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Development of an ISO Standard on Marine Operations

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Abstract

In the course of 2007 the Standard ISO 19901-6 “Marine Operations” is expected to be published as a final ISO document. This Standard is a part of the series on Standards for Petroleum and Natural Gas Industries - Specific Requirements for Offshore Structures - Part 6: Marine operations. The Standard comprises a wide field of marine operations, which due to their special nature and limited duration are not always logically and adequately covered by other standards. The Standard provides requirements and guidance for the planning, engineering and safely execution of marine operations for all types of offshore structures except for drilling rigs.

The paper explains the organization of the concerned part of ISO being ISO TC67/SC7 and indicates where the position of this Standard ISO 19901-6 is in comparison with other Standards of the series of ISO Standards Petroleum and natural gas industries - specific requirements for offshore structures (published, to be published and under preparation).

The paper will focus on the key and operational parts of the Standard 19901-6 “Marine operations”. The key parts are the general considerations on the HSE plan, risk management, job safety analysis, environmental impact study, and on manning, qualifications, job and safety training. Further key parts are Organization, documentations and planning, Metocean criteria, Weight control, Stability and Ballasting operations. The operational parts give guidance and recommendations on Loadout, Transportation, Temporary mooring, Construction and outfitting afloat, Float-over topside installation, Pre-laid mooring including foundation, Offshore installation operation, Lifting operations and finally Decommissioning and removal.

The paper will show the advantage of the present Standard on the guidance and recommendations on the marine operations

for all offshore structures as will be used by the oil companies and contractors.

Introduction

In the late 1980 proliferation of national standards were perceived as a threat The EU tended to initiate European Standards and also initiatives from National Standards were noticed (CA, CN, ID, NO, UK). Perceived business need by the major international oil and gas companies and major oil and gas producer associations were:

- Offshore Projects as Global Business
- Global Standards for Global Projects.

The ISO came with the initiative. ISO is a worldwide federation of national standards bodies (ISO member bodies). ISO agreed on the following objectives:

- Development of global standards for Petroleum Industry
- Under the International organization for Standardization (ISO).

For this purpose the existing technical committee ISO TC67 “Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries” was reactivated. Under management of subcommittee SC7 “offshore structures” the global standards would be established. More information on the ISO TC67/SC7 for the new international standards for offshore structures is given for instance in [Ref. 1], [Ref. 2] and [Ref. 3].

These new standards for all types of offshore structures (except drilling rigs) are implemented in the ISO 19900 series. The new global standards are based on API RPs and other existing practices while the convergence should be found through harmonization with international practices as practical and possible. Each standard may consist of general normative and informative parts, while regional and national annexes can be included. Further the designs are based on the Limit State Design Practice (PSF).

National Standards Bodies and Liaison Organizations participate in the work to develop the standards either as a participating or an observing or as a liaison member.

The participating members of the ISO/TC67/SC7 are: Argentina, Brazil, Canada, China, Denmark, Finland, France, Germany, Indonesia, Italy, Japan, Kazakhstan, Netherlands, Norway, Romania, Russian Federation, Saudi Arabia, United Kingdom and USA.