



International
Association
of Oil & Gas
Producers

IOGP Update

Albert Skiba – Regional Director Statoil May 4, 2018
4th ISO seminar on international standardization in the
reliability technology and cost area

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- **About IOGP**
- Where we started on standards
- Operators position paper (IOGP 381)
- Regulators use of standards (IOGP 427)
- EU/US Sanctions & IOGP Standards Solution
- Reengaging with API & IOGP key message

IOGP Committees 2017

Management Committee

Arctic

Legal

Communications

Metocean

Decommissioning

Safety

Environment

Security

EU

Standards

Geomatics

Subsea

Health (with IPIECA)

Wells Expert

Participants come from member companies and organizations, bringing with them a wide range of know-how, data and experience

With support from IOGP's secretariat, the work of the committees reaches a wider global audience through publications, events and an expanding media programme

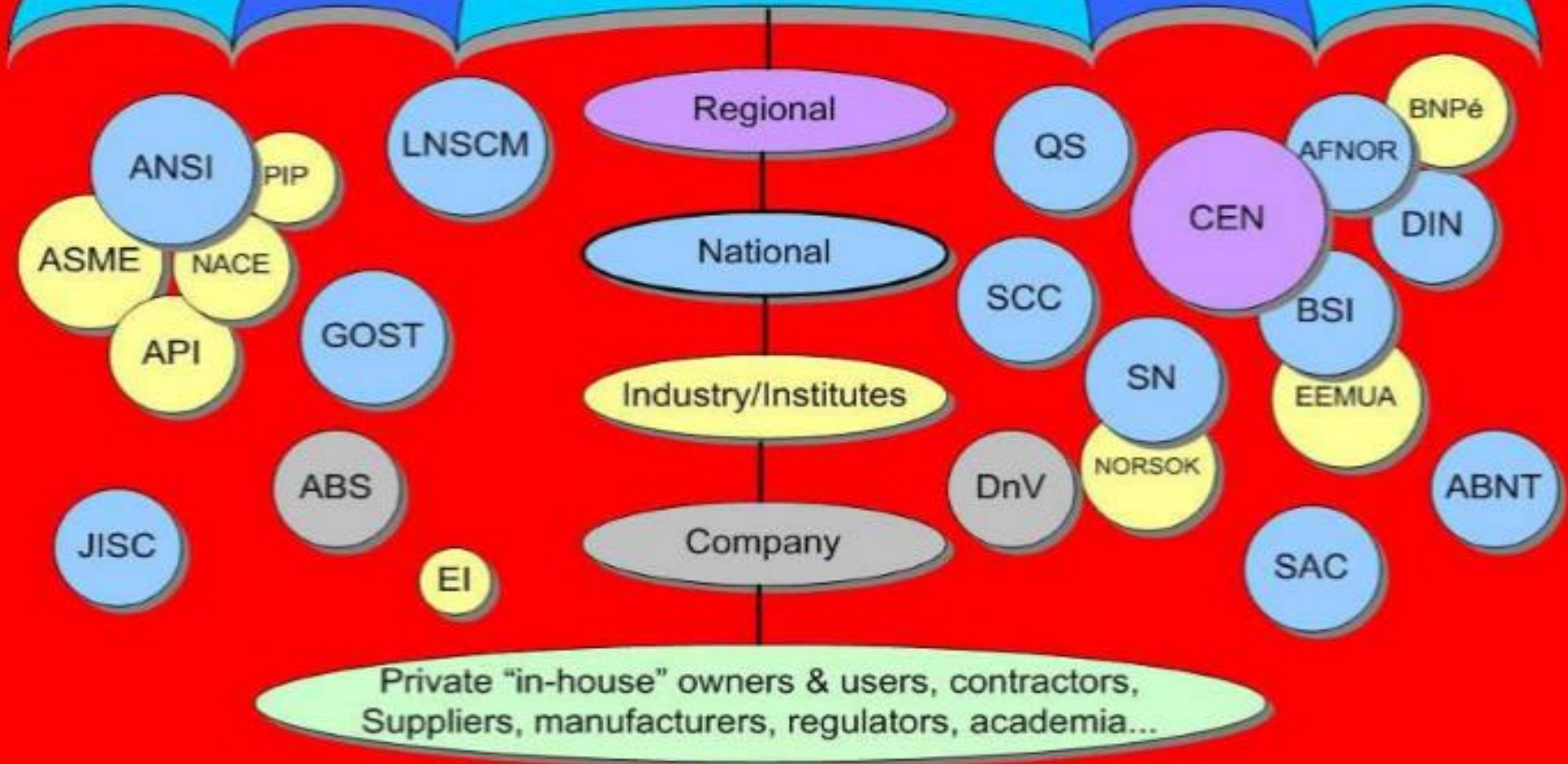
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There are 600.000+ standards out there for our use.

