

14<sup>th</sup> May 2009

## **TC 67/SC 7 Offshore Structural Standards**

### **UK Recommendation to form a Chairman's Advisory Group to identify a mechanism to fund the continued development and maintenance of the ISO TC 67/SC 7 series of standards.**

#### **Background**

In 1992, under the direction of ISO/TC 67/SC 7, the E&P industry commenced the process of producing a series of International Standards relating to the design and assessment of offshore structures. Since then nine SC 7 standards have been drafted and published, with around seven remaining to be completed by 2011.

The SC 7 series of offshore structural standards have always been recognised as forming a unique set of documents. ISO 19902 (Fixed steel offshore structures) for example, published in 2007, represents a distillation of over 40 years of industry experience in the design, fabrication, installation and operation of fixed offshore jacket structures. With over 600 pages of detailed technical requirements and supporting information, it provides E&P companies with a document that allows them to design reliable and cost effective structures. In ISO 19904-1 floating structures are addressed covering monohulls, semi-submersibles and spars, with stationkeeping systems given special attention with their own standard (ISO 19901-7). Marine operations, dealing with all structural forms, are considered in ISO 19901-6, while other SC 7 standards bring together, for the first time, a unified global methodology for addressing important engineering inputs to the design and assessment process including metocean, seismic, geotechnical and foundation design. Finally, 2010 will see the completion of a standard relating to offshore structures in arctic and cold environments.

The process through which the SC 7 series of standards were drafted, converted to ISO format, and eventually published, has evolved over the past decade. Over this period the manpower resources available from within E&P companies to support the technical development of standards has reduced significantly. Increasing reliance has been placed on contracting services to support both the technical development and the ISO formatting of SC 7 documents.

Under the auspices of the OGP Offshore Structures Committee, a joint industry project (JIP) was formed to undertake the technical editing of the draft offshore standards. The funds provided by this JIP have allowed a number of standards to be completed and issued within a shorter timescale than would have been possible through sole reliance on E&P company personnel.

#### **Current Status**

While a number of SC 7 documents have already been published by ISO, a number require further effort prior to completion. These include standards relating to the site assessment of jack-up rigs, design of arctic structures, and topside engineering. In the future, further offshore structure technologies may be identified that warrant standardisation through the ISO process.

In addition to completing technical editing on a number of existing documents, the ISO process includes a review cycle within which standards that have already been published need to be revisited. At the time of review published standards need to be updated:

- to address any errors or shortcomings in the technical provisions
- to incorporate new practices that warrant inclusion in the standard
- to address regional issues (eg, through the provision of regional annexes)

Where no change is required positive confirmation of a standards ongoing applicability and relevance is required.

### **Current Funding Status**

The OGP Structures Editing JIP is within its final funding phase, with limited (if any) scope for additional funding from the contributing organisations. Further, the JIP was established to provide a resource to deliver the first set of publications, not for the long-term maintenance and development of the SC 7 documentation.

If the SC 7 document set is to be enhanced and maintained, an alternative funding mechanism needs to be identified.

### **Recommendation**

It is recommended that a new Chairman's Advisory Group (AG) be formed to consider options to raise the funds required to complete, maintain, add-to and enhance the SC 7 series of standards.

The AG should work under the direction of SC 7 and report its findings and recommendations to SC 7.

#### ***Composition:***

The AG should be limited in size to not more than twelve people and include representation from:

- both large and small E&P companies
- design contractors
- contractors familiar with supporting ISO editing process
- regulators
- SC7 Chair and WG Convenors
- API SC2 Strategic committee
- OGP Offshore Structures Committee (JIP 19 for ISO Editing)

#### ***Timescale and Reporting:***

The findings of the AG should be reported to SC 7 within six months of its initiation. They should include:

- a estimate of the funds required to support SC 7 documentation over the next decade
- options for raising the funds
- recommendation on how to progress the favoured option.