

# Future ship safety – a time for change?

The IMO Symposium on the Future of Ship Safety concluded with a statement urging a comprehensive review of the existing safety regulatory framework

The IMO Symposium on the Future of Ship Safety, held on 10 and 11 June, at IMO Headquarters in London marked something of a departure from “business as usual” at IMO.

Attended by some 500 delegates, it provided an opportunity for IMO and other sectors of the maritime community to take a step aside from day-to-day business and contemplate the future of ship safety in a holistic and rounded way.

The aim of the symposium was to look ahead to the decades to come, and to the ships of the future. Such vessels will be required to meet clear goals and functional requirements to fulfil the safety and, increasingly, the environmental expectations of society – which are growing ever more demanding.

The ships of the future must provide a sustainable response to the needs of society, industry and global trade and be operated within a framework that encourages a safety culture beyond mere compliance with statutory requirements. This will require all stakeholders not only to accept their

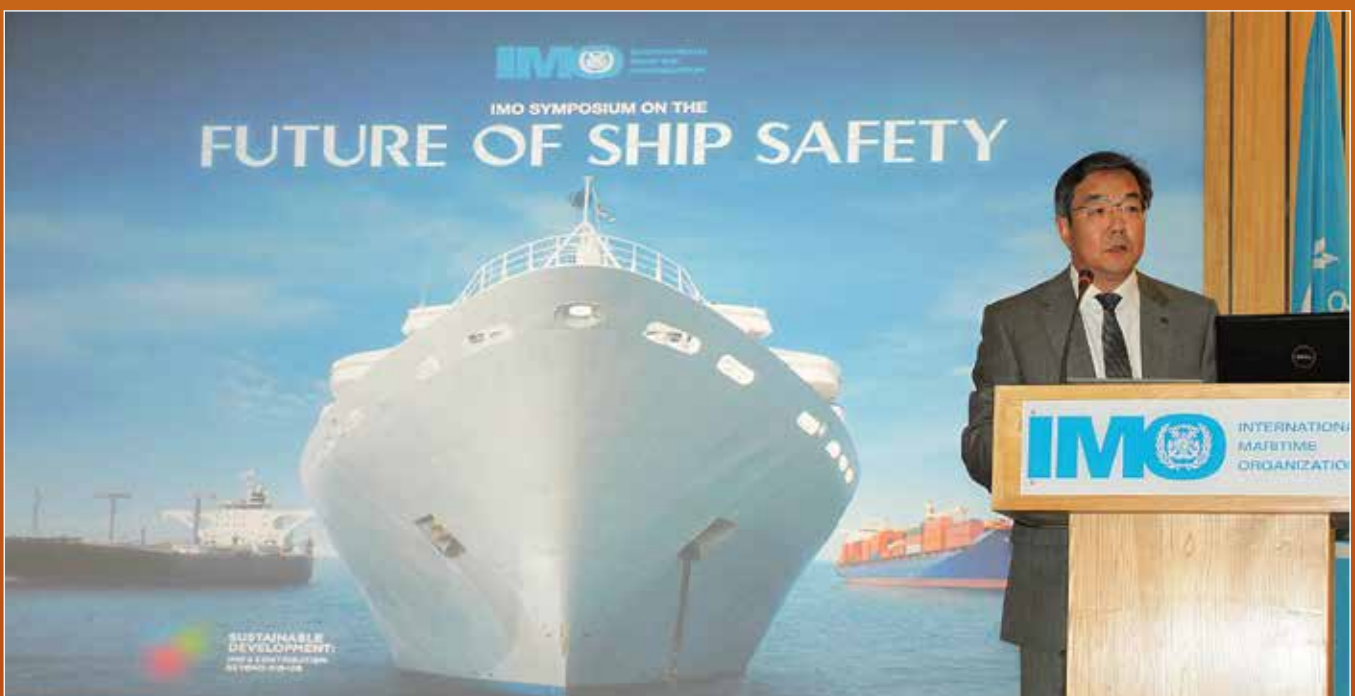
own responsibilities, but to work seamlessly with others to ensure that areas of shared or overlapping responsibility are always fully and effectively addressed.

There is a trend towards a more scientific approach, including risk-based methodologies, in the design and operation of the safe ship of today.

This trend is set to continue, but it requires structured data collection and analysis methodologies to give shipping a sound basis from which to continuously improve. The advances in technology unavoidably outpace prescriptive regulation. Ships are being built today to meet demands and challenges not thought of until very recently, and the innovation inherent in their design today will find its way into the mainstream design of tomorrow. As such there is a need to devise a regulatory framework that will encourage designs for safety through technological innovation and promotes operational excellence within clearly accepted high level parameters.

The symposium discussed all these issues from

IMO Secretary-General Koji Sekimizu opens the two-day symposium



the standpoints of designers, builders, operators, regulators, class and academia, providing the forum for a look over the horizon at the shape of things to come. It pictured the world of the future, and conceptualised shipping in that world.