We need to focus.

International
ISO / IEC / ITU



IOGP Position Report 381

First issued 1994, last revised 2010

IOGP strongly supports the internationalisation of key standards. IOGP '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.

ISO Standards for use in the oil & gas industry

ISO 18418 Process safety systems (Flow)
ISO 18419 Replaced by API Spec QMS2
ISO 18423 Wellhead & christmas tree equipment
ISO 18429 Reliability modelling/safety systems
ISO 12394 Challenge driver for equipment
ISO 18433 Drill through equipment (DTH)
ISO 18434 Hoisting equipment – construction
ISO 18435 Hoisting equipment – specification
ISO 13626 Drilling and well-coring structures
ISO 13802 Control and mitigation of fires and explosions
ISO 13905 Offshore piping systems
ISO 14274 Reliability and maintenance data (Flow)
ISO 14492 Off-pipeing, Parts 1-4 (Flow)
ISO 14493 Drilling equipment

ISO 15138 Hoisting, ventilation and air conditioning (Flow)
ISO 15136 Cracking-related materials for use in H₂S environments, Parts 1-3
ISO 15544 Emergency response
ISO 15603 U-leaf cooling, Parts 1-3
ISO 18001 Risk assessment in the design of offshore LNG installations
ISO 18000 Characteristics of LHG reflecting design and material selection
ISO 18004 LNG Marine Transfer Arms (Flow)
ISO 17177 Unconventional LNG transfer systems
ISO 17292 Metal ball valves
ISO 17776 Major Accident Hazard management design design (Flow)
ISO 17781 Duplex stainless-steel materials loading requirements (Flow)
ISO 17782 Qualification of materials/layers of special materials (Flow)
ISO 17945 Materials essential to cathodic stress cracking
ISO 17969 Guidelines on compliance for pressurized LNG
ISO 18003 Systems and installations for supply of LNG as fuel to ships
ISO 19008 Standard Cost Coding System (Flow)
ISO 30815 Production assurance and reliability management
ISO 27637 Materials selection
ISO 2906-1 Thermoplastics
ISO 2906-2 Elastomers
ISO 27448 Method of test for offshore fire dangers
ISO 29001 Sector-specific quality management systems

ISO 13626 Marine drilling riser systems, Parts 1-2
ISO 13225 Marine drilling riser couplings
ISO 19003-3 Subsea logging systems

ISO 13626-1 Subsea production systems
ISO 13626-2 Subsea flexible pipe systems
ISO 13626-3 Subsea THU pumpdown systems
ISO 13626-4 Subsea wellhead and line equipment
ISO 13626-5 Subsea control umbilicals
ISO 13626-6 Subsea production controls
ISO 13626-7 Completion/workover riser systems

ISO 13628-6 ROV and interventions
ISO 13628-9 ROV intervention systems
ISO 13628-10 Borehole flexible pipe
ISO 13628-11 Flexible pipe systems for subsea and mooring applications
ISO 13628-15 Subsea structures and moorings

