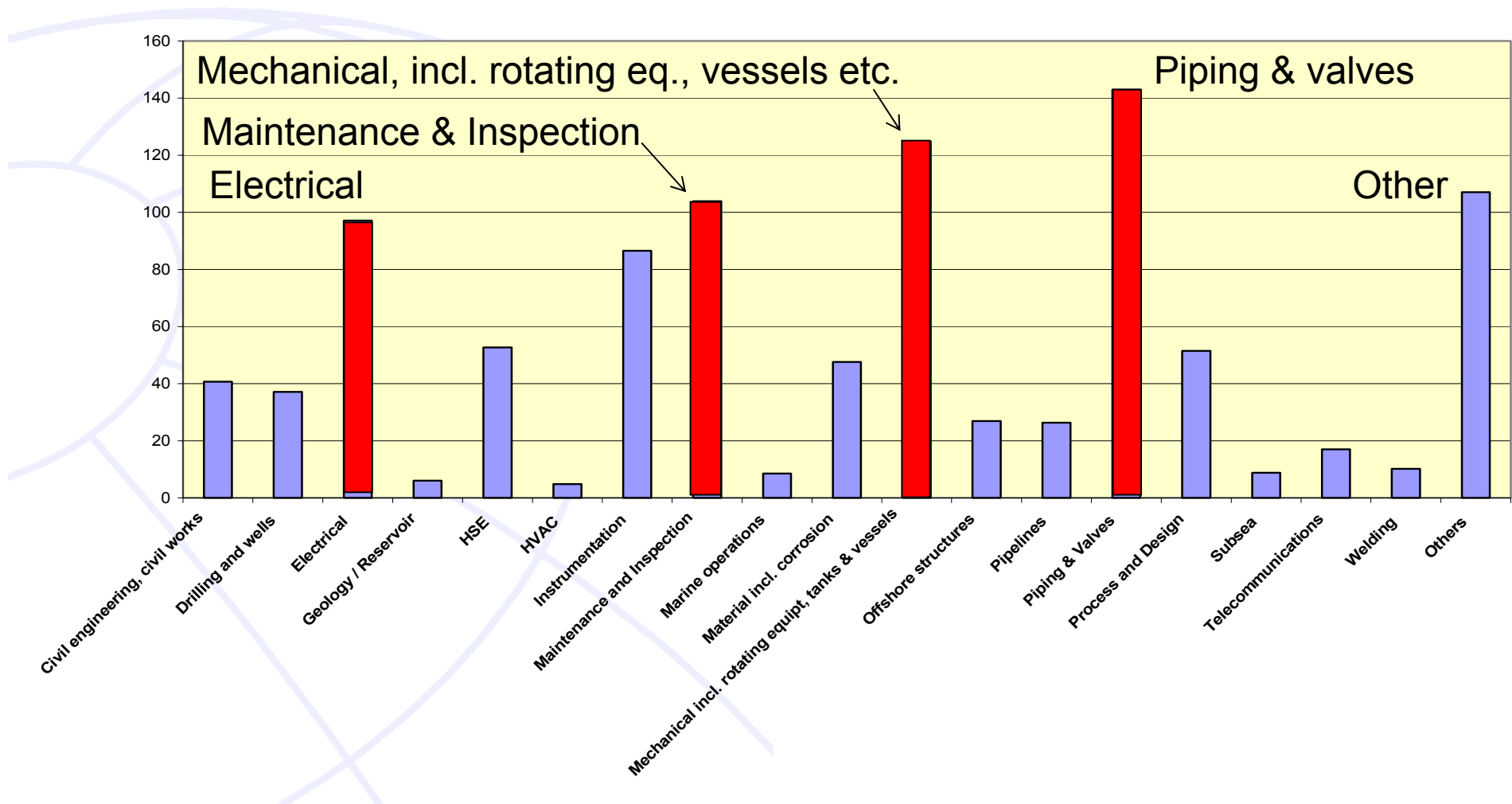


This graph (from an OGP study of twelve offshore regulators around the globe) suggests that there is ample room for increased development and use of International Standards.

