

A stylized graphic of a globe is positioned on the left side of the slide. It is composed of several overlapping, light blue curved lines that form a grid-like pattern, representing latitude and longitude lines. The globe is partially cut off by the left edge of the slide.

BSEE Workshop on Domestic and International Standards

New Orleans
14 Nov 2012

Denis Deutsch, Total
Chair OGP Standards Committee

Contents

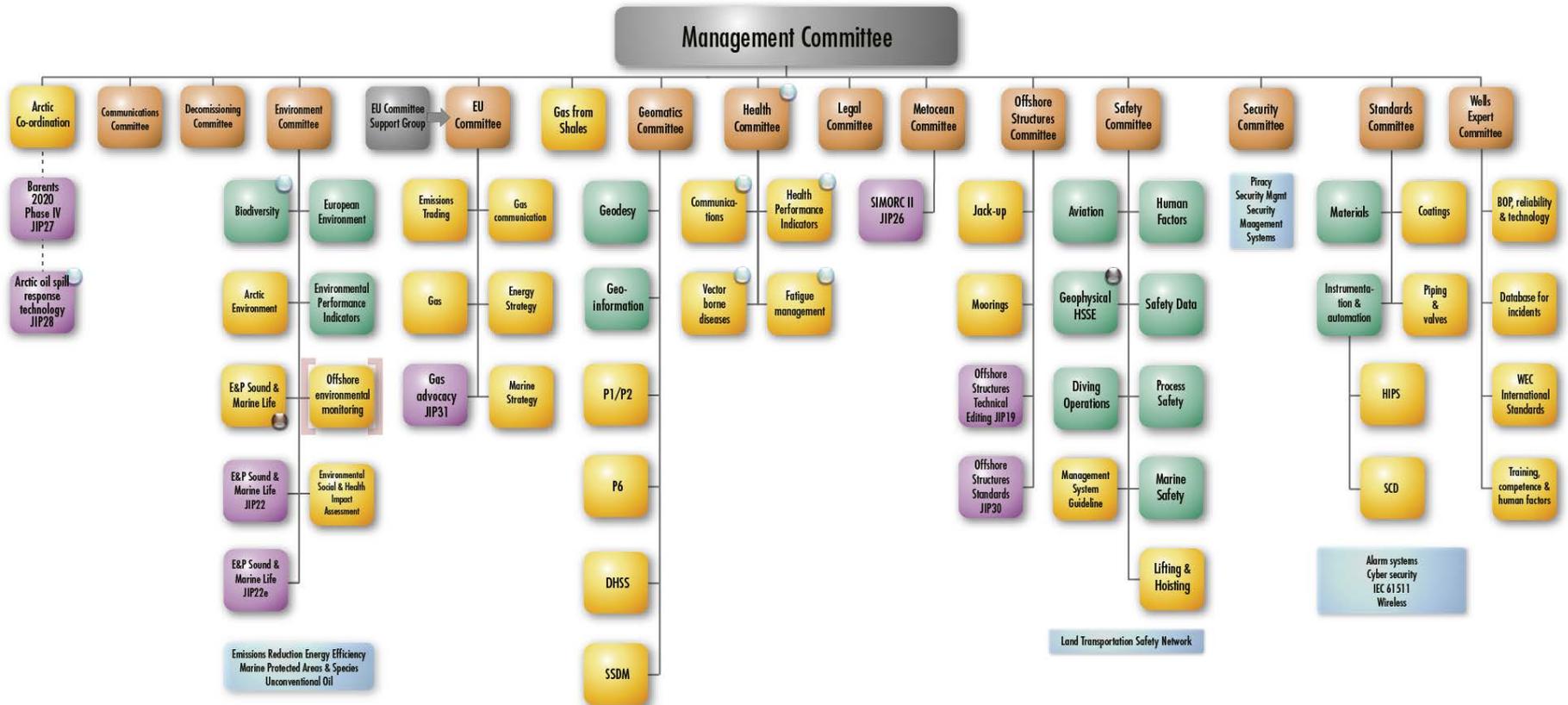
- **What is OGP ?**
- **OGP position on standards**
- **How can OGP help 1-2-3 ?**
- **Conclusion**

- **More info on OGP**

What is OGP ?

