

International Standardisation Driving Global Competitiveness and Sustainability of the Oil & Gas and Future Energy Industries

Dr Matt Keys - June 2021

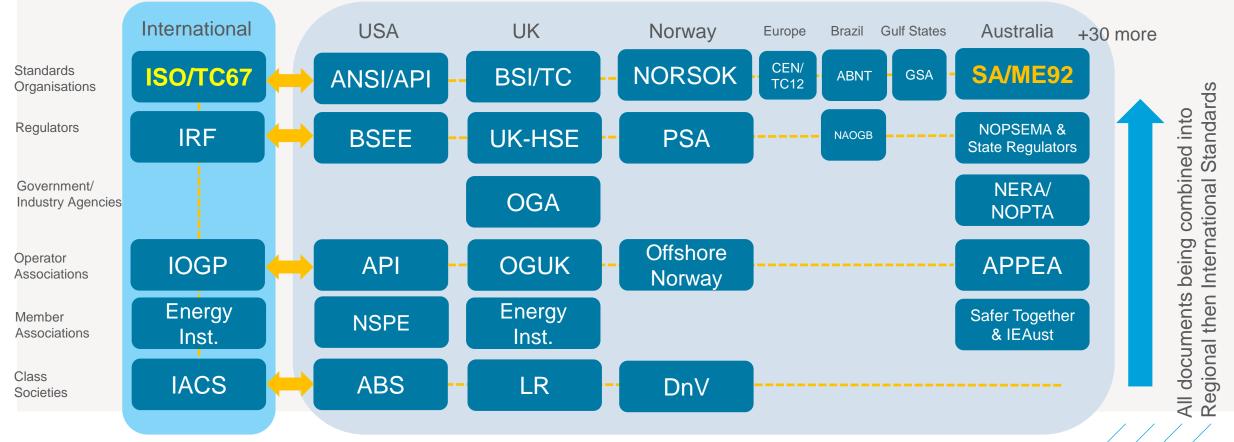






Capital Project Complexity (CPC) Initiative

- 1. All Standards Bodies, Regulators, Oil & Gas Produces, Class Societies and Member Associations are now working together
- 2. Reducing the need for Regional and Company Standards & Specifications with ~250 International standards
- 3. Reducing the costs of projects, operations and decommissioning through global consistency