ISO 14000 Calculation of OGD performance properties
ISO 18405 Control of casing tubing
ISO 18407-1 Drill stem design
ISO 18407-2 Inspection and classification of drill stem elements
ISO 18414-1 Field testing of water-based fluids
ISO 18414-2 Field testing of oil-based drilling fluids
ISO 18414-3 Drilling fluids – lab testing
ISO 18417 Subsea safety valve systems
ISO 18422 Replaced by API Spec SR
ISO 18424-1 Rebay drill stem elements
ISO 18424-2 Threading and gauging of connections

ISO 18426-1 Well cementing
ISO 18426-2 Testing of well cements
ISO 18426-3 Testing of deepwater well cement
ISO 18426-4 Atmospheric bonded cement slurries
ISO 18426-5 Shrinkage and expansion of well cement
ISO 18426-6 Static gel strength of cement formulations
ISO 18427-1 Deep-water casing connections
ISO 18427-2 Casing/liner placement and slip-collar testing
ISO 18427-3 Performance testing of cement float equipment
ISO 18432 Subsea safety valves
ISO 18433 Replaced by API Spec QMS1

ISO 11908 Casing and tubing for wells
ISO 11961 Drill pipe
ISO 12826 Qualification of casing connections for thermal wells
ISO 13885 Tubing aluminum alloy pipes
ISO 13908 Drilling fluids
ISO 12801 Drilling fluids – processing systems evaluation
ISO 13803-1 Measurement of reservoir properties of completion fluids
ISO 12803-2 Measurement of properties of proppants
ISO 12803-3 Testing of logging liners
ISO 12803-4 Measurement of stimulation & gravel-pack fluid leakoff
ISO 12803-5 Measurement of long term conductivity of proppants
ISO 13803-6 Measuring leak-off of completion fluids under dynamic conditions
ISO 13628 Thread compounds
ISO 13629 Casing and tubing connections testing
ISO 13638 OVA sealant liners for casing & tubing
ISO 14311 Packers and bridge plugs

ISO 14098 Accessory completion equipment
ISO 19536 Processing cavity pump systems, Parts 1-2
ISO 19563 Field inspection of new casing, tubing and plan end drill pipe
ISO 19564 Gauging and inspection of threads
ISO 19568-1 Electric submersible pump systems for artificial lift
ISO 19564 Aluminum alloy drill pipe
ISO 14003 Lock moorings and landing nipples
ISO 16320-3 Well integrity life cycle governance manual (Flow)
ISO 16320-2 Well integrity operational phase
ISO 12009-1 Side-pocket moorings
ISO 12009-2 Flow control devices for side-pocket moorings
ISO 11009-3 Locks & seals for side-pocket moorings & flow control devices
ISO 12009-4 Side-pocket moorings and related equipment
ISO 12824 Sand control screens
ISO 20012 Design of aluminum drill string
ISO 20012 Aluminum alloy drill pipe threaded gauging
ISO 20012 Subsea riser tubing moored formation barriers

ISO 8971-5 Escalators – procurement
ISO 8428 Sucker rods
ISO 8429 Pumpjacks
ISO 8436 Ballot bonded steel girth spools
ISO 8436 Replaced by API Std 611
ISO 8437 Specific purpose steam turbines
ISO 8438 Lubrication, shock cooling and control oil systems, Parts 1-4
ISO 8439 Centrifugal compressors
ISO 8440-1 Rotary-type positive displacement process compressors (oil free)
ISO 8440-2 Weight coated air compressors
ISO 8442 Flexible couplings – special
ISO 8442 Integritally ground air compressors
ISO 82711 Spiral plate heat exchangers
ISO 82712 Helical heat exchangers
ISO 82821 Reciprocating gas compressors
ISO 13591 High speed enclosed gear units
ISO 13206 Calculation of lesser face thickness
ISO 13206 Face thickness for general service
ISO 13206 Air cooled heat exchangers
ISO 13209 Reciprocating compressors
ISO 13209 Centrifugal pumps
ISO 13210 Reciprocating positive displacement pumps
ISO 14491 Flexible couplings – general
ISO 15567 Heat exchangers, Parts 1-2
ISO 15669 Piping