- **Serving 75 members around the world**
- **OGP's membership includes upstream companies, national and international associations and major contractors – some 40% are either US-based or operate in America**
- **OGP's member companies produce over half of the world's oil and over a third of its gas**
- **OGP involves a large number of participants in its 15 main committees and many SCs, TFs and Networks**
- **One of these main committees is the Standard Committee with 60 members from around the world.**
- **Mid -2010 to mid -2011 : the GIRG = Global Industry Response Group (to recent accidents : prevent, intervene, respond)**

OGP committee structure



OGP position on standards

(OGP is not a Standard Developer Organisation)

- OGP's goal is to foster the development of standards on an international level for the broadest possible application.
- The aim is to produce one set of words:
 - "Do it once, do it right, and do it internationally."
- OGP primarily supports development and publication of international standards by ISO and IEC but appreciates that other standard development organisations such as API, ASTM, ASME, DNV, EEMUA, NFPA, etc. publish standards widely used internationally.
- Involve all stakeholders, including regulators (BSEE, PSA ...)
- *OGP position on standards is described in detail in report No. 381, March 2010, 4th edition*

How OGP can help – 1 ?

- The GIRG = the Global Industry Response Group, published its report in May 2011
- One out of 3 actions of the GIRG was the establishment of the WEC = Well Experts Committee to help prevent other accidents with 4 Task Forces :
 - Well control incident database
 - BOP reliability and technology development
 - Human factors – training, competence & behaviours
 - **International standards : Established a prioritised list of key standards to be developed**
- (2 other actions = intervene (capping) and respond to spills)

How OGP can help – 2 ?

- There is currently a legal concern for the experts of ISO TC67, equipment for the Oil & Gas industry, which hinders the normal ISO working process
- OGP has decided to host a temporary structure to allow this important standardization work to continue= the **OGP 'Interim Solution'** managed by the OGP IATF (Interim Administration Task Force) ; the TF was launched in June 2012 and is currently comprising more than 40 WGs and more than 1000 experts

How OGP can help – 3 ?

- After the 'Interim Solution', the industry needs a **permanent solution**
- This is why **OGP and API** very recently (August 2012) **decided to launch a joint Task Force** to:
 - Develop a method to create a single set of standards for the industry that is
 - legally compliant (including trade regulation & export control regimes)
- This new TF had its 1st meeting mid-October and is expected to report by end Q1 2013

Conclusion

OGP aims at :