In the context of environmental protection, a combination of regulatory pressure and society's changing expectations are providing a catalyst for innovation, imagination and blue-sky thinking in ship design.

The regulations that make EEDI mandatory are non-prescriptive: which means that, as long as the required energy-efficiency level is attained, ship designers and builders are free to use the most cost-efficient solution or solutions for each particular ship. Ship designers and engineers are already developing a set of design innovations that they can draw on to meet these new challenges. The symposium discussed how such innovative thinking can – and should – also be applied to ship safety.

On the first day, the symposium reviewed the current factors influencing ship safety, and questioned whether these factors were moving ship safety in the desirable direction, from the perspectives of the shipping industry, society and others – in view of current challenges, opportunities and driving forces. The second day addressed approaches to ship design, risk assessment and the human element with a focus on how these elements may best be regulated in the future.

The symposium included six international panels of high-level speakers from across the broad spectrum of ship design, construction, equipment, operation and regulation, who discussed a wide range of issues impacting the future of ship safety.

### Session 1

#### Future impacts on ship safety

This session examined recent trends in ship design and their likely impact on ship safety in the decades to come, and discussed how future risks should be assessed.

### Session 2

#### Meeting the needs of society and the maritime industry

This session looked at how shipping responds to the needs of society, industry and global trade and examined possible ways forward in the future.

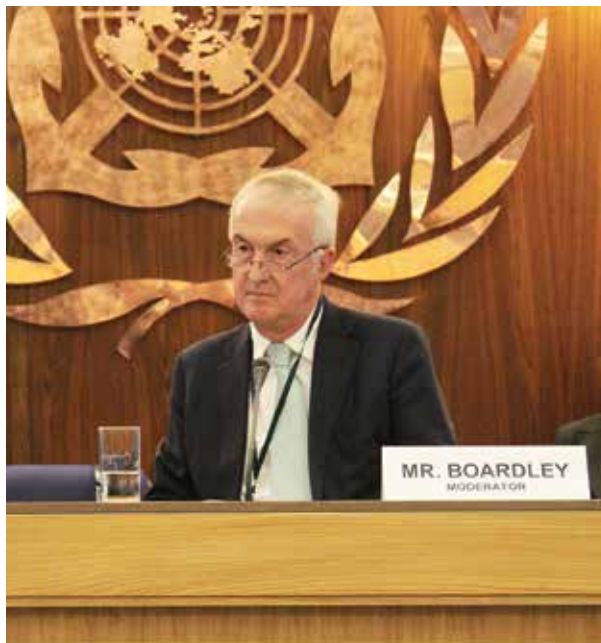
### Session 3

#### Driving forces on maritime safety

This session looked at the economic, environmental and consumer forces impacting maritime safety and how such forces will drive future ship design and operations.



Mr. Bernard Meyer, Managing Director, Meyer Werft, was moderator for session one on Future Impacts on Ship Safety



Mr. Tom Boardley, Marine Director, Lloyd's Register, was moderator for session two on Meeting the needs of Society and the Maritime Industry



Mr. Peter Hinchliffe OBE, Secretary-General, ICS moderated the third session – Driving Forces on Maritime Safety

**Session 4****Responding to regulatory challenges through risk assessment**

This session discussed the availability and need for data collection and analysis methodologies to provide the sound scientific basis for continuous improvement in the years to come.

**Session 5****Dealing with the human element**

This session sought to identify the best way to encourage a safety culture beyond mere compliance with statutory requirements based on both theoretical and practical examples.

**Session 6****The need for change**

This session looked at whether the current international safety regulatory framework will effectively respond to the future challenges discussed throughout the symposium and identified the actions needed to meet those challenges successfully.



Moderator for session five, dealing with the human element, was Mr. Gerardo A. Borromeo, President Intermanager



Dr Tom Allan, Maritime Consultant, was moderator for session six, The Need for Change

## IMO Future Ship Safety Symposium 10-11 June 2013

# Closing remarks by the Secretary-General

**Ladies and gentlemen,**

We have reached the conclusion of what I am sure you will agree has been a fascinating, stimulating and insightful symposium on future ship safety.

Yesterday we embarked on an ambitious programme, covering a number of wide ranging issues and, thanks to the wisdom and experience of all the participants, I believe we have done all that we set out to do and more.

I note with great satisfaction that you have considered wide ranging issues relating to a more goal-based, risk-based approach.

With regard to data collection: there is no doubt that more and better data, and the use of the latest methods to analyse them, are central to the development of future regulations based on risk.

Second, there is no doubt in my mind that a safety culture that goes beyond mere compliance is essential in the future. Ships will become more complex and, as they do, we must move away from safety being simply a series of box-ticking exercises. That approach is not good enough now, and the administrative burden must be reduced.

Third – and this is perhaps the most far reaching – you have considered whether the current safety regulatory framework is appropriate for responding to the future