ISO 15358 Steel valves DR 100 and smaller
ISO 14812 Shell & tube heat exchangers
ISO 14810 Risk assessment of offshore LNG installations
ISO 14866 Internal coating and lining of steel storage tanks
ISO 17177 Unconventional LNG transfer systems
ISO 17292 Metal ball valves
ISO 17348 Helium Selection in OGD Environment for casing, tubing and downhole equipment (Flow)
ISO 17549 Streams containing high levels of CO₂ (Flow)
ISO 18796-1 Internal coating and lining of process vessels (Flow)
ISO 18624-1 Design and testing of LNG storage tanks
ISO 20889-1 Resistance to cryogenic spillage of insulation materials – liquid phase (Flow)
ISO 20849 Centrifugal and rotary pumps shaft sealing
ISO 22050 Replaced by API Std 525
ISO 20857 Corrosion repairs for pipework (Flow)
ISO 24637 Flare details
ISO 27538 Corrugated metal connections
ISO 28388 Welding of storage tanks
ISO 28440 LNG – Ship to shore interface

ISO 14448 Steel pipe for pipeline transportation systems
ISO 14449 Activation, mechanical integrity and coating for pipeline valves
ISO 12736 Wet thermal insulation coatings
ISO 12943 Pipeline site entrance
ISO 13620 Pipeline transportation systems (Flow)
ISO 14313 Pipeline valves
ISO 14329 Subsea pipeline valves
ISO 15288-1 Cathodic protection of on-land pipelines
ISO 15288-2 Cathodic protection for offshore pipelines
ISO 15295-1 Pipeline induction joints
ISO 15295-2 Pipeline fittings
ISO 15295-3 Pipeline flanges

ISO 14448 Steel casing pipelines (Flow)
ISO 14449 Pipeline reliability based limit state design
ISO 19345-1 Life cycle integrity management for onshore pipelines
ISO 21259 Test procedures for pipeline mechanical connectors
ISO 21800-1 Polyethylene coatings (2-layer PE and 3-layer PE)
ISO 21800-2 Fusion-bonded epoxy coatings
ISO 21800-3 Field joint coatings (Flow)
ISO 21800-4 Polyethylene coatings (2-layer PE)
ISO 21800-5 External concrete coatings (Flow)



Standards in purple issued in 2016
 Standards in blue are a priority for 2017 issue

These ISO standards, TR and TS (abbreviated titles) are only a core collection of several hundreds of standards available for the oil & gas industry from ABNT, ANSI, API, AS, BSI, CSA, DIN, DNV, NF, NORSOK, NF, GOST, SAC etc. Some ISO/TC67 standards have been withdrawn and the relevant API standard is referenced above

Many of these ISO standards cobranded with API up to 2009.
 Poster available at www.iogp.org/international-standards



ISO/TC67 Vision



..... also for South Korea!

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OGP



International Standards
Workshop, Bangkok, Thailand
11-12 March 2010

Regulator' use of
standards

Alf Reidar Johansen
OGP Standards Manager

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Regulators use of standards (IOGP 427)



