

Role and Work of ISO TC 67

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Chair, ISO/TC67

BP - Houston

ISO Technical Committee 67

- **“Materials, equipment and offshore structures for the petroleum, petrochemical and natural gas industries”**

Excludes offshore structures that are subject to IMO regulations

(part of TC8 – Ships and marine technology)

ISO/TC67 - Scope

- **SCOPE**
 - **Standardization of the materials, equipment and offshore structures used in the drilling, production, transport by pipelines and processing of liquid and gaseous hydrocarbons within the petroleum, petrochemical and natural gas industries**

ISO/TC 67 – Mission and Vision

- **MISSION**
 - To create value-added standards for the oil and natural gas industries
- **VISION**
 - Global standards used locally worldwide

ISO/TC 67 Vision

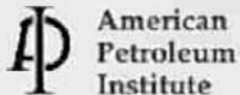
API Adopt-back of ISO 13706, as ANSI/API 661

European Standard (adoption of ISO 13706 via Vienna Agreement)

Air-Cooled Heat Exchangers for General Refinery Service

API Standard 661, Fifth Edition
March 2002

ISO 13706: 2000, Petroleum and Natural Gas
Industries—Air-cooled Heat Exchangers



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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 13706

April 2000

CS 75:180:20

English version

Petroleum and natural gas industries - Air-cooled heat
exchangers (ISO 13706:1998)

Industries du pétrole et du gaz naturel - Échangeurs de
chaleur refroidis à l'air (ISO 13706:1998)

Öl- und Erdgasindustrien - Luftgekühlte Wärmeaustauscher
(ISO 13706:1998)

This European Standard was approved by CEN on 13 April 2000.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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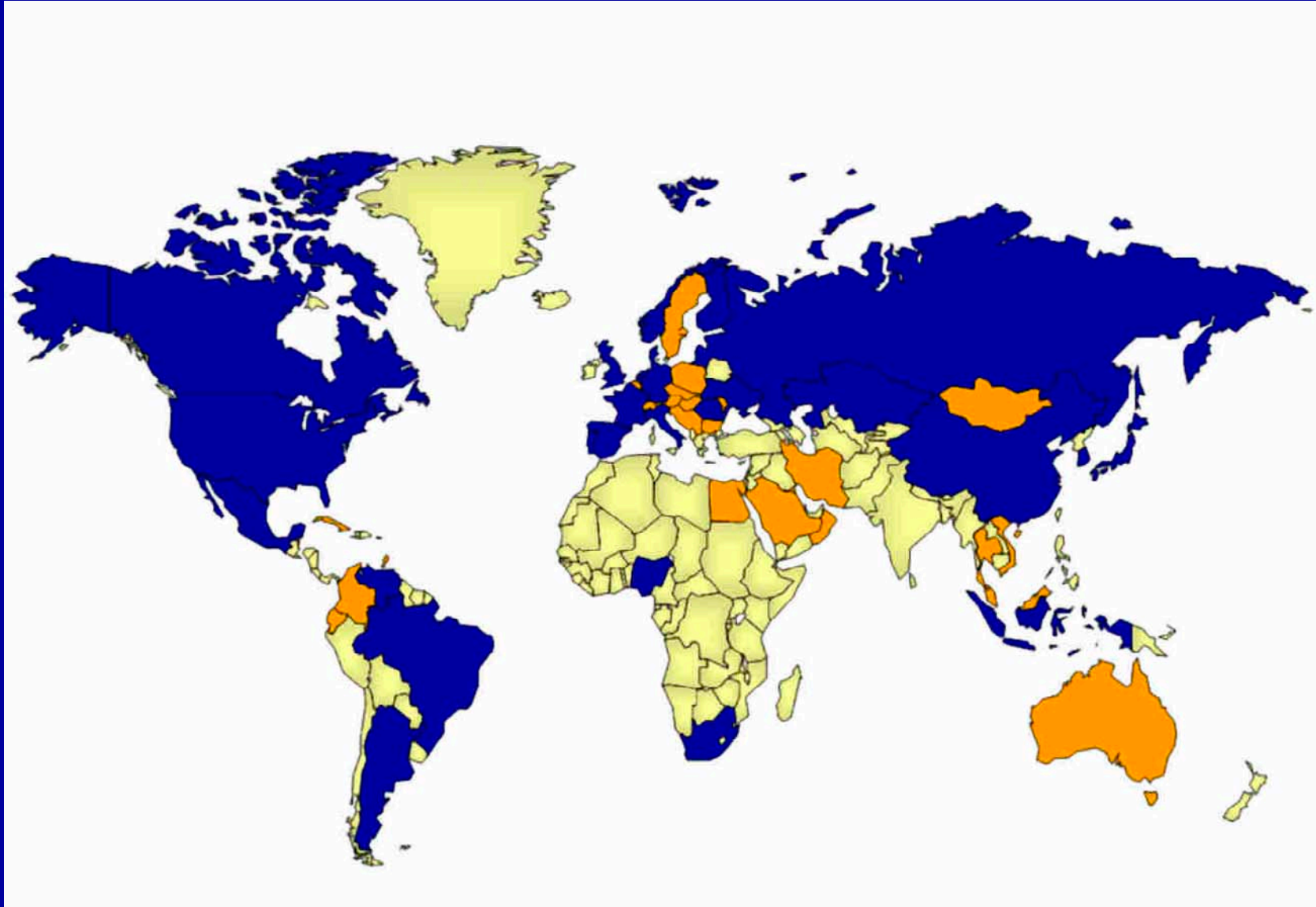
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Ref. No. EN ISO 13706:2000 E

