# Offshore contractors face surge of regulations

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**AFTER YEARS OF** relative calm, MODU owners are experiencing a storm surge of regulatory initiatives that will challenge both the design of new units and the operation of existing units. Issues of widespread importance include:

## CHALLENGES AT THE IMO

At its December 2004 session, the **International Maritime Organization's (IMO's)** Maritime Safety Committee directed its Ship Design and Equipment (DE) Subcommittee to undertake amendment of the IMO MODU Code. The Code underwent its last major revision in 1989. The MODU Code is intended to provide MODUs with an assured level of safety equivalent to that of cargo ships under the International Convention on the Safety of Life at Sea (SOLAS) and International Convention on Load Lines (ICLL), both of which have seen significant revisions since 1989.

Accordingly, the nature of these changes and their potential applicability to the design and construction of MODUs will need to be assessed. In addition, the DE Subcommittee has been directed to consider recent amendments to the helideck standards of the International Civil Aviation Organization (ICAO) and incorporate them into the MODU Code.

Among the changes that will be considered are: protection against downflooding in heavy seas; fire safety systems; lifesaving equipment carriage and maintenance standards; mandatory participation in classification; and navigation and communication equipment requirements. IADC has formed a Working Group on Revision of the IMO MODU Code to review the various SOLAS and ICLL revisions and prepared a comprehensive position paper providing IADC's views. The position paper will be used in discussions with interested flag State Administrations and coastal State regulatory agencies and will form the basis of an IADC submission to IMO when the DE Subcommittee begins consideration of this matter at its February 2006 session. The Working Group currently includes representatives of **Atwood Oceanics**, **Diamond Offshore**, **ENSCO**, **GlobalSantaFe**, **Noble Drilling**, **Pride International**, **Rowan Companies**, **TODCO** and **Transocean.** The issue is scheduled to be considered at the February 2006 and 2007 sessions of the DE Subcommittee, with final consideration of amendments to the MODU Code to be undertaken by the Maritime Safety Committee in 2008.

The Maritime Safety Committee also continued its development of goal based construction standards for new ships. The standards are intended to provide overarching goals against which ship safety is to be verified at the design and construction stages, and during operation. Five tiers of standards are envisioned, with the top three tiers being developed by IMO, and tiers IV and V being developed by the classification societies, other recognized organizations and other industry standards organizations.

The draft goal statement for Tier I states: "Ships are to be designed and constructed for a specified design life to be safe and environmentally friendly, when properly operated and maintained under the envisaged operating and environmental conditions, in intact and foreseeable damage conditions, throughout their life." This is accompanied by a series of functional requirements related to matters such as design, fatigue and coating life; design environmental conditions; structural and residual strength; accessibility for inspection and maintenance; and quality. The Committee identified the development of these standards as high priority and work is progressing rapidly.

IMO's Subcommittee on Ship Design and Equipment, at its February 2005 meeting, addressed several issues related to lifesaving equipment. It continued discussions on the compatibility of immersion suits when used with lifejackets; immersion suits and lifeboat access and capacity; and lifejackets and marine escape systems. The Subcommittee supported a general re-evaluation of current weight and space allocations for lifesaving craft and a review of the underlying anthropometric data, the underlying problem being the increased weight and size of seafarers and passengers. It remains to be seen how the issue will be addressed in terms of equipment certification and provision of appropriate equipment.

The Subcommittee also agreed to develop performance standards for protective coatings for use in ballast and void spaces on all types of ships, with a target coating life of 15 years.

In a separate initiative, the IMO's Marine Environment Protection Committee will consider amendments to MARPOL Annex I to establish protection standards for fuel oil tanks on ships, including MODUs, when it meets in July 2005. The new regulations are to apply to ships having an aggregate fuel capacity of 600 cu m and above that are contracted after 1 August 2007, or delivered after 1 August 2010 or undergo major conversion after those dates.

Under the proposed regulations, fuel tanks will need to be protected by double hulls, or meet alternative probabilistic standards to protect against outflow in the case of side or bottom damage. As the probabilistic standards were developed for traditional ship hull forms, they are likely to be of little use to designers of jackups or semisubmersibles, who will thus be forced to alter designs to provide double hull protection for fuel tanks.