Company specifications



Average number of specifications - Draft - OGP Benchmark survey 2008



OGP Standard Committee



Members ¹⁾

Wilson Barbosa de Oliveira
Anatoly Baryshnikov
Gail Baxter
Felicia Decusara
Joachim G. Koenig
Tom Kelleher
Alain Loppinet
Martin Maeso
David Miller
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Terry Qin ²⁾
Neil Reeve (chair)
Daniel Rioche
Trevor Vyze
Ross Smith
Mike Swidzinski
Richard Torgersen
Helge I Vestre ³⁾

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: ¹⁾ Plus corresponding members from: BG, Chevron, Mærsk and Premier. Alternates: ²⁾ Du Delin & Xiaohong Chen, CPSC ³⁾ Per Eirik Fosen ⁴⁾ 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

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- **For full position, see OGP report No. 381, April 2007, 3rd 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

★ Standards Workshops

North America

Anadarko	IADC
API	IAGC
Baker Hughes	Marathon
Chevron	MI-SWACO
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	OIF
BP	OMV
Calm	Perenco
DONG Energy	Premier Oil
Energy Institute	Repsol-YPF
ENI	Shell
GDF Suez	StatOilHydro
IOCOA	Total
IPIECA	Tullow Oil
Mærsk	WEG
MOL	Wintershall
NOGPA	

35 members active in region

Russia & Caspian region

TNK-BP
17 members active in region

Asia & Australasia

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

28 members active in region

Africa

Greater Nile Petroleum
29 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



Associate Members



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

, under the Bin Hamad time Minister Industry – and an international April 2006 in shop was to of standardisation tor and increase & gas companies anisations in the gion. It is the first time a standaras workshop had been held in this area. The number of workshop delegates