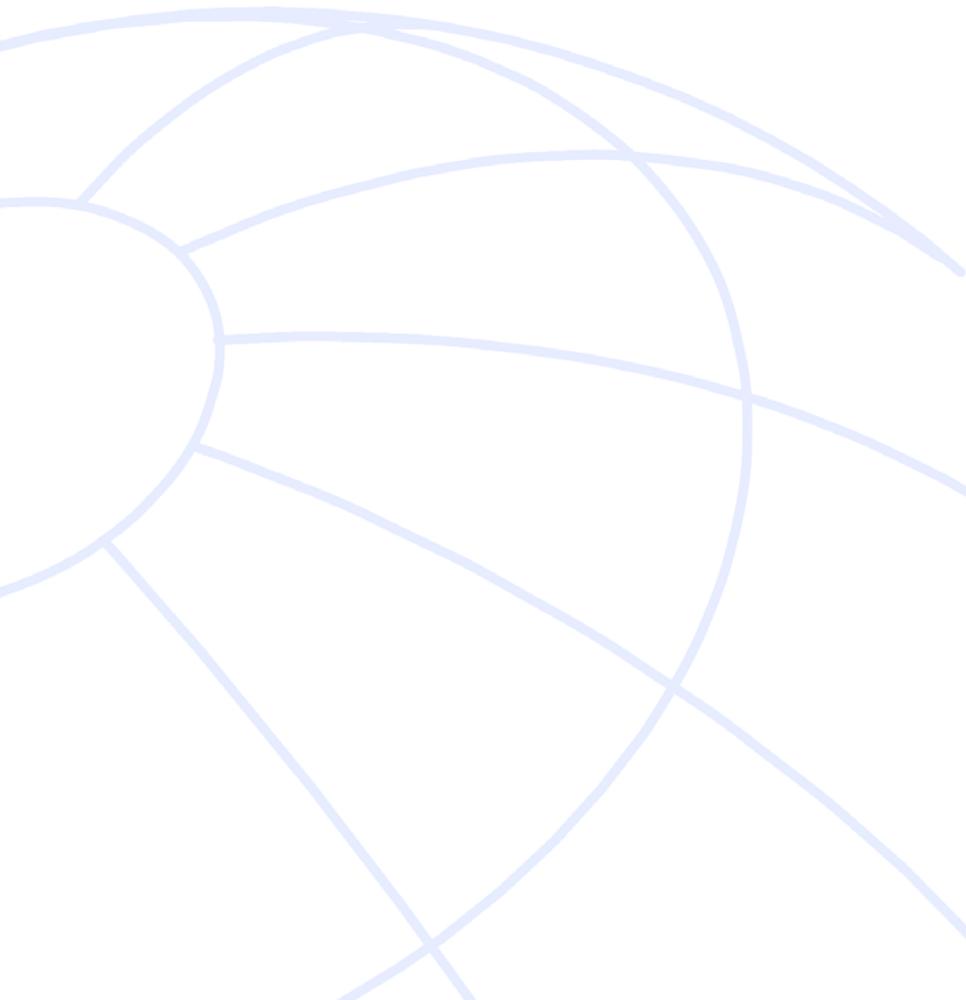
- One set of global standards
- Avoid duplication of efforts (resources are scarce)
- Involve all stakeholders, incl. regulators

