



# International Standards Bulletin

**International Association of Oil & Gas Producers**  
formerly E&P Forum

## Vision: Global standards used locally worldwide

### Executive Summary

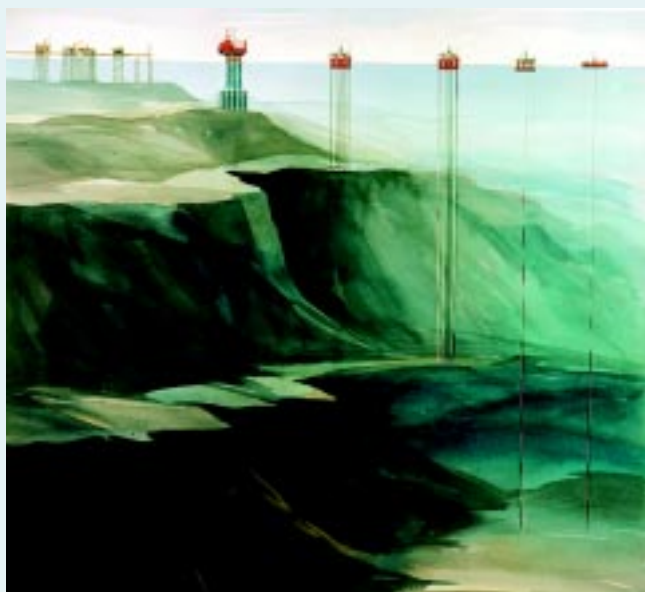


A new set of International Standards for a wide selection of vital oil and gas industry commodities, systems and facilities will soon be available. These standards are based on API specifications and other relevant industry documents and developed by a worldwide group of experts working through ISO, the International Organization for Standardization. The Standards have been in development for some time and 12 are now expected to be issued this year and a further 32 next year after an international review and approval process. For details see inside.

These Standards are supported by the international oil and gas industry and national standardization organizations for worldwide applications, in an effort to reduce cost and delivery time and assist international trade across national borders.

The regulatory authorities have also taken an interest in the work as support for goal-setting and functional regulations.

It is envisaged that the Standards will be implemented and widely used in America, Asia, Europe and other oil and gas provinces around the world. As such this will be a useful contribution to the WTO TBT agreement on removal of Technical Barriers to Trade. The Standards are also developed to replace existing industry and national standards, in-house oil company technically detailed specifications and they are suitable for use with new functional specifications.

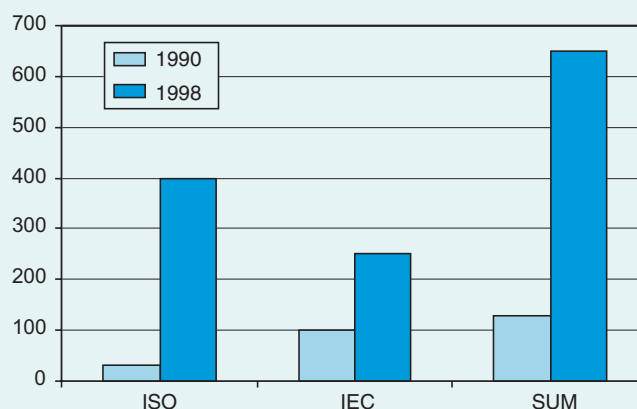


### List of contents

- Executive summary
- Step change in use of ISO Standards
- "Why do we need International Standards?"
- API support for ISO work
- European work
- ISO Standards
- ISO oil and gas sector
- New electrotechnical standards
- About OGP
- OGP position on International Standards
- New International Standards - ISO/TC67

### Step change in use of ISO Standards

From a recent Shell study, a step change over the last eight years in references to ISO Standards in their in-house specifications is clearly evident. See graph below:



This reveals the growing number of International Standards available and a company prepared to make good use of them. New International Standards for the oil and gas industry will soon be available. Read more inside.

**Make use of the new IEC and ISO Standards for your own benefit!**

## “Why do we need International Standards?”

**“International standards will present the least barrier to worldwide trade.”**

The petroleum and natural gas industry is an international one, not constrained by geographical or political boundaries. The technological and economic challenges inherent in doing business worldwide necessitate an overall coordination of how our industry procures and uses materials and equipment. The petroleum and natural gas industry utilizes the same set of suppliers, and the use of a common set of standards will play an important part in cost and variety control. Some equipment used for exploration and production is highly specialized and designs have been developed to cater for the specific needs.

Effort must be concentrated in areas where it will yield the best returns. The over-riding principle is therefore that duplication of efforts shall be avoided. From this it follows that if a standard is being developed internationally, no effort will, as a general rule, be made to produce standards at a regional, national or industry level.

### API support ISO work



The American Petroleum Institute (API) oil industry standardization efforts date back to 1923. In the 76 years since, API has developed a suite of standards that have become de facto global standards in most areas of the world.

