



International  
Association  
of Oil & Gas  
Producers

# Standards Solution

## What it is and how to use it

July 2017



# Who is IOGP?

- IOGP is the International Association of Oil & Gas Producers
- IOGP works on behalf of the world's oil & gas exploration and production (E&P) companies to promote safe, responsible, and sustainable operations
- Starting from some 14 members in 1974, membership has grown to 75, most of them are operating companies around the globe

# Introduction

- IOGP Standards Solution host technical work of ISO/TC 67 under the Association's auspices and in accordance with trade regulations, including observing complete confidentiality
- IOGP Standards Solution builds on ISO/IEC Directives and IOGP's A-liaison status with ISO/TC 67
- It has the approval of IOGP's Standards and Legal Committees
- Objective: Propose and progress technical work on drafts that will be balloted and published by ISO/TC 67 as ISO deliverables

# Standards Solution – General

- IOGP invites ISO/TC 67 Work Groups (WG) and Project Teams (PT) to work under the Association's umbrella
- Representatives from all parts of industry may be invited, except those from countries under EU and/or US sanctions
- IOGP WG/PT develop draft deliverables for ballot in ISO ('fast track'\*) based on new proposals from ISO or IOGP, or revision of existing ISO/TC 67 documents
- IOGP can provide input on drafts and resolutions of comments

\* See next slide

# Building on ISO fast-track procedure\*

- Document already exist in IOGP (originating from IOGP, ISO or another organization)
- As category A-liaison organization, IOGP can submit the document to ISO/TC 67 for approval under the fast-track procedure
- There is no NWIP ballot within ISO/TC 67, document is submitted directly to DIS ballot, followed by FDIS ballot, if necessary
- All ISO/TC 67 members can vote and provide comments on DIS and FDIS before publication

\* Ref. ISO/IEC Directives Part 1, Annex F

# Response from ISO/TMB (1)

8 October 2015

ISO/TMB TF on challenges oil and gas sector agreed that ISO/TC 67 may develop:

- Full text ISO deliverables
- ISO deliverables endorsing an API standard (via normative reference)\* including a supplement with technical content (i.e. 'ISO supplements')

A single statement of normative reference to an API document ('coversheet', 'empty shell') without a supplement including technical content is not acceptable

\* ISO/TMB TF welcomed the efforts of IOGP with API that has agreed to make their referenced standards available as 'read-only' during DIS ballot at their website

<http://publications.api.org>

# Response from ISO/TMB (2)

## 21-22 February 2017

### **TECHNICAL MANAGEMENT BOARD RESOLUTION 20/2017**

*Adopted at the 68th meeting of the Technical Management Board, Kuala Lumpur (Malaysia), 21-22 February 2017*

#### **Challenges in the oil and gas sector – TC 67 response to IOGP proposal**

The Technical Management Board,

Welcomes the response from the ISO/TC 67 leadership regarding the International Association of Oil and Gas Producers (IOGP) proposal for certain ISO standards for the petroleum, petrochemical and natural gas industries',

Endorses the flowchart showing the proposed way of working together with the international standards developing community through the IOGP as presented in Annex 3 to TMB Agenda item 3.2, February 2017, and

Approves the proposal from ISO/TC 67 for dealing with the revision of ISO standards as Fast Track, such that, if copyright agreement is cleared with ISO/CS, a revision of an existing ISO standard can be started in IOGP and then voted in ISO once mature enough to become a DIS.

Disbands the TMB Task Force Oil and gas.