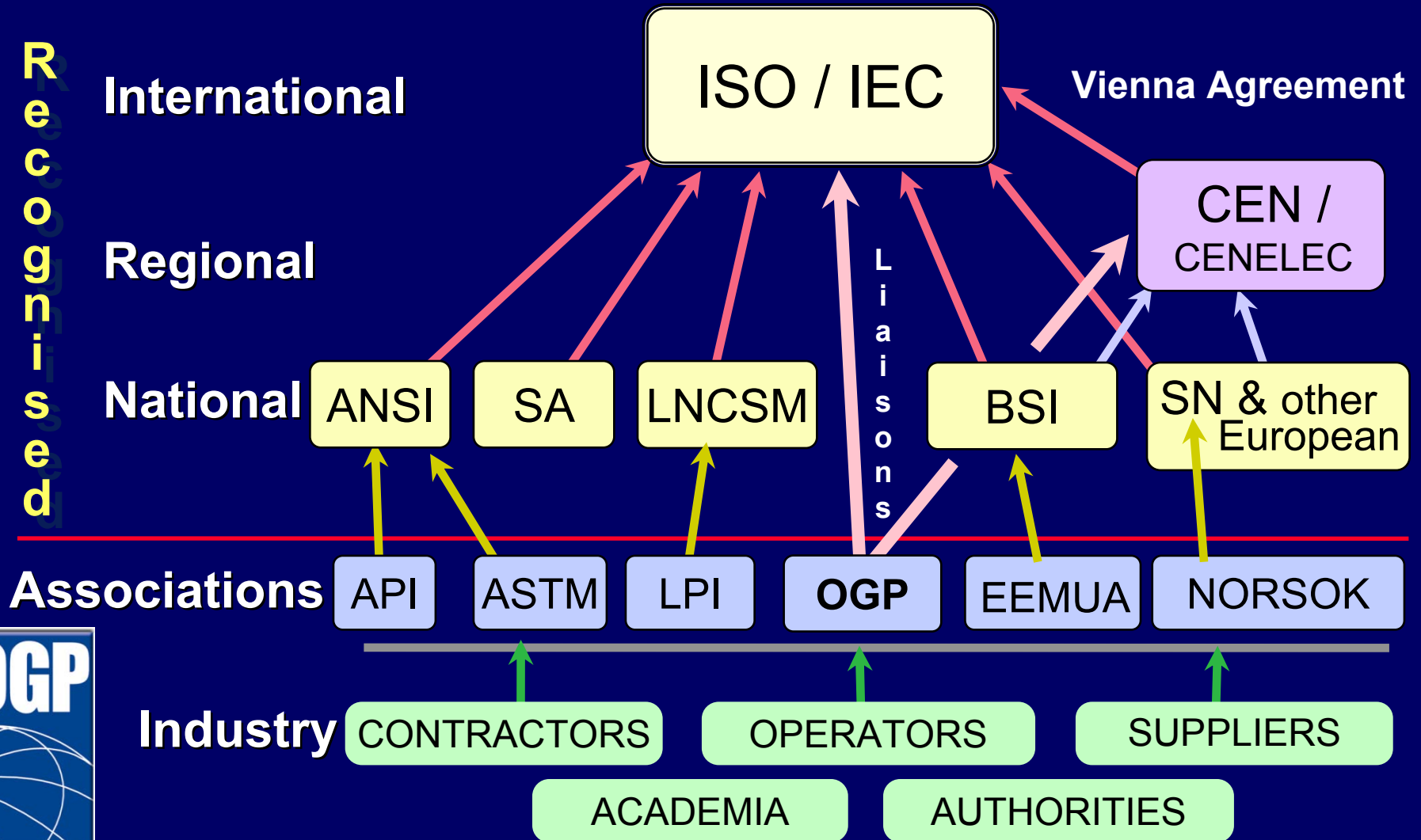
<http://info.ogp.org.uk/standards/>

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