API therefore supports the industry aim for development of International Standards for the petroleum and natural gas industry. In order to help achieve this end, API has assumed the Secretariats of the key oil industry Technical Committees in ISO, namely TC28 (Petroleum products and lubricants) and 67 (Materials, equipment and offshore structures for petroleum and natural gas industries), on behalf of ANSI the US Member body of ISO.

API has also provided many of its key standards to be worked in ISO. Member companies of API represent a significant part of the world's oil and gas exploration, production, refining and distribution activities.

It is important that the International Standards developed in TC28 and TC67 are commercially relevant and are widely used around the world. Therefore the intellectual input from API committees needs to be fully engaged with that from Europe and the Rest of the World in order to create a single set of words to be adopted in local, regional and International Standards. Thus may the vision be fulfilled: “Global standards used locally worldwide”

Visit API website at: [www.api.org](http://www.api.org)

**“Standards are so commonplace that we forget that they have to be created. They do not come into this world ready made and without effort.”**

- Dr. W. Edward Demming, *Quality Management Guru*

Most oil companies have their own technical specifications to cater for their general needs and for special application at project level. Major savings can be made by ensuring that as many as possible of these requirements are harmonized in internationally recognized and utilized standards.

This position of international standardization will present the least barriers to the petroleum and natural gas industry trade on a worldwide basis for the benefit of our manufacturers and industry. To this end the International Association of Oil & Gas Producers (OGP) has been working with the international standards organisations to develop a new set of coherent standards for our industry.



### European work



The EU Commission has developed the Public Procurement Directive (regulation) where EN Standards are supposed to be used when available. Many of these required Standards are provided by the CEN Technical Committee 12 by implementation of the ISO Standards developed in ISO/TC67 in the frame of the so-called Vienna Agreement signed by ISO and CEN.

The EU Commission has also issued New Approach Directives and, although the CEN/TC12 standards are not “harmonized” and do not implicate any presumption of conformity, they must not be in conflict with the Essential Requirements of those Directives.

Those technical conditions should be taken care of in the International Standards if so accepted by ISO experts. Then this scheme assures the possibility for application of the same technical requirements in the whole WORLD, including EUROPE.

As outlined in the OGP position paper, the equivalence will be recognised by the use of the same ISO Standard number in the CEN designation as in for example EN ISO 11960 for casing and tubing.

Visit CEN website at: [www.cenorm.be](http://www.cenorm.be)



Publish in 1999

- 3183-3 **Steel pipe for pipelines**
- 10432 **Subsurface safety valve equipment**
- 10441 **Flexible couplings** for mechanical power transmission - Special purpose applications
- 13628-1 **Subsea production systems (SPS)**
- 13628-4 **Subsea wellhead and tree equipment**
- 13702 Control and mitigation of **fires and explosions** on offshore production installations
- 13879 Content and drafting of a **Functional Specification**
- 13880 Content and drafting of a **Technical Specification**
- 13881 **Classification and conformity assessment** of products, process and services
- 14224 Collection and exchange of **reliability and maintenance data** for equipment
- 14313 **Pipeline valves**
- 14691 **Flexible couplings** for mech. power transmission

Targeted for publication in 2000

- 3977-5 **Gas turbines** - Part 5: Gas turbine application
- 10405 Care and use of **casing and tubing**
- 10414-1 Field testing of **drilling and completion fluids and well cement** - Part 1: Water-based fluids
- 10423 **Wellhead and christmas tree equipment**
- 10426-1 **Cements and materials for well cementing**
- 10426-2 **Recommended practice for testing of well cement**
- 10439 **Centrifugal compressors**
- 10440-1 **Rotary type positive displacement compressors**
- 10442 Packaged integrally geared **centrifugal air compressors**
- 11960 Steel pipes for use as **casing or tubing**
- 13533 **Drill-through equipment**
- 13534 Inspection, maintenance, repair and remanufacture of **hoisting equipment**
- 13535 **Hoisting equipment**
- 13623 **Pipeline transportation systems**
- 13628-2 SPS - Part 2: **Flexible pipe systems**
- 13628-3 SPS - Part 3: Through flowline (TFL) systems
- 13628-6 SPS - Part 6: **Subsea production control systems**
- 13628-9 SPS - Part 9: Remotely Operated Tools (ROT) intervention systems
- 13678 Evaluation and testing of **thread compound systems**
- 13680 **Corrosion-resistant alloy seamless tubes**
- 13703 **Piping systems** on offshore production platforms
- 13706 Air-cooled **heat exchangers**
- 13707 **Reciprocating compressors**
- 13709 **Centrifugal pumps**
- 13710 Reciprocating **positive displacement pumps**
- 13847 Pipeline transportation systems - **Welding of pipelines**
- 14310 **Downhole equipment**
- 15138 **Heating, ventilation and air-conditioning**
- 15544 **Emergency response on offshore installations**
- 15546 **Aluminum alloy drill pipes**
- 15547 Plate **heat exchangers**
- 15663-1 **Life cycle costing** - Part 1: Methodology

Note: *Titles are abbreviated*



## ISO Oil and Gas Sector

“Sector differentiation” is the name of a specific initiative promoted by ISO, aimed at introducing new mechanisms to strengthen the participation of market forces in the standardization work. The overall objective is that of ensuring a closer relationship between standardization work items and business priorities. This requires a better interaction between industry senior management from all stakeholders in the oil and gas industry (capable to represent effectively the strategic business needs of enterprises and of the other market forces) and the typical delegates participating in the standardization process who bring the value of voluntary dedication, knowledge and technical expertise.