International Regulators' Forum
took resolution 

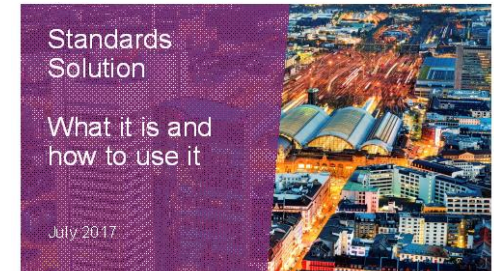
The Montara and Macondo incidents put a new emphasis on the need for robust and comprehensive standards. There is also greater recognition of the role national regulators have to play in the standards development process; in selecting topics and priorities for standardisation, in helping to develop standards themselves, or in using completed standards within the regulatory landscape. OGP therefore welcomed the resolution of the IRF members in October 2011 following their Summit Conference last year to support the ISO standards system (and IEC for electrical issues) as the principal system for offshore regulators to support in order to achieve globally agreed offshore standards. At the same time, IRF recognised the crucial role that relevant national and regional standards would continue to play whilst no equivalent ISO (or IEC) standards existed. IRF has now set up a Standards subgroup that will engage with the OGP Standards Committee, ISO/TC67 Management Committee and other relevant groups.

OGP Standards Committee and ISO TC67 plenary go to Rio for meetings 18th and 19-20th September 2012 respectively.

IOGP Standards Solution



- IOGP's Standards Solution (replacing Interim Solution) launched March 2014 continues to host technical work of ISO/TC67 under the Association auspices and in accordance with trade regulations, including observing complete confidentiality.
- IOGP's Standards Solution builds on ISO/IEC Directives and IOGP's liaison status with TC67.
- It has the approval of IOGP's Management and Legal Committees.
- **Objective: Propose, progress and revise technical standards in a safe environment that will be balloted and published by ISO as ISO standards.**



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Key message

Standardization is a top priority for the oil and gas industry to enable and enhance safety, reliability and integrity of operations globally.

As economic conditions dramatically challenge the oil and gas industry, standardization also is a key business driver to tackle escalating project costs and schedule.

As operators, we need an aligned way forward to help set and steer the direction forward for the development of standards.

April 2017

Operators' position and key messages on standards



Introduction

Standardization is a top priority for the oil and gas industry to enable and enhance safety, reliability and integrity of operations globally. As economic conditions dramatically challenge the oil and gas industry, standardization also is a key business driver to tackle escalating project costs and schedule.

A key deliverable to standardization are standards. As operators, we need an aligned way forward to help set and steer the direction forward for the development of standards.

This paper addresses the way forward for oil and gas industry standards, i.e. standards developed for the industry by standards developing organizations (SDO) and other organizations, of which there are over 180 such as API, DNV GL, IEC, ISO, NACE and NORSOK. Starting with selected standards as the base, major operators typically codify their own learnings in their own suite of technical specifications and practices. Harmonization of these additional company requirements is being reviewed and addressed through JIP33.

As an independent, non-standards developing organization of global operators, IOGP can serve as a voice of the industry to influence international, global, regional and industry standards development and seek to agree to the preferred international standards.

Current status on the progress of standards development

With multiple standards developing organizations across the global oil and gas industry, there continues to be duplicating, competing and inconsistent standards development in some areas.

As operators, through IOGP, we agreed to maintain a system where organizations developing standards work together to develop "international standards used locally worldwide" for the oil and gas industry. International standards are standards that have been agreed by countries (through balloting process) and ISO/IEC are the bodies that develops these.

While there has been significant cooperation between standards developing organizations in the past years to progress international standards, the following challenges have recently arisen:

- API withdrew from the leadership of ISO standards development process in 2009.
- A number of companies withdrew from ISO standards development process due to EU/US sanction regulations in 2012.
- Concerns about intellectual property and copyrights have been raised.



<http://www.iogp.org/international-standards/>

Where we want to be

Maintain a system where international, global, regional and industry standard developing organizations work together to develop “international standards used locally worldwide” for the global oil and gas industry and work within a legally compliant process to deliver:

- Standards that are globally accepted and widely used.
- Standards that replace/reduce the need for operating company specifications.
- Standards with the potential for more than one brand (e.g. through ISO/IEC partnership agreements).
- Standards to be accepted by regulators and adopted by national standards bodies around the world.
- A standards development process that builds on the existing standards infrastructure.
- A set of industry standards avoiding duplication and divergence.



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Producers

Thank you for listening!

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