ISO/TC67 – Member countries

- **PARTICIPATING – “P” members = 27 countries**
 - Argentina, Brazil, Canada, China, Denmark, Finland, France, Germany, Indonesia, Italy, Japan, Kazakhstan, Korea, Mexico, Netherlands, Nigeria, Norway, Portugal, Qatar, Romania, Russian Federation, South Africa, Spain, Ukraine, United Kingdom, United States, Venezuela
- **OBSERVING – “O” members = 26 countries**
 - Australia, Austria, Belgium, Bulgaria, Colombia, Cuba, Czech Republic, Ecuador, Egypt, Hong Kong, Hungary, Iran, Malaysia, Moldova, Oman, Poland, Saudi Arabia, Serbia and Montenegro, Singapore, Slovakia, Sweden, Switzerland, Thailand, Trinidad and Tobago, Viet Nam
- COPANT members indicated by underscore

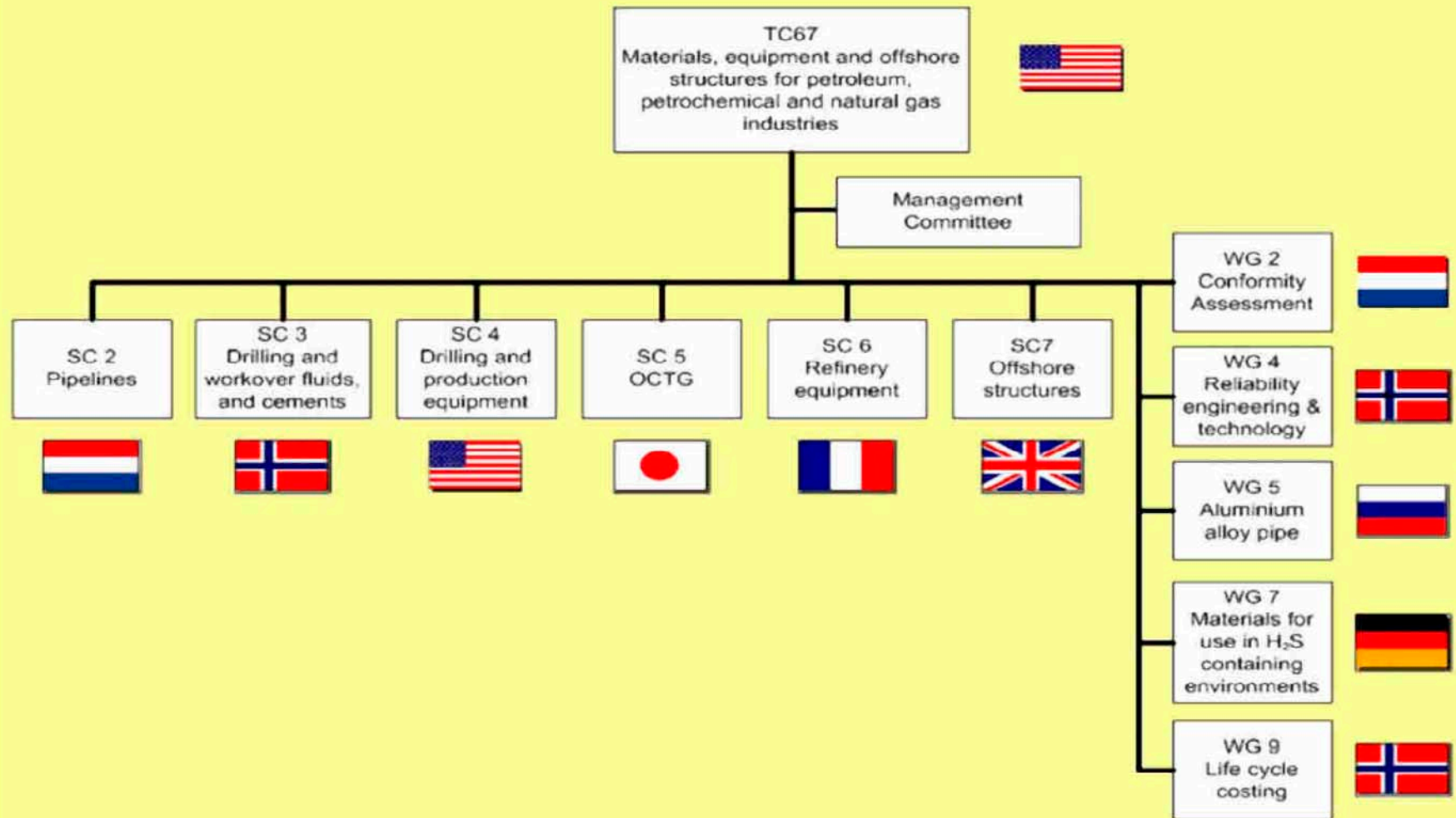
ISO/TC67 Member Countries



ISO/TC67 Liaisons

- International Association of Oil and Gas Producers (OGP)
- International Association of Drilling Contractors (IADC)
- Committee on European Normalisation (CEN)
- World Customs Organization
- IMO through ISO TC 8
- ISO TC5, TC17/SC18, TC164/SC15, TC8, TC44, TC96, TC98, TC115, TC176/SC2, TC176/SC3, TC184/SC4
- IEC TC18/MT18, TC31, TC65

ISO/TC67 Organization



Key Standards - Drilling



- 11960 Casing and tubing
- 15546 Aluminum alloy drill pipe
- 15156 Materials for H₂S environments
- 10423 Wellhead & christmas tree equipment
- 11961 Drillpipe
- 13679 Connection testing
- 13500 Drilling fluids
- 13501 Drilling fluid processing equipment
- 14310 Packers & bridge plugs

Key Standards - Pipelines



- **3183** Linepipe
- **13623** Pipelines
- **13847** Pipeline welding
- **14313** Pipeline valves
- **14723** Subsea pipeline valves
- **15589** Cathodic protection
- **15590** Induction bends, fittings and flanges
- **21329** Mechanical connectors

Key Standards - Subsea Production



- **13628-1** Subsea production systems
- **13628-2** Unbonded flexible pipe systems
- **13628-3** Through flowline systems
- **13628-4** Subsea wellhead & christmas tree
- **13628-5** Subsea control umbilicals
- **13628-6** Subsea production control systems