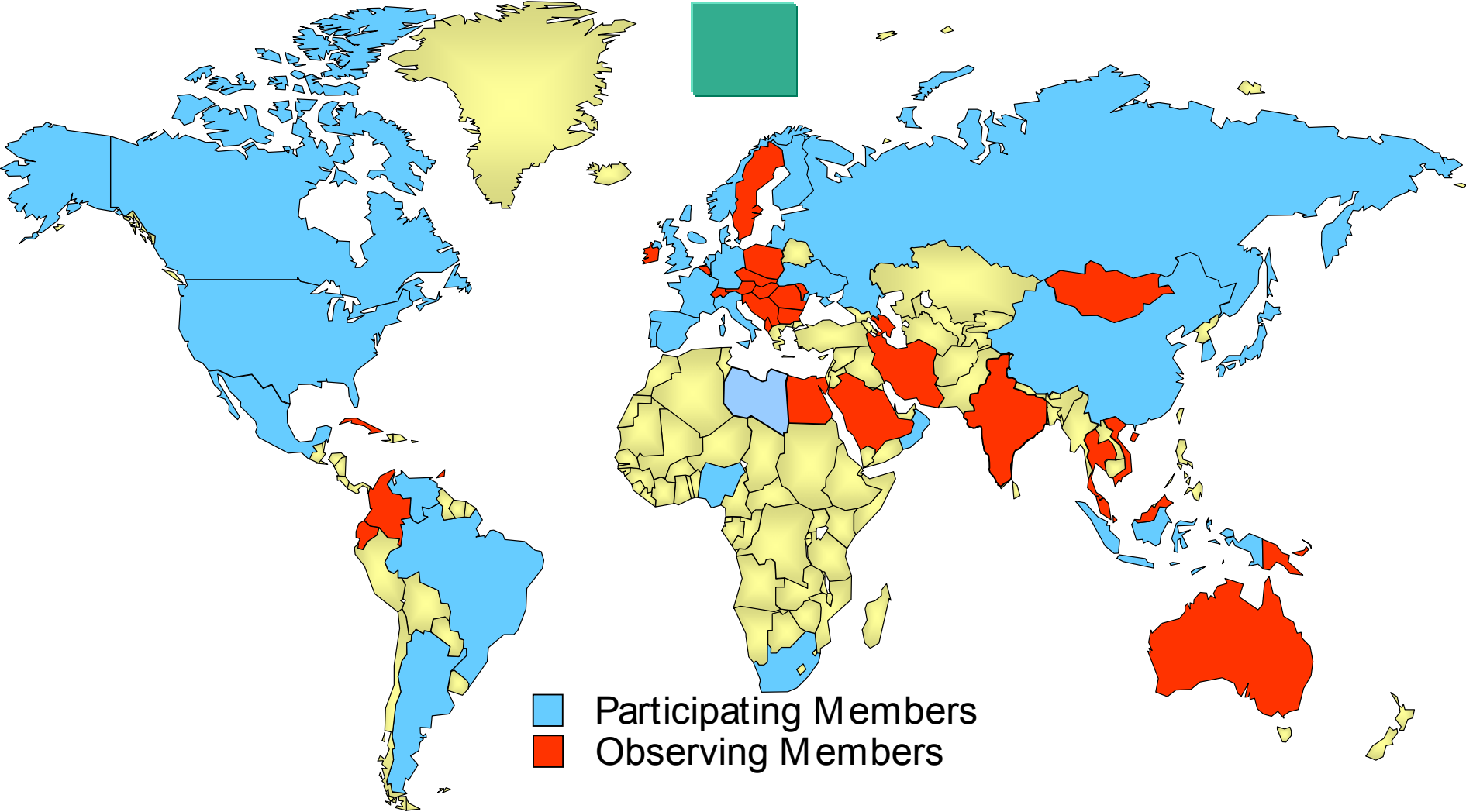
publications in 2006. A further 16 are planned for publication this year. The