*'Do it once, do it right, and do it internationally'
is OGP's motto since 1994*

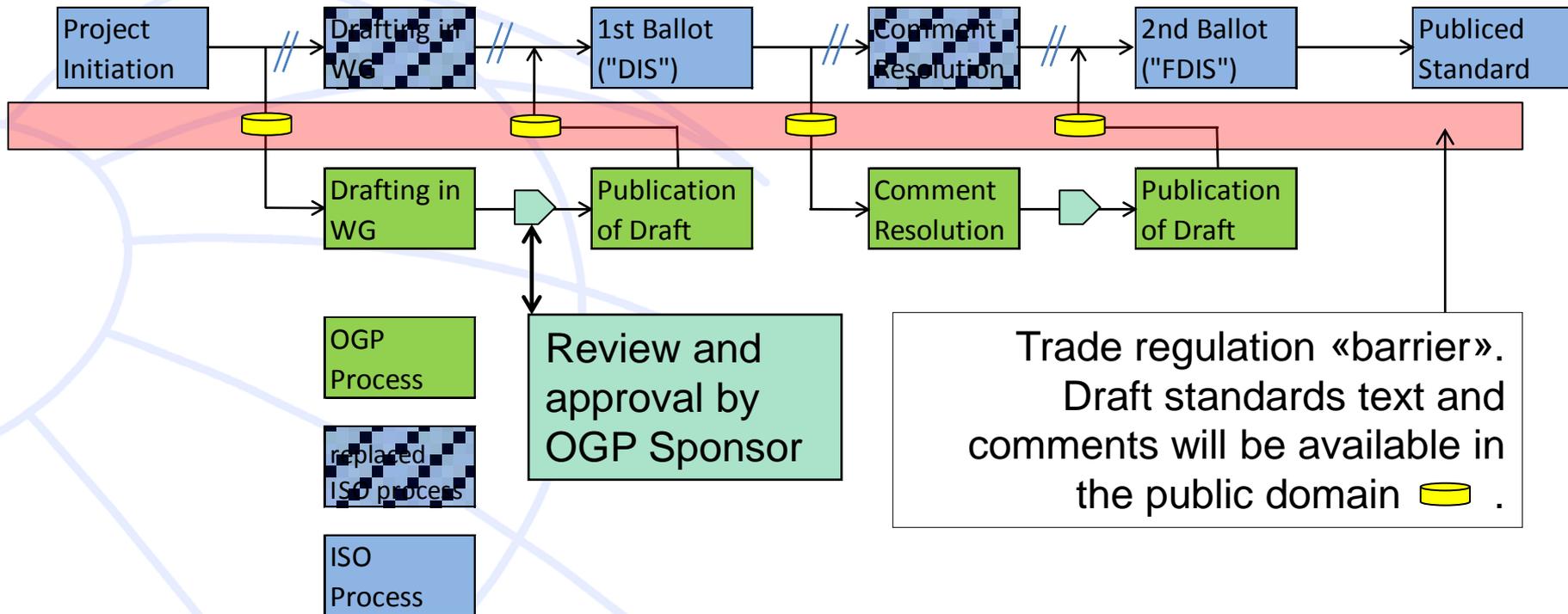
Links/Reports

- OGP website : www.ogp.co.uk
- OGP Report 463: Deepwater Wells, GIRG recommendations
- OGP Report 381: OGP Position paper on development and use of international standards
- OGP Report 426: OGP Regulator's use of Standards
- OGP Report 450: Benchmarking on the use of international standards by the Operators
- OGP Report 4210: Global adoption of ISO/TC67 standards
- OGP 2012 Standards bulletin (*available here !*)

Back-up slides



OGP interim solution compared to ISO route (simplified)



OGP Standards bulletin poster

ISO Standards for use in the oil & gas industry

ISO 10418 Basic surface safety systems
ISO 10423 Wellhead & christmas tree equipment
ISO/TR 12489 Reliability modeling/safety systems (New)
ISO 13533 Drill-through equipment (BOPs)
ISO 13534 Hoisting equipment - core/main (Rev)
ISO 13535 Hoisting equipment - auxiliary (Rev)
ISO 13626 Drilling and well-servicing structures
ISO 13702 Control & mitigation of fire & explosion
ISO 13703 Offshore piping systems
ISO 14224 Reliability/maintenance data
ISO 14492 GPP piping - Parts 1-4
ISO 14493 Drilling equipment

ISO 15156-1 Selection of cracking resistant materials for use in H₂S environments
ISO 15156-2 Cracking-resistant steels and cast irons for use in H₂S environments
ISO 15156-3 Cracking-resistant alloys for use in H₂S environments
ISO 15138 HVAC
ISO 15544 Emergency response
ISO 15643 Life cycle costing, Parts 1-3
ISO 17776 Assessment of hazardous situations
ISO 20815 Production assurance and reliability management
ISO 21457 Materials selection
ISO 23936-1 Thermoplastics
ISO 23936-2 Elastomers (New)
ISO/TS 27469 Method of test for offshore fire dampers
ISO/TS 29001 Sector-specific quality management systems

ISO 19000 Offshore structures - general requirements
ISO 19001-1 Meteocon design and operating considerations
ISO 19001-2 Seismic design
ISO 19001-3 Topside structure
ISO 19001-4 Geotechnical and foundation design
ISO 19001-5 Weight control
ISO 19001-6 Marine operations
ISO 19902 Fixed steel offshore structures
ISO 19903 Fixed concrete offshore structures
ISO 1995-1 Jack-ups (New)
ISO/TR 19905-2 Jack-ups commentary (New)
ISO 19906 Arctic offshore structures

