



# REPORT

International Association of Drilling Contractors  
Offshore Division

## 4<sup>th</sup> Session of the Sub-Committee on Ship Systems and Equipment 20 – 24 March 2017

The fourth session of the Ship Systems and Equipment Sub-Committee was held at the IMO Headquarters from 20-24 March 2017, chaired by Dr. S. Ota (Japan). The Vice-Chair, Mr. U. Senturk (Turkey), was also present.

The session was attended by delegations from Members and Associate Members; by representatives from the United Nations Programs, specialized agencies and other entities; by observers from intergovernmental organizations with agreements of cooperation; and by observers from non-governmental organizations in consultative status; as listed in document SSE 4/INF.1. For the full report of items considered at this session please see document SSE 4/19 *Report to the Maritime Safety Committee*. IADC was represented at this session by Jim Rocco Senior Director, Policy & Regulatory Affairs. Also attending this session with IADC were Mr. John Flynn, Marine Superintendent for Stena Drilling Limited and Mr. Mike Lindsley, Head of Marine Operations for Seadrill.

### **SUMMARY OF ITEMS OF INTEREST:**

#### **Safety Objectives and Functional Requirements for the Guidelines on Alternative Design and Arrangements for SOLAS Chapters II-1 and III**

The Sub-Committee received the report of the subject Correspondence Group (CG) and noted the progression of the work completed that involved identifying expected performance derived from functional requirements intended to provide a performance based alternative to existing SOLAS Chapter III provisions. The CG also established a comparative matrix that illustrates how new functional requirements may align/respond to the current more prescriptive specifications of Chapter III.

The Sub-Committee subsequently established a working group during this session to further progress this work. These deliberations further refined expected performance of functional requirements. However it was agreed by the working group and endorsed by the Sub-Committee that upon completion of the working group efforts made during this session the ability to deliver a more quantifiable set of associated expected performances was yet to come.

The Sub-Committee proceeded to provide its general endorsement of work completed so far and invited the Committee to note the progress made with a view to furthering development of expected performances that yields more quantifiable elements. The Committee was also invited to extend the completion date of this output to 2019.

### **Making the Provisions of MSC.1/Circ.1206/Rev.1 Mandatory**

It was noted by the Sub-Committee that work intended during this session was to review the draft MSC Circular on *Guidelines on safety during abandon ship drills using lifeboats* (Annex 2 from MSC.1/Circ.1206/Rev.1) and; draft amendments for inclusion in MSC.1/Circ.1205 *Guidelines for developing operation and maintenance manuals for lifeboat systems* to identify possible inconsistencies with the new MSC.402(96) resolution.

Upon completion of the above mentioned work undertaken at this session by the LSA working group, the Sub-Committee endorsed these draft guidelines and amendments and invited the committee to approve them at MSC 98.

### **Uniform Implementation of Paragraph 6.1.1.3 of the LSA Code**

Also considered by the LSA working group was the issue of amending paragraph 6.1.1.3 of the LSA code to account for “hand-operating” functionality when deploying a rescue boat. This proposal was originally introduced due to some vessel operators encountering incidences of Port State non-compliance when such capability was provided where current LSA Code provisions do not expressly reference an allowance for manual arrangements.

At the conclusion of working group efforts, the Sub-Committee endorsed its outcome for proposing text to the subject LSA paragraph allowing for rescue boats not exceeding 700 KGs to be provided with a manual means of launching. The Committee was invited to adopt this proposal and note the completion of this output.

### **Review of the MODU Code, LSA Code and MSC.1/Circ.1206/Rev.1**

The Sub-Committee endorsed the draft MSC resolution that would implement amendment provisions to account for, *inter alia*, the following considerations in the 2009 MODU Code:

- Recognizing “H” class division criteria that meet hydrocarbon fire test parameters when conducting material testing in accordance with the Fire Test Procedures Code
- Providing more thorough consideration of Dynamic Positioning “shutdown” logic when encountering emergency conditions during drilling operations
- Improving measures to account for maintenance/integrity of equipment, including portable equipment, in hazardous zones
- Establishing H Class boundaries where hazardous areas may be adjacent to accommodations and other spaces containing vital equipment and machinery
- Additional protection of escape routes
- Deluge water extinguishing systems on the drill floor
- Providing for differences in average body mass for calculation of life boat capacity
- When assigned, clarifying the Master as the person in charge at all times
- Enhancing lifesaving drill requirements

The Sub-Committee invited the committee to adopt these amendments and note that work on this output has been completed.

### **Amendments to the FSS Code For CO2 Pipelines in Under-deck Passageways**

Introduced as a new output at MSC 96, this undertaking was intended to address the potential shortcomings of flanged and welded connections in restricted locations underdeck that may, due to leakage, contribute to compromised extinguishing capability and crew safety. Intentions were to consider the relative necessity of this effort via casualty incident data submitted by interested

Member States to SSE 4.