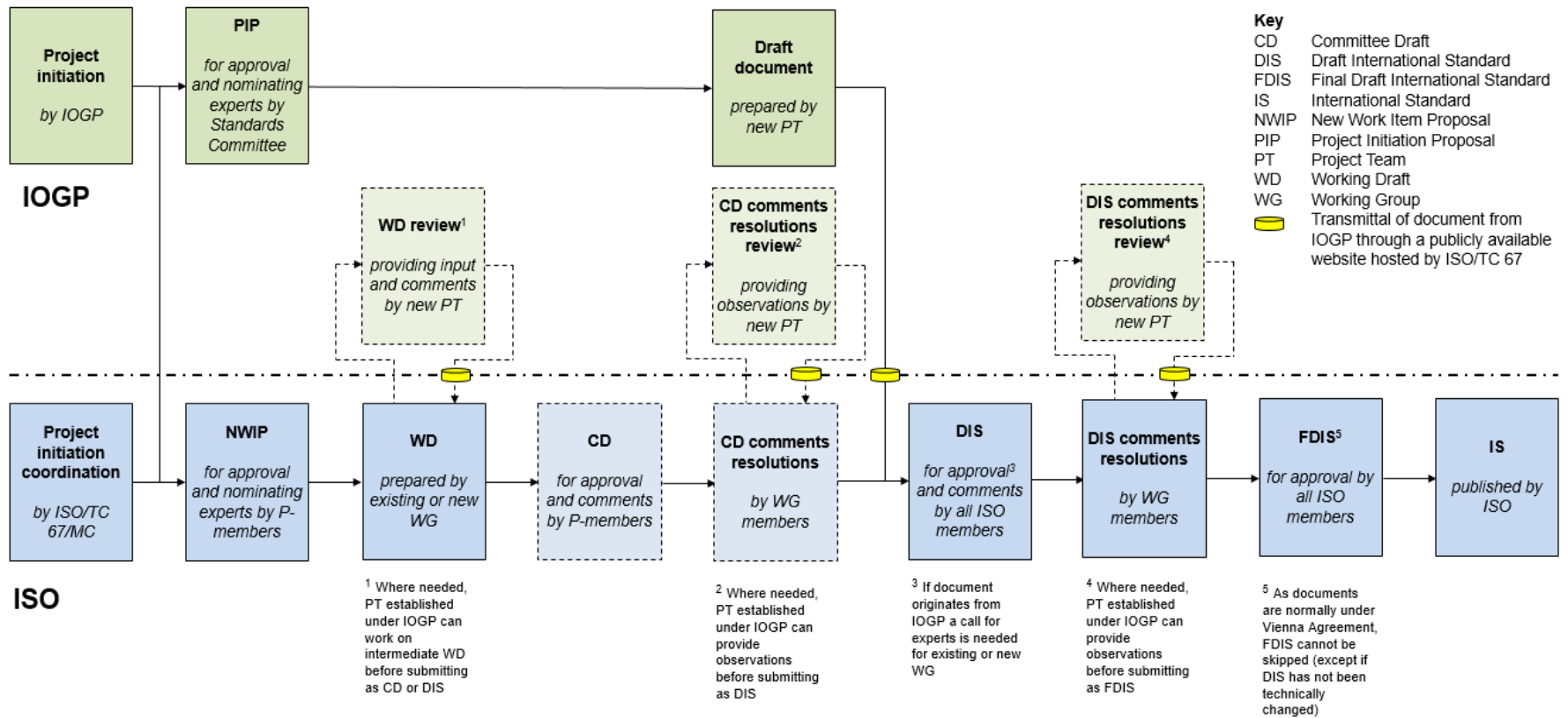
# Amended IOGP Supplementary procedure (approved version 20170707)

Major changes compared with previous version:

- Projects need to be initiated by IOGP if WG/PT would like to develop the draft standard under the IOGP umbrella, following the 'fast-track procedure' (i.e. no NWIP ballot in ISO, but PIP in IOGP)
- IOGP can facilitate developing ISO supplements to previously co-branded API standards to ensure that ISO/TC 67's standards portfolio is up-to-date and aligned with the state of the art
- DIS comments resolution will formally be handled in an ISO working group



# IOGP Standards Solution flowchart (approved per ISO/TMB resolution 20/2017)



Documents to be transmitted will be available in public domain at [www.iso.org/tc67](http://www.iso.org/tc67)