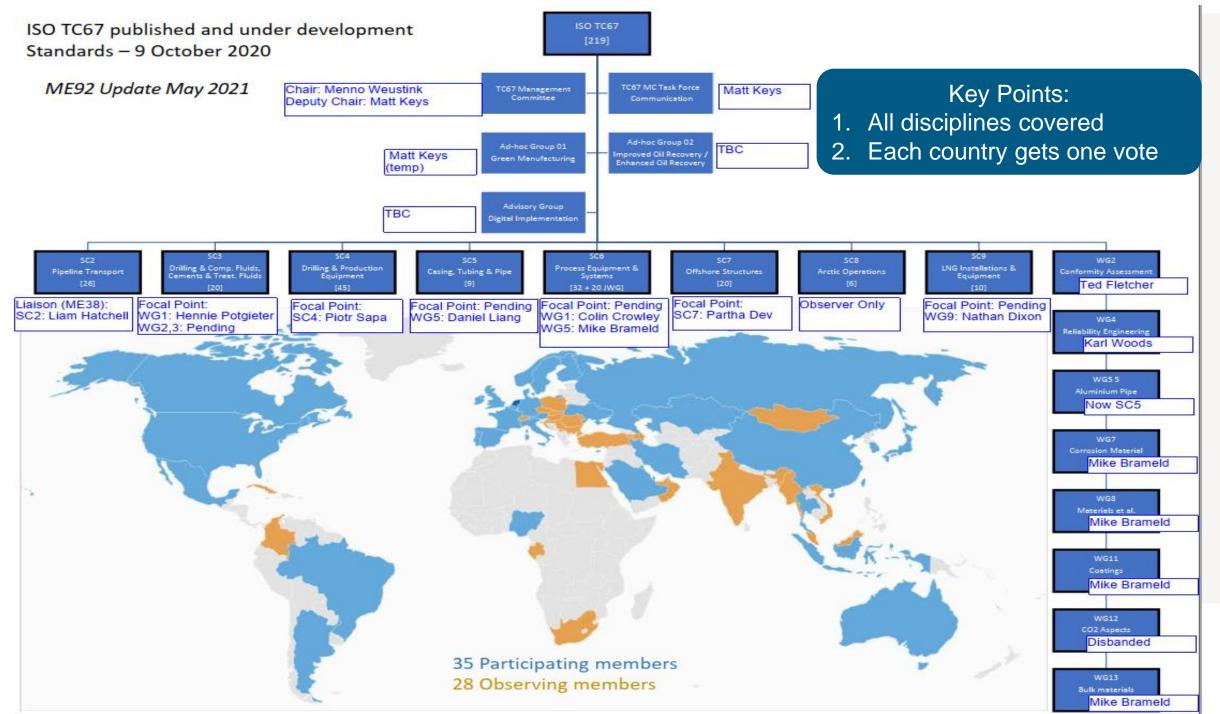


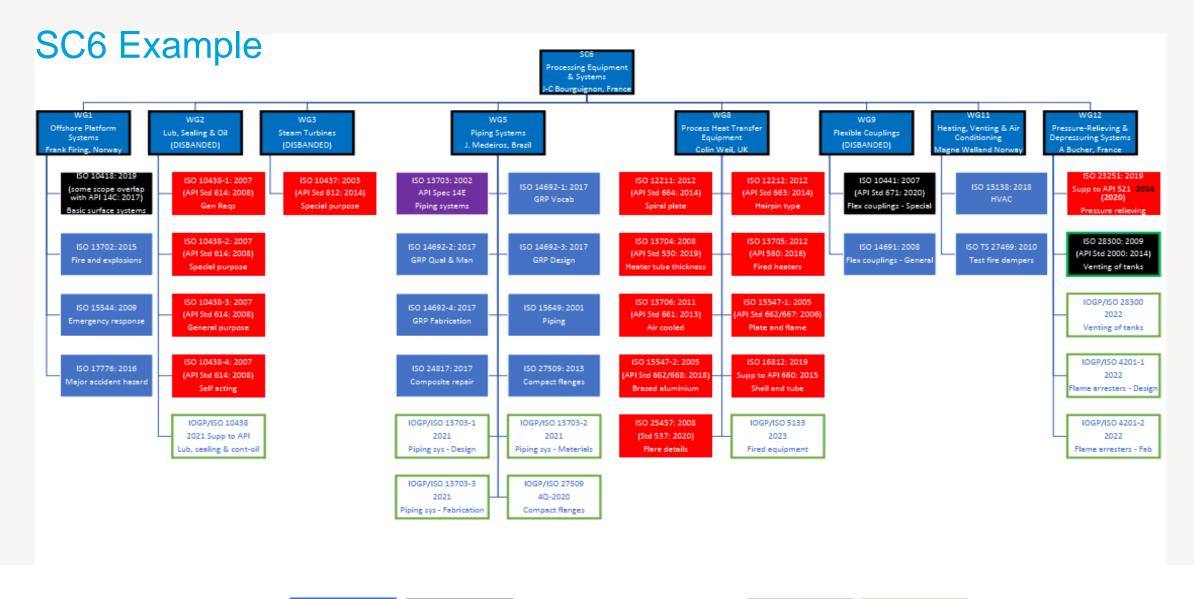






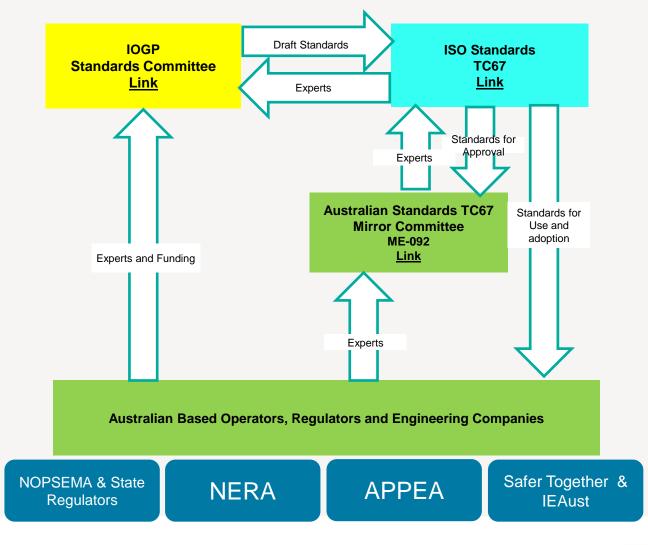






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IOGP, TC67, ME92 Links on Standards Collaboration for Australia