- **13628-7** Workover/completion risers
- **13628-8** Remotely operated vehicles (ROV)
- **13628-9** Remotely operated tool (ROT) intervention system

Key Standards - Offshore Structures



- **19900** Offshore structures
- **19901-1** Metocean design
- **19901-2** Seismic design and criteria
- **19901-4** Geotechnical and foundation design
- **19901-5** Weight control during engineering and construction
- **19901-7** Stationkeeping
- **19905-1** Jack-ups
- **13625** Marine drilling riser couplings

Key Standards - Facilities and Refineries



- **10434** Steel gate valves
- **10437** Steam turbines
- **10439** Centrifugal compressors
- **13704** Heater tube thickness
- **13706** Air-cooled heat exchangers
- **13707** Reciprocating compressors
- **13709** Centrifugal pumps
- **15649** Piping

Key Standards - Working Groups

- **13881 Classification and conformity assessment**
- **14224 Reliability and maintenance**
- **15663 Life cycle costing**
- **15589 Corrosion-resistant alloys for H₂S**
- **29001 Quality Management System (industry specific ISO 9001)**



ISO/TC67 Management Plan

“The Wall Chart”



Stage 20.20 – WD ballot started



Stage 30.20 – CD ballot started



Stage 40.20 – DIS ballot started



Stage 50.20 – FDIS ballot started



Stage 60.60 – standard published

ISO/TC67 Publications

- 1995=2
- 1996=4
- 1997=0
- 1998=2
- 1999=11
- 2000=22
- 2001=20
- 2002=17
- 2003=22
- 2004=16
- 2005=12
- 2006=target of 16
with 6 published
(August 2006)
- TOTAL = 122

ISO/TC67 Emerging Issues

- Liquefied Natural Gas (LNG)
- Pedestal cranes
- Hot tapping of pipelines
- Marine soil investigations
- Pipeline overpressure protection
- Ladders
- Gastight cements and cementing complex wells
- Compact flanges

ISO/TC67 Challenges

- Engineers and ISO editing
- Business activity level
- Technical experts
- Travel
- Some new technologies are not “traditional” engineering disciplines
- Participation by global industry

ISO/TC67 Motto

*“Do it once,
do it right,
do it internationally !”*

Thank You

Any Questions?