# Procedure for WG/PT

- As simple as possible!
- Do it mainly as in ISO, however technical discussion taking place exclusively and confidentially in IOGP to eliminate concerns about technical assistance and sanction-breaking technology transfer
- Adhere to IOGP Supplementary procedure and other guidance provided for developing standards
- File documents under assigned folder in IOGP ShareFile (password-secured web-based documentation system)
- Chairperson to monitor the WG/PT members list to ensure no embargo countries are included; membership subject to IOGP's approval

# Standards Solution Tools Box

## Folder in IOGP ShareFile

«Tools box» available for all registered WG/PT members in in IOGP ShareFile containing useful documents:

- IOGP Supplementary procedure
- Presentation material about IOGP Standards Solution
- PIP template for initiating projects
- Templates for organizing meetings
- Guidance for developing standards
- IOGP contact details

# ISO Standards for use in the oil & gas industry

**ISO 10418** Process safety systems (Rev)

**ISO 10419** Replaced by API Spec 6W2

**ISO 10420** Wellhead & Christmas tree equipment

**ISO 12489** Reliability modelling/safety systems

**ISO 12554** Shallow gas diverter equipment

**ISO 15620** Drill-through equipment (DDP)

**ISO 15634** Hoisting equipment - care/maintenance

**ISO 15636** Hoisting equipment - specification

**ISO 15636** Drilling and well-servicing structures

**ISO 15702** Control and mitigation of fires and explosions

**ISO 10703** Offshore piping systems

**ISO 14224** Reliability and maintenance data (Rev)

**ISO 14692** GRP piping, Parts 1-4 (Rev)

**ISO 14693** Drilling equipment

**ISO 15138** Heating, ventilation and air-conditioning (Rev)

**ISO 15156** Cracking-resistant materials for use in H<sub>2</sub>S environments, Parts 1-3

**ISO 15544** Emergency response

**ISO 15563** Life cycle costing, Parts 1-3

**ISO 14901** Risk assessment in the design of onshore LNG installations

**ISO 14903** Characteristics of LNG influencing design and material selection

**ISO 14904** LNG Marine Transfer Arms (New)

**ISO 17177** Unconventional LNG transfer systems

**ISO 17292** Metal ball valves

**ISO 17776** Major Accident hazard management during design (Rev)

**ISO 17781** Duplex stainless steel materials testing requirements (New)

**ISO 17782** Qualification of manufacturers of special materials (New)

**ISO 17945** Materials resistant to sulfide stress cracking

**ISO 17969** Guidelines on competency for personnel (Rev)

**ISO 18480** Systems and installations for supply of LNG as fuel to ships

**ISO 19008** Standard Cost Coding System (New)

**ISO 20815** Production assurance and reliability management

**ISO 21427** Materials selection

**ISO 23926-1** Thermoplastics

**ISO 23926-2** Elastomers

**ISO 27469** Method of test for offshore fire dampers

**ISO 29001** Sector-specific quality management systems

**ISO 10855** Offshore containers, Part 1-3 (New)

**ISO 10847** Modular drilling rigs for offshore fixed platforms (New)

**ISO 10797-1** Elastomeric coating of risers - polychloroprene or EPDM (New)

**ISO 19900** General requirements for offshore structures

**ISO 19901-1** Metocean design and operating considerations

**ISO 19901-2** Seismic design procedures and criteria (Rev)

**ISO 19901-3** Topsides structure

**ISO 19901-4** Geotechnical