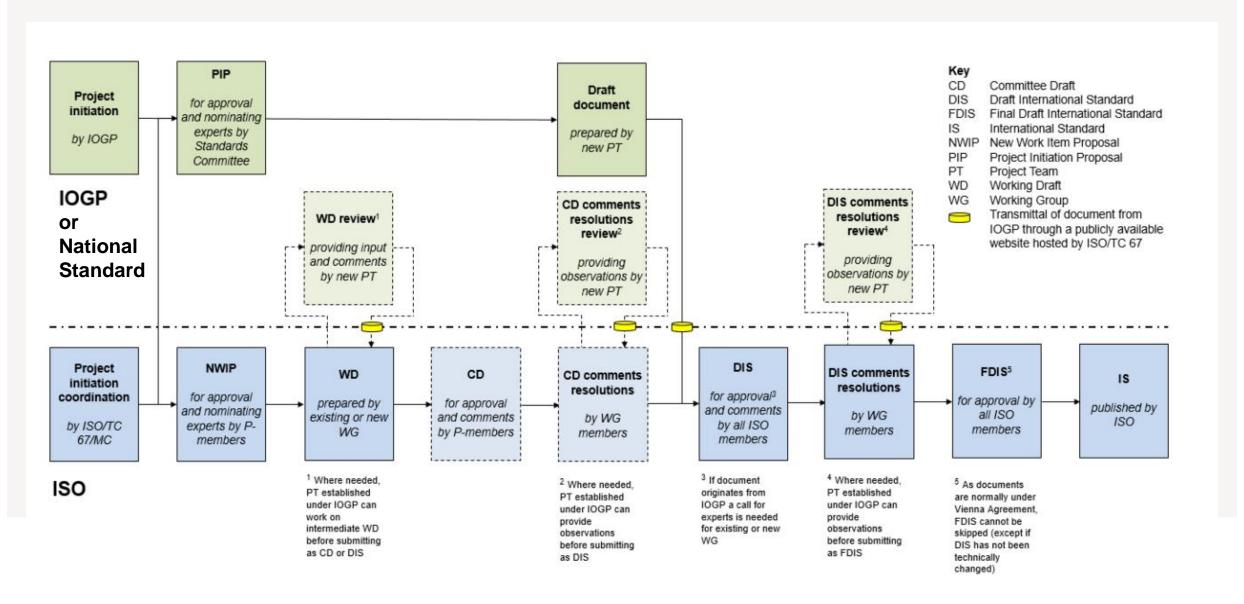








Standards Process (IOGP or National Standard to ISO)



Australian Example 1

The following guidance was issued by NOPSEMA for Well Integrity, which provided multiple standards as good industry practice for Well integrity

Following the Macondo and Montara blowouts in 2009 and 2010, API, ISO, NORSOK, Oil and Gas UK and other bodies have developed and updated standards and guidelines specifically for well integrity in an effort to avoid repeating the costly mistakes of the past. The International Regulators Forum (IRF), of which NOPSEMA is a member, accepts the following as good industry practice:

- ISO 16530 Well Integrity Part 1: Life Cycle Governance
- · ISO 16530 Well Integrity Part 2: Well Integrity for the Operational Phase
- NORSOK Standard D-010 Well Integrity in Drilling and Well Operations
- · Oil & Gas UK Well Integrity Life Cycle Guidelines
- . Oil & Gas UK Guidelines for the Abandonment of Wells
- Oil & Gas UK Guidelines for Qualification of Materials for the Abandonment of Wells.