ISO 2077-5 Gas turbines - procurement
ISO 10428 Sucker rods
ISO 10431 Pumping units
ISO 10434 Bolted bonnet steel gate valves
ISO 10437 Special-purpose steam turbines (Rev)
ISO 10438 Lubrication, shaft-sealing and control-oil systems, Parts 1-4
ISO 10439 Centrifugal compressors (Rev)
ISO 10440-1 Rotary-type positive-displacement process compressors (oil-free)
ISO 10440-2 Rotary PD packaged air compressors
ISO 10441 Flexibly coupled - special
ISO 10442 Integrally geared air compressors
ISO 12211 Spiral plate heat exchangers (New)
ISO 12212 Harpin heat exchangers (New)
ISO 13651 Reciprocating gas compressors
ISO 13681 High speed erlencon gear units
ISO 13704 Calculation of boiler tube thickness
ISO 13705 Fired heaters for general service (Rev)
ISO 13706 Air-cooled heat exchangers (Rev)
ISO 13707 Reciprocating compressors
ISO 13709 Centrifugal pumps
ISO 13710 Reciprocating positive displacement pumps (Rev)

ISO 14691 Flexible couplings - general
ISO 15547-1 Plate & frame type heat exchangers
ISO 15547-2 Brazed aluminium plate-fin type heat exchangers
ISO 15649 Piping
ISO 15761 Steel valves DN 100 and smaller
ISO 16812 Shell & tube heat exchangers
ISO 17292 Metal ball valves
ISO 21049 Centrifugal and rotary pumps shaft sealing (Rev)
ISO 23251 Pressure-relieving and depressuring systems (Rev)
ISO/TS 24817 Composite repair of pipework
ISO 25457 Flange details
ISO 27509 Compact flanged connections (New)
ISO 28300 Venting of storage tanks
ISO 28460 LNG - Ship to shore interface

ISO 13624-1 Marine drilling riser systems
ISO/TR 13624-2 Marine drilling riser system analysis
ISO 13625 Marine drilling riser couplings
ISO 19901-7 Station-levelling systems for floating offshore structures (Rev)
ISO 19904-1 Floating offshore structures

ISO 13628-1 Subsea production systems (Amend)
ISO 13628-2 Subsea flexible pipe systems
ISO 13628-3 Subsea TPL pumpdown systems
ISO 13628-4 Subsea wellhead and tree equipment
ISO 13628-5 Subsea control umbilicals
ISO 13628-6 Subsea production controls
ISO 13628-7 Completion/workover riser system
ISO 13628-8 ROV and interfaces (Rev)

ISO 13628-9 ROV intervention systems
ISO 13628-10 Bonded flexible pipe
ISO 13628-11 Flexible pipe systems for subsea and marine applications
ISO 13628-15 Subsea structures and manifolds (Rev)
ISO 13628-16 Spools for flexible pipe auxiliary equipment (New)
ISO 13628-17 RP for flexible pipe auxiliary equipment (New)

ISO 10427-2 Centralizer placement and step-collar testing
ISO 10427-3 Performance testing of cement float equipment
ISO 10432 Subsurface safety valves
ISO 11960 Casing and tubing (Rev)
ISO 11961 Drill pipe
ISO 13005 Tubing aluminium alloy pipes (New)
ISO 13500 Drilling fluids (Amend)
ISO 13501 Drilling fluids - processing systems evaluation (Rev)
ISO 13503-1 Measurement of viscous properties of completion fluids (Rev)
ISO 13503-2 Measurement of properties of proppants
ISO 13503-3 Testing of heavy brines
ISO 13503-4 Measurement of stimulation & gravelpack fluid lockoff
ISO 13503-5 Measurement of long term conductivity of proppants
ISO 13503-8 Measurement of leak-off of completion fluids under dynamic conditions (New)
ISO 13678 Thread compounds
ISO 13679 Casing and tubing connections testing (Rev)