and foundation design (Rev)

**ISO 19901-5** Weight control (Rev)

**ISO 19901-6** Marine operations

**ISO 19901-8** Marine soil investigations

**ISO 19902** Fixed steel offshore structures

**ISO 19903** Fixed concrete offshore structures (Rev)

**ISO 19904-1** Monohulls, semi-submersibles and spars (Rev)

**ISO 19905-1** Site-specific assessment of jack-ups (Rev)

**ISO 19905-2** Jack-ups commentary

**ISO 19905-3** Site-specific assessment of floating units (New)

**ISO 19906** Arctic offshore structures

**ISO 35101** Arctic Operations - Working environment (New)

**ISO 35103** Arctic Operations - Environmental monitoring (New)

**ISO 35104** Arctic operations - Ice management (New)

**ISO 35106** Arctic metocean, ice and seabed data (New)

**ISO 3977-5** Gas turbines - procurement

**ISO 10408** Sucker rods

**ISO 10421** Pumping units

**ISO 10434** Bolted bonnet steel gate valves

**ISO 10436** Replaced by API Std 311

**ISO 10437** Special-purpose steam turbines

**ISO 10438** Lubrication, shaft sealing and control-air systems, Parts 1-4

**ISO 10439** Centrifugal compressors

**ISO 10440-1** Rotary-type positive-displacement process compressors (oil-free)

**ISO 10440-2** Rotary PD packaged air compressors

**ISO 10441** Flexible couplings - special

**ISO 10442** Integrally geared air compressors

**ISO 12211** Spiral plate heat exchangers

**ISO 12212** Harpin heat exchangers

**ISO 10439** Reciprocating gas compressors

**ISO 13691** High speed enclosed gear units

**ISO 10704** Calculation of heater tube thickness

**ISO 13005** Fired heaters for general service

**ISO 13006** Air-cooled heat exchangers

**ISO 13007** Reciprocating compressors

**ISO 13009** Centrifugal pumps

**ISO 13010** Reciprocating positive displacement pumps

**ISO 14691** Flexible couplings - general

**ISO 15547** Heat exchangers, Parts 1-2

**ISO 15649** Piping

**ISO 15741** Steel valves DN 100 and smaller

**ISO 16812** Shell & tube heat exchangers

**ISO 16801** Risk assessment of onshore LNG installations

**ISO 16951** Internal coating and lining of steel storage tanks

**ISO 17177** Unconventional LNG transfer systems

**ISO 17292** Metal ball valves

**ISO 17348** Materials Selection in CO<sub>2</sub> Environment for casing, tubing and downhole equipments (New)

**ISO 17349** Streams containing high levels of CO<sub>2</sub> (New)

**ISO 18796-1** Internal coating and lining of process vessels (New)

**ISO 18624-1** Design and testing of LNG storage tanks

**ISO 20688-1** Resistance to exogenic spillage of insulation materials - Liquid phase (New)

**ISO 21049** Centrifugal and rotary pumps shaft sealing

**ISO 23251** Replaced by API Std 521

**ISO 24817** Composite repairs for pipework (Rev)

**ISO 25457** Flare details

**ISO 27509** Compact Flanged connections

**ISO 28300** Venting of storage tanks

**ISO 28440** LNG - Ship to shore interface

**ISO 13624** Marine drilling riser systems, Parts 1-2

**ISO 13625** Marine drilling riser couplings

**ISO 19901-7** Stationkeeping systems

**ISO 13628-8** ROT and interfaces

**ISO 13628-9** ROT 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

**ISO 13628-1** Subsea production systems

**ISO 13628-2** Subsea flexible pipe systems

**ISO 13628-3** Subsea TFL 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 10490** Calculations for DC TC performance properties