Upon completing deliberations of the Fire Protection working group convened at this session, the Sub-Committee concluded that due to the absence of any Member State casualty information submitted as was invited at MSC 96, there was no need to proceed further with this consideration for amendments at this time. Interested delegations were invited to submit relevant information to SSE 5 for future consideration.

### **Requirements for Onboard Lifting Appliances and Winches**

First proposed as a new output at MSC 89 in February 2011, this undertaking has focused efforts on developing SOLAS provisions addressing on-board lifting appliances and anchor handling winches. As this issue pertains to MODUs, a need exists to maintain a distinction between any forthcoming SOLAS provisions and that which is already provided for in Chapter 12 of the MODU Code. In this light, particular interest, with respect to offshore drilling contractors, is being paid to discussions involving the intended applicability of these developing SOLAS provisions.

At this session, the Sub-Committee established a working group after taking receipt of the report of the correspondence group report detailing the continued progress. During the working group deliberations, lengthy discussion ensued regarding a variety technical and operational details concerning issues such as equipment design, life cycle considerations, and operating environments. Most important to offshore drilling contractors however, was the discussion of the applicability of these provisions. As the list of exemptions was drafted during this working group, “appliances on ships subject to the MODU Code” was established as one of the six identified as not being applicable to these draft provisions.

Noting that it was necessary for this work item to progress intersessionally, the Sub-Committee established a correspondence group and extended the target completion year to 2019.

### **Amendments to the Guidelines for Vessels with Dynamic Positioning (DP) Systems (MSC/Circ.645)**

Upon review of the Correspondence Group report, the Sub-Committee agreed that amended guidelines contained in the report should be issued as a new set of guidelines which will retain in effect existing MSC.1/Circ.645 Guidelines for existing vessels with dynamic positioning systems for which these provisions currently apply. The Sub-Committee also endorsed the draft guidelines contained in the CG report and invited the Committee to adopt accordingly at MSC 98 and note the conclusion of this output.

### **Revision of Requirements for Escape Route Signs and Equipment Location Markings in SOLAS and Related Instruments**

At the behest of SSE 3 & MSC 97, the IMO Secretariat, in conjunction with the ISO Central Secretariat prepared a draft Assembly resolution containing graphical symbols from ISO 24409-2:2014 for consideration at SSE 4 to address revision of the *requirements for escape route signs and equipment location markings in SOLAS and related instruments*. Noting that this ISO standard was not originally intended for shipboard use, the Sub-Committee agreed that A.952(23) *Graphical symbols for shipboard fire control plans* should continue to be used in tandem with the new Assembly resolution, once adopted. Consequently, the Sub-Committee endorsed this draft resolution and invited the Committee to approve these measures with a view to adoption at A 30. The Sub-Committee noted that work on this output had been completed at this fourth session.

## **Unified Interpretation (UI) of Provisions of IMO Safety, Security, and Environment Related Conventions**

The Sub-Committee invited the Committee to approve the draft UI on suitable means for the calibration of portable atmosphere testing instruments as referred to in SOLAS regulation II-2/4.5.7.1. This approval will clarify that calibration of such equipment on or offshore is acceptable in accordance with manufacturer's recommendations.

## **Development of New Requirements for Ventilation of Survival Crafts**

After recalling this output having been newly established at MSC 97, the Sub-Committee acknowledged the Committee's recognition that this issue was a "high priority" with a focus on totally enclosed lifeboats. LSA working group deliberations resulted in an agreement that it was necessary to acquire additional data related to active and passive ventilation systems and their effects on "micro-climates" experienced inside totally enclosed lifeboats prior to further progression of this item.

It was determined that this work needed to be advanced intersessionally, thus the Sub-Committee established a Correspondence Group to address the following and provide a report to SSE 5:

- Gather and review data on micro-climates
- Identify possible criteria on which ventilation requirements should be based (eg. humidity, temperature, O<sub>2</sub>, CO<sub>2</sub> level, etc.
- Recommend criteria to be used for draft amendments

## **Consequential work related to the New Polar Code**

The Sub-Committee endorsed the LSA Working Group's recommendations for establishing a work plan to address additional testing and performance standards related to life-saving appliance and arrangements on board ships in polar waters. Interested delegations and organizations were also invited to submit proposals regarding the development of guidance on extinguishing media at polar service temperatures and amendments to firefighters' outfit standards for use in polar environments.

A Correspondence Group was established to address the following at SSE 5:

- Methods for evaluating environmental conditions when considering use of life-saving equipment in polar waters
- Identify test and performance criteria for life-saving appliances and arrangements on board ships in polar waters
- Consideration for creating new, or modifying existing standards for application to life-saving appliances and equipment onboard ships in polar waters.

The target completion year for this work item was extended to 2019.