ISO 13680 CRA seamless tubes for casing & tubing
ISO 14310 Patches and bridge plugs
ISO 15126-1 Progressing cavity pump systems
ISO 15126-2 Progressing cavity pump systems - drive heads
ISO 15463 Field inspection of new casing, tubing and plain and drill pipe
ISO 15464 Gauging and inspection of threads
ISO 15546 Aluminium alloy drill pipe (Rev)
ISO 16070 Lock mandrels and landing nipples
ISO 17078-1 Side-pocket mandrels (Amend)
ISO 17078-2 Flow control devices for side-pocket mandrels
ISO 17078-3 Landing & seals for side-pocket mandrels & flow control devices
ISO 17078-4 Side-pocket mandrels and related equipment
ISO 17824 Sand control screens
ISO 20312 Design of aluminium drill string (New)
ISO 20313 Aluminium drill pipe thread gauging (New)
ISO 28781 Subsurface tubing mounted formation barriers

ISO 21120 Steel pipe for pipeline transportation systems (Rev)
ISO 12490 Actuation, mechanical integrity and sizing for pipeline valves (New)
ISO/TS 12747 Pipeline life extension (Rev)
ISO 13623 Pipeline transportation systems
ISO 13847 Pipeline welding (Rev)
ISO 14313 Pipeline valves
ISO 14723 Subsea pipeline valves
ISO 15589-1 Cathodic protection for on-land pipelines (Rev)
ISO 15589-2 Cathodic protection for offshore pipelines (Rev)
ISO 15590-1 Pipeline induction bonds
ISO 15590-2 Pipeline fittings (Rev)
ISO 15590-3 Pipeline flanges (Rev)
ISO 16708 Pipeline reliability-based limit state design
ISO 21329 Test procedures for pipeline mechanical connectors
ISO 21809-1 Polyethylene coatings (3-layer PE and 3-layer PP) (New)
ISO 21809-2 Fusion-bonded epoxy coatings (Rev)
ISO 21809-3 Field joint coatings (Amend)
ISO 21809-4 Polyethylene coatings (2-layer PE)
ISO 21809-5 External concrete coatings



Standards in brown issued in 2011
Standards in green are a priority for 2012 issue
These ISO standards are only a core collection of several hundreds of International Standards available for the oil & gas industry

The Global Industry Response Group (GIRG)



Background:

- Formed in July 2010 to lead industry response to the Macondo accident in the Gulf of Mexico, Montara in Australia and other similar incidents

Task:

- To improve the industry's well incident prevention, intervention and response capabilities
- And by doing so, reduce the likelihood and impact of future well incidents

Results:

- Recommendations to prevent, mitigate and respond to well incidents issued in May 2011

On-going initiatives

Prevention

Better capabilities and practice in well engineering design and well operations management

OGP Wells Expert Committee
International Association of Oil & Gas Producers

Intervention

Improved capping response in the event of an incident and to study further the need for – and feasibility of – global containment solutions

SUBSEA WELL RESPONSE PROJECT **Oil Spill Response**

Response

Effective and fit-for-purpose oil spill response preparedness and capability

MUTUAL AID

OSR
Oil Spill Response Industry Programme

Governments, regulators, NOIAs, OSROs and industry initiatives

Wells Expert Committee: progress

Well control incident database:

- Launched and being compiled, instant benefits from safety alerts
- Long-term project to identify areas for special action

BOP reliability and technology development:

- Research contract let to develop a methodology for assessing the ability of a BOP system to deliver the required performance
- Identify areas where BOP system performance can be improved through better design, testing and technology

Human factors – training, competence & behaviours:

- Contract signed with Aberdeen University to develop guidelines for crew resource management
- Recommendations being developed for well control training, examination and certification

International standards:

- Established a prioritised list of key standards to be developed
- On-going liaison with relevant bodies including API, IADC, ISO, OSPRAG and WLCPF Competence Task Force

International engagement

- Co-operation with International Regulators' Forum
- International recognition at Ministerial Forum on Offshore Energy Safety