**ISO 10495** Care/Use of casing/tubing

**ISO 10497-1** Drill stem design

**ISO 10497-2** Inspection and classification of drill stem elements

**ISO 10414-1** Field testing of water-based fluids

**ISO 10414-2** Field testing of oil-based drilling fluids

**ISO 10416** Drilling fluids - lab testing

**ISO 10417** Subsurface safety valve systems

**ISO 10422** Replaced by API Spec 150

**ISO 10424-1** Rotary drill stem elements

**ISO 10424-2** Threading and gauging of connections

**ISO 10426-1** Well cementing

**ISO 10426-2** Testing of well cements

**ISO 10426-3** Testing of deepwater well cement

**ISO 10426-4** Atmospheric foamed cement slurries

**ISO 10426-5** Shrinkage and expansion of well cement

**ISO 10426-6** Static gel strength of cement formulations

**ISO 10427-1** Blow spring casing centralizers

**ISO 10427-2** Centralizer placement and stop-collar testing

**ISO 10427-3** Performance testing of cement float equipment

**ISO 10432** Subsurface safety valves

**ISO 10433** Replaced by API Spec 6W1

**ISO 11960** Casing and tubing for wells

**ISO 11961** Drill pipe

**ISO 12836** Qualification of casing connections for thermal wells

**ISO 13085** Tubing aluminium alloy pipes

**ISO 13500** Drilling fluids

**ISO 13501** Drilling fluids - processing systems evaluation

**ISO 13503-1** Measurement of viscous properties of completion fluids

**ISO 13503-2** Measurement of properties of proppants

**ISO 13503-3** Testing of heavy brines

**ISO 13503-4** Measurement of stimulation & gravelpack fluid leakage

**ISO 13503-5** Measurement of long term conductivity of proppants

**ISO 13503-6** Measuring leak-off of completion fluids under dynamic conditions

**ISO 13678** Thread compounds

**ISO 13679** Casing and tubing connections testing

**ISO 13680** CRA seamless tubes for casing & tubing

**ISO 14310** Packers and bridge plugs

**ISO 14990** Accessory completion equipment

**ISO 15126** Progressing cavity pump systems, Parts 1-2

**ISO 15463** Field inspection of new casing tubing and plain and drill pipe

**ISO 15464** Gauging and inspection of threads

**ISO 15551-1** Electric submersible pump systems for artificial lift

**ISO 15546** Aluminium alloy drill pipe

**ISO 16070** Lock mandrels and landing nipples

**ISO 15531-1** Well integrity life cycle governance manual (New)

**ISO 14530-2** Well integrity operational phase

**ISO 17078-1** Side-pocket mandrels

**ISO 17078-2** Flow control devices for side-pocket mandrels

**ISO 17078-3** Latches & seals for side-pocket mandrels & flow control devices

**ISO 17078-4** Side-pocket mandrels and related equipment

**ISO 17078-5** Sand control screens

**ISO 17824** Design of aluminium drill string

**ISO 20512** Aluminium alloy drill pipe threading gauging

**ISO 27427** Aluminium alloy drill pipe formation gauging

**ISO 28781** Subsurface tubing mounted formation barriers

**ISO 3183** Steel pipe for pipeline transportation systems

**ISO 12490** Actuation, mechanical integrity and sizing for pipeline valves

**ISO 12726** Wet thermal insulation coatings

**ISO 12747** Pipeline life extension

**ISO 13423** Pipeline transportation systems (Rev)

**ISO 13847** Welding of pipelines

**ISO 14313** Pipeline valves

**ISO 14723** Subsea pipeline valves

**ISO 15569-1** Cathodic protection of on-land pipelines

**ISO 15569-2** Cathodic protection for offshore pipelines

**ISO 15599-1** Pipeline reduction bends

**ISO 15599-2** Pipeline fittings

**ISO 15599-3** Pipeline flanges

**ISO 14640** Steel cased pipelines (New)

**ISO 16708** Pipeline reliability-based limit state design

**ISO 19345-1** Life cycle integrity management for onshore pipeline

**ISO 21229** Test procedures for pipeline mechanical connectors

**ISO 21809-1** Polyolefin coatings (3-layer PE and 3-layer PP)

**ISO 21809-2** Fusion-bonded epoxy coatings

**ISO 21809-3** Field joint coatings (Rev)

**ISO 21809-4** Polyethylene coatings (2-layer PE)

**ISO 21809-5** External concrete coatings (Rev)

**ISO 10498** International Association of Oil & Gas Producers

**ISO**

**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, APLAS, BSI, CSA, NORSON, NF, GOST, SAC etc. Some ISO/TC67 standards have been withdrawn and the relevant API standard is referenced above

Poster available at [www.iogp.org/international-standards](http://www.iogp.org/international-standards)



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