Standardisation bodies – relationships

Recognised

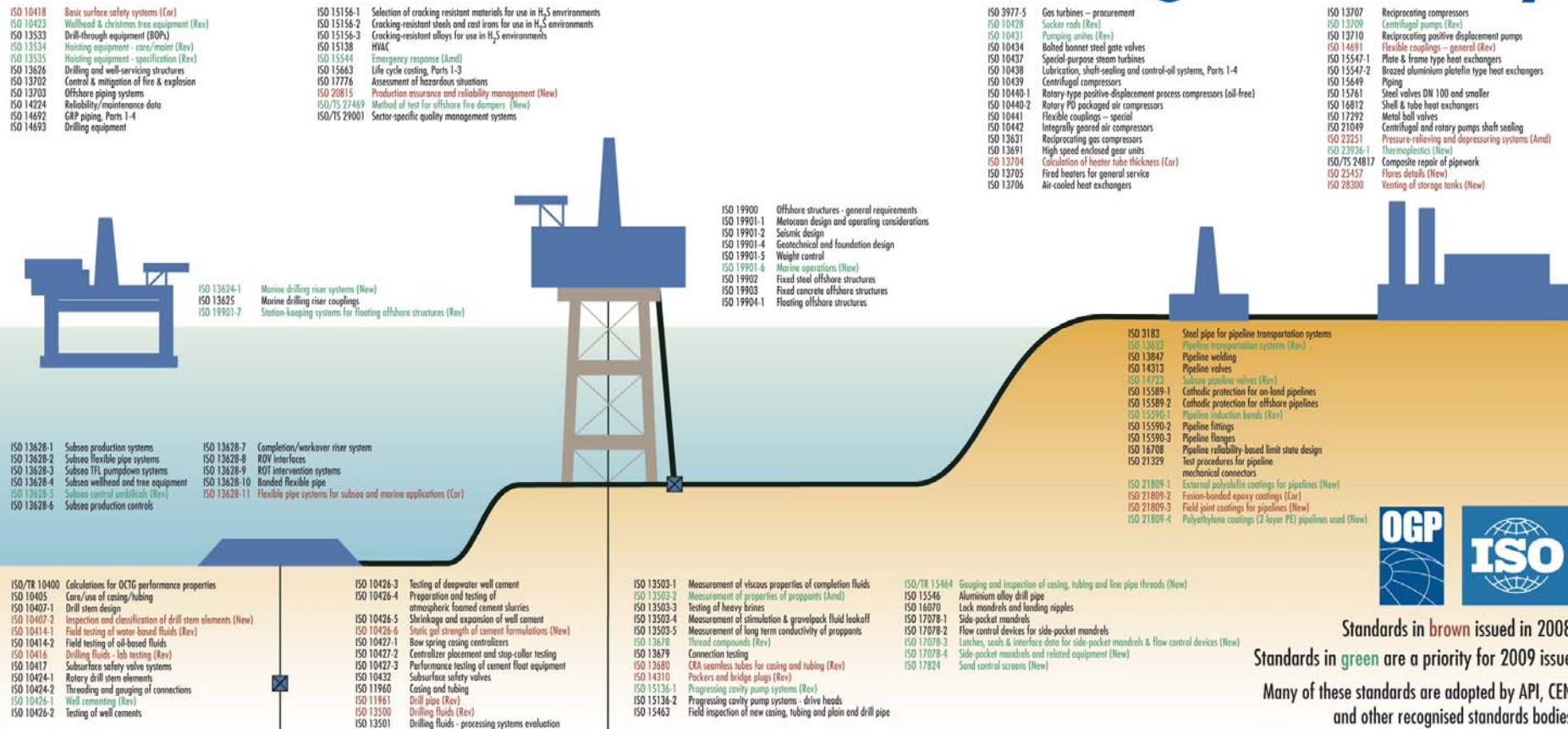


The oil & gas industry is global
ISO/TC67 is one of the more important global committees