As part of TC67 and the CPC, the ISO documents have since been adopted by Standards Norway and British Standards as their National Standard and they are both part of TC67 - SC4/WG4 to continue to review its relevance





Australian Example 2



Improving MODU mooring system integrity for cyclonic conditions

The integrity of mooring systems on mobile offshore drilling units (MODUs) is a critical barrier in preventing subsea loss of containment events and collisions with surrounding infrastructure. Lessons learned from a mooring failure incident in early 2015 highlight the need for step change in improving mooring system integrity for Australian conditions, specifically cyclonic conditions.

On 12 March 2015, the Atwood Osprey MODU experienced a mooring failure during Cyclone Olwyn and was blown three nautical miles off location in the vicinity of subsea and surface infrastructure and an environmentally sensitive shoreline. At the time, the rig had already been powered down and its workforce evacuated. The incident, however, still had the potential for catastrophic consequences to the facilities and infrastructure nearby.

Following the incident, NOPSEMA conducted a formal investigation and hosted a workshop with industry. The workshop aimed at providing insight into the contributory, causal and other relevant factors of the mooring failure incident and sought to identify best practices, opportunities for improvement, regulatory requirements and perspective.

the Regulator Issue 1: 2017

In early 2015 a Mooring incident occurred during cyclonic conditions on a MODU off the WA coast

New guidance for Australian waters was issued through APPEA in October 2016 and the link shared through NOPSEMA.

Current situation

- 1. the NOPSEMA link to the Rev 0 document is no longer valid
- The document was updated by APPEA DISC to Rev 1 in 2017 and stored on the new industry group 'Stand Together for Safety' (STFS)
- In December 2019, Rev 2 was back on the APPEA site as the only safety document. The Rev 2 document references the 3rd edition of API RP 2SK and the 2013 edition of ISO 19901-7

Way Forward

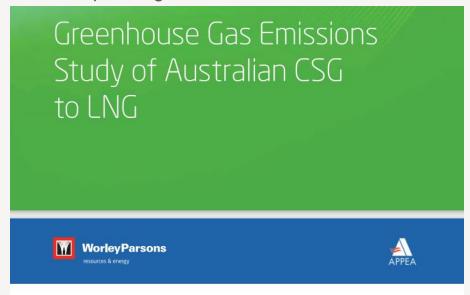
- 1. ISO 19901-7 and API RP 2SK are being combined under one document through IOGP/ISO-TC67.
- Australia's requirements can be added through the ME92-TC67 link





Australian Example 3

In 2011, APPEA commissioned a report into GHG emissions for the Coal Seam Gas - LNG industry in comparison to the Coal power generation

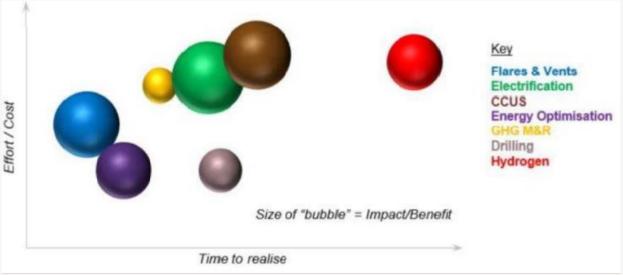


In 2021, ISO TC67 is now developing a common standard for GHG emission calculations





Future Industries







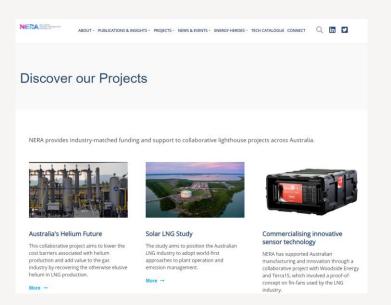




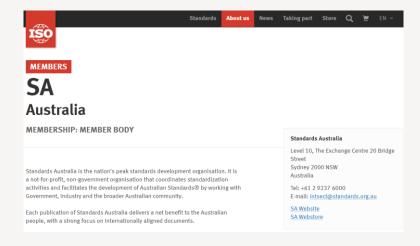


How to get involved and find out more

www.nera.org.au/NERA-projects



www.iso.org/home/tc67



www.linkedin.com