The Oil and Gas industry has been selected as one of the pilot sectors groups (up to now three, including the Automotive and the Road informatics industries). OGP is an active partner of ISO for this initiative.

ISO’s support for this International Standards Bulletin is part of the efforts to foster communication with industry forces covered in the framework of this pilot initiative.

More details on the pilot sector group for the Oil and Gas industry can be found at: [www.iso.ch/oil](http://www.iso.ch/oil)

## New electrotechnical standards

An international IEC committee is presently developing a new suite of standards within the scope: “Standards for electrical installations of ships and of mobile and fixed offshore units, incorporating good practice and co-ordinating as far as possible existing rules”, taking IEC publication 92 as a basis.

The result is IEC 61892 “Mobile and fixed offshore units - Electrical installations” in seven parts as follows:

- |   |                                   |
|---|-----------------------------------|
| Part 1: General requirements and conditions | Part 5: Mobile units              |
| Part 2: System design                       | Part 6: Installation (1999-02)    |
| Part 3: Equipment (1999-02)                 | Part 7: Hazardous areas (1997-05) |
| Part 4: Cables                              |                                   |

Visit IEC website at: [www.iec.ch](http://www.iec.ch)

## About OGP



**International  
Association  
of Oil & Gas  
Producers**  
formerly E&P Forum

OGP is an international association of oil companies and petroleum organizations formed in 1974. It was established to represent its members' interests at the International Maritime Organisation and other specialist agencies of the United Nations, and to governmental and other international bodies concerned with regulating exploration and production of oil and gas. While maintaining this activity, the OGP now concerns itself with all aspects of exploration and production operations, with particular emphasis on safety of personnel and protection of the environment, and seeks to establish industry positions with regard to such matters. As of mid 1999, OGP has 57 members made up of 47 oil companies and 10 national and international oil industry associations operating in more than 60 different countries.

The OGP Standards Committee monitors, co-ordinates and influences the development of International Standards to meet the needs of the OGP members. There is close communication between the national associations, particularly the API. The Committee also monitors and influences European Standards under CEN.

## OGP Position on standards

The OGP members have prepared a Position paper on the subject of International Standards. The executive summary of this document is as follows:

The OGP firmly supports the internationalization of standards, and the following points emphasize the key issues:

- Development and use of ISO Standards should be promoted.
- Standards should be published at the ISO level, and the ISO number should remain visible whatever the method of publication.
- International Standards should be used without modification wherever possible.
- International Standards should recognize regional variations.
- Priorities for development of Standards should be based on a consensus of need.
- Available resources should be used in the most efficient way.
- Unnecessary duplication of effort should be avoided.
- 'Users' should be well represented on all critical standardization work groups.
- Communication within companies should be improved so that industry resources may be used most effectively.
- Simplicity and Fitness for Purpose should be guiding principles

## New International Standards - ISO/TC67

International Standards for materials, equipment and off-shore structures for the petroleum and natural gas industries are predominantly the responsibility of ISO/TC67, which was reactivated in 1989.

ISO/TC67 has twenty participating (P) member countries, and another twenty observing (O) members. The TC67 has seven subcommittees and forty-six working groups where the actual task of standards development is carried out by industry volunteers/technical experts. The current chair is C.L. Stark, BP Amoco, Houston.

The roster of participants numbers 850, with 45% from oil companies, 40% from service/supply/manufacturers, and the remaining 15% from regulators/academics/consultants/national standards bodies.

ISO/TC67 has an active work programme of some 125 Standards, of which thirty-two have been published to date. The remaining Standards of the work programme will see first publication during the period to 2004. See page 3.

These Standards represent, in terms of worldwide industry spending, a total of approximately USD 20 billion per year. Even a saving as small as 1% in the procurement costs of industry materials and equipment using International Standards translates into a LARGE saving.

Visit ISO/TC67 website at: [www.api.org/iso/tc67](http://www.api.org/iso/tc67)



### The International Association of Oil and Gas Producers - OGP

25/28 Old Burlington Street, London, W1X 1LB, UK  
Telephone: +44 (0)171 292 0600 · Fax: +44 (0)171 434 3721  
[www.ogp.org.uk](http://www.ogp.org.uk) e mail: [katrina.hide@ogp.org.uk](mailto:katrina.hide@ogp.org.uk)

**This bulletin is developed by the OGP Standards Committee including members from:**

API, BG, BP Amoco, DONG, Elf, ENI/Agip, Exxon, Institute of Petroleum, ISO, Maersk, OLF, Saga Petroleum, Shell, Total Fina, WEG.

[www.ogp.org.uk/standards](http://www.ogp.org.uk/standards)