TC67 enjoy a wide base of member countries

ISO Standards for use in the oil & gas industry

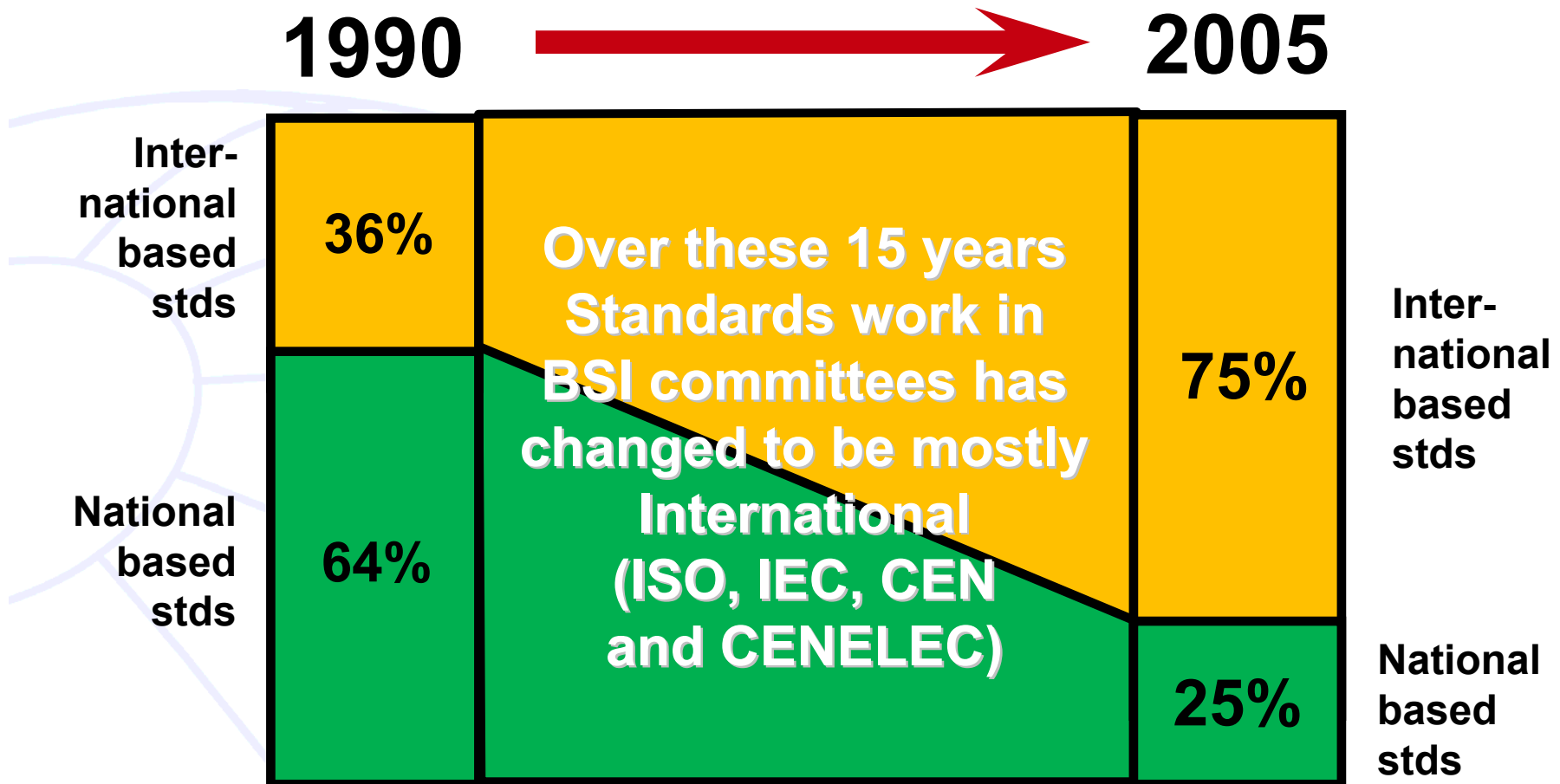


Standards in brown issued in 2008
 Standards in green are a priority for 2009 issue
 Many of these standards are adopted by API, CEN and other recognised standards bodies

- 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

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

Tenaris ISO 11960/API 5CT coupling

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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

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- **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**

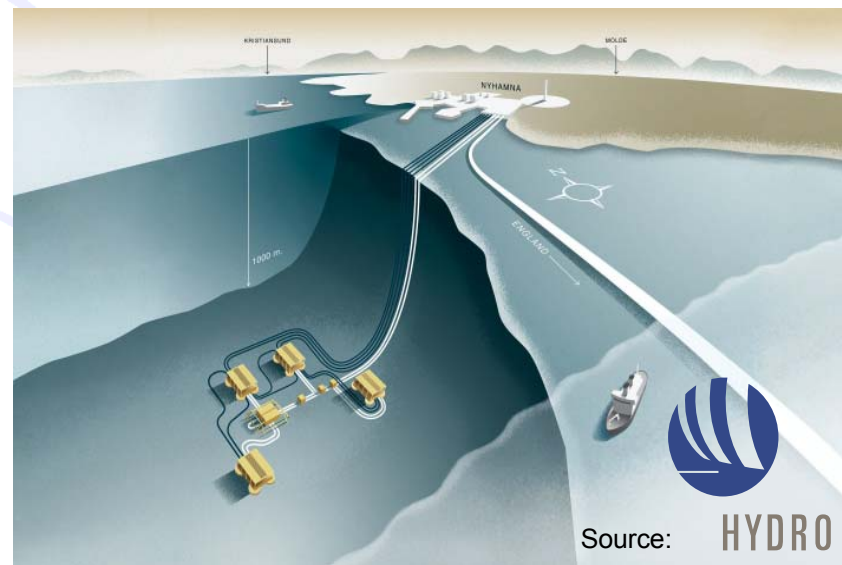


ipeli

ISO offers new technology

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- Hydro (now StatoilHydro) used ISO 13628-series for subsea production installations for the development of the Ormen Lange field (illustration below).
- These ISO standards are developed on the basis of API, NORSOK and other new input.
- API works to back-adopt all of the ISO subsea standards.



Conclusion

OGP



- ❖ **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 / www.iec.ch**



**Global
Standards
Used Locally
Worldwide**

..... also for Australia!

Questions?

OGP



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