Multi-disciplinary reliability technology and cost standards for value creation

Project groups: 53 experts from 14 countries organized in 6 project teams (in line with IOGP Standards Solution).

Companies: Oil & energy, drilling & engineering, manufacturers, research institutions, consultancies and regulator.

Meetings: Project team meet for standards development and marketing. Many adoptions: Regionally (e.g. CEN) + nationally.

ISO 14224 Collection and exchange of reliability and maintenance data for equipment (ed.3, 2016) – Confirmation by Systematic Review, Feb 2022
ISO 20815 Production assurance and reliability management (ed.2, 2018)
ISO/TR 12489 Reliability modelling and calculation of safety systems assurance and reliability management (ed.1, 2013)
ISO 19008 Standard cost coding system for oil and gas production and processing facilities (ed.1, 2016) – Confirmation Systematic Review, Feb 2022
ISO/TS 3250 Calculation and reporting of production efficiency in the operating phase (ed.1, Aug 2021) – Now being deployed + CEN process
ISO 15663 Life cycle costing (ed.1, Feb 2021) – Now being deployed

Global adoption of ISO/TC67/WG4 standards

60+: AT ISO level
Safety: At regional level (e.g. European standardization organization)
172+: standards at national level (e.g. National Standardization Bodies like in Norway)

Business opportunities and challenges

- Energy transition: The ISO/TC67/WG4 standards portfolio is well suited for the new scope of ISO/TC67 regarding also lower carbon. Possible amendments being considered for new ISO/TC67 scope issues (e.g., wind: ISO 19008; coverage and ISO 14224: add-ons).
- ISO Guide 84:2020 has been used when preparing new ISO 15663 and ISO/TS 3250, reflecting also lower carbon agenda and sustainability. These are important for value creation and production & injection efficiency.
- Digitalization: ISO 14224 and ISO 19008 is important to structure technical information for safe, reliable and cost-effective operations.
- HSE: Industrial interface meetings held to share ISO standards benefits and give advice regarding safety instrumented systems (ref. IOGP Report 636 + PDS Forum), BOP:well control equipment (RAPID-S53 JIP) and diving respiratory equipment (ISO/IOGP).
- Cost management: Requires ISO 19008 standard cost coding and new ISO 15663 life cycle costing for standardized decision-support.
- Advisory ISO Interactions: Session held March 2022 on quality, conformance, reliability, and cost aspects with ISO/TC67 standards.

Marketing: New ISO 14224 course to be held in Houston 9 May 2022, with focus on drilling/well/subsea initiated arising from dialogue with RAPID-S53 JIP (drilling BOP); Use of ISO 14224 to ensure Safety and Equipment Quality in the Oil and Gas.

Conferences:

Presentations regarding ISO 15663 and ISO 19008 towards academia (University guest lecturers) held in October 2021 and April 2022.

Industry collaboration arena: ISO standards applied in framing/performing Joint Industry Projects (JIP), e.g. Subsea All-Electric. Safety equipment JIPs: APOS. Technical information JIPs: Industrial interface dialogues with IOGP JIP33 and IOGP JIP36.

Terms and translations:

Further information: See latest updates on our ISO/TC67/WG4 website