## INT'L LABOR ORGANIZATION

The **International Labor Organization** is preparing a new Maritime Labor Convention that will consolidate more than 50 existing standards on various issues, including maritime training, work hours, working conditions, medical fitness and shipboard accomodations. While the earlier standards have recognized the primacy of coastal State legislation over such matters for MODU operations and have largely excluded MODUs, it appears that in the current effort ILO is insistent in saddling flag

States with concomitant responsibility for enforcing labor and working condition standards on MODUs. IADC has not been invited to participate in the tripartite (Labor/Shipowner/Government) negotiations at ILO, but is attempting to alert coastal State governments to the potential conflicts and difficulties that adoption of the ILO standard in their current form will create.

An April 2005 meeting addressed outstanding issues with regard to the coverage of ship sizes and service to be included, the workforce to be included, and administrative provisions to govern the new Convention. The draft Convention is to be submitted to the International Labor Conference for adoption in early 2006.

## HELIDECK ISSUES

Complicating the IMO's efforts to update the helideck standards in the MODU Code is the ongoing work of ICAO to update its helideck standards. The work has temporarily slowed as ICAO is re-evaluating how the work is to be undertaken, but is expected to resume.

In a related initiative, the United Kingdom's Civil Aviation Authority is revising CAP 437 "Offshore Helicopter Landing Areas-Guidance on Standards." CAP 437 is applied by many aviation regulators worldwide. Changes have been proposed to the guidance governing physical characteristics; visual aids; rescue and fire-fighting facilities; fueling; and operational standards.

The new edition is targeted for issuance in the 2nd quarter 2005. IADC consulted with International Association of Oil & Gas Producers (OGP) and the UK Offshore Operators Association (UKOOA) Aviation Subcommittees and submitted comments to the CAA requesting clarification of the guidance, particularly with respect to requirements for wind tunnel tests and analyses of the potential effects of heat producing sources, such as flares, on flight operations.

## MOORING STANDARDS

Hurricane Ivan severely disrupted oil and gas production as it struck the Central Gulf of Mexico as a Category IV storm. In its ferocity, it caused several semisubmersibles to break moorings and go adrift.

While the drifting rigs caused minimal damage and resulted in no pollution, they have come under scrutiny, with MMS and the industry attempting to come to a better understanding of the nature of the mooring failures and what steps, if any, can be taken to make the mooring systems more robust.

IADC has worked with the Offshore Operators Committee and API improve MMS' understanding of the standards used in designing MODU mooring systems and the limitations of such systems in the face of a Category IV storm. The efforts will continue with both workshops and research projects likely. Due to its intensity, inclusion of the hindcast analysis of Hurricane Ivan into the metocean databases used for design and assessment of structures in the Gulf of Mexico is likely to have localized effects on air gaps required in shallow waters.

## SAFETY MANAGEMENT SYSTEMS

The MMS has indicated in the Regulatory Agenda that it is considering requiring safety management systems for operators. MMS indicates that it is not satisfied with the safety performance in the Gulf under voluntary participation by operators in safety management systems (60% of OCS operators have implemented an SMS).

The problem for drilling contractors when SMSs are mandated is the potential for conflicts between the SMS and other regulatory demands on the contractor, such as the International Safety Management Code promulgated by IMO. Such problems are exacerbated when, as in the US, the regulator does not choose to recognize contractors as independent stakeholders capable of managing the assets under their control. IADC is already engaged in preliminary discussions with MMS regarding this matter.

As Australia's newly-formed National Offshore Petroleum Safety Authority (NOPSA) has moved toward implementation of its revised Safety Case regime, IADC has sought clarification from NOPSA of the individual and mutual responsibilities of drilling contractors, their clients and third-party contractors. While NOPSA believes that, through its outreach efforts, its expectations are well understood, IADC remains concerned that the guidance provided does not provide sufficient clarity.

## PROTECTING SEALIFE

Last November, the US EPA proposed national requirements for cooling water intake structures on offshore facilities. If adopted as proposed, new jackups with a design water update exceeding 2 MM gal/day would be required to substantially reduce the intake velocity of their cooling water, which force such units to use air-cooled engines, or large and difficult to handle intake velocity reducing screens. EPA is trying to minimize the impact on the environment associated with mortality of small plants and animals in seawater used for cooling water. IADC and allies had previously won a delay in the imposition of these regulations from EPA. Along with other offshore industry associations, IADC continues to work for an approach better tailored for industry. Paradoxically, the EPA, in conjunction with the US Coast Guard, is considering standards that would require the annihilation of sea life in ballast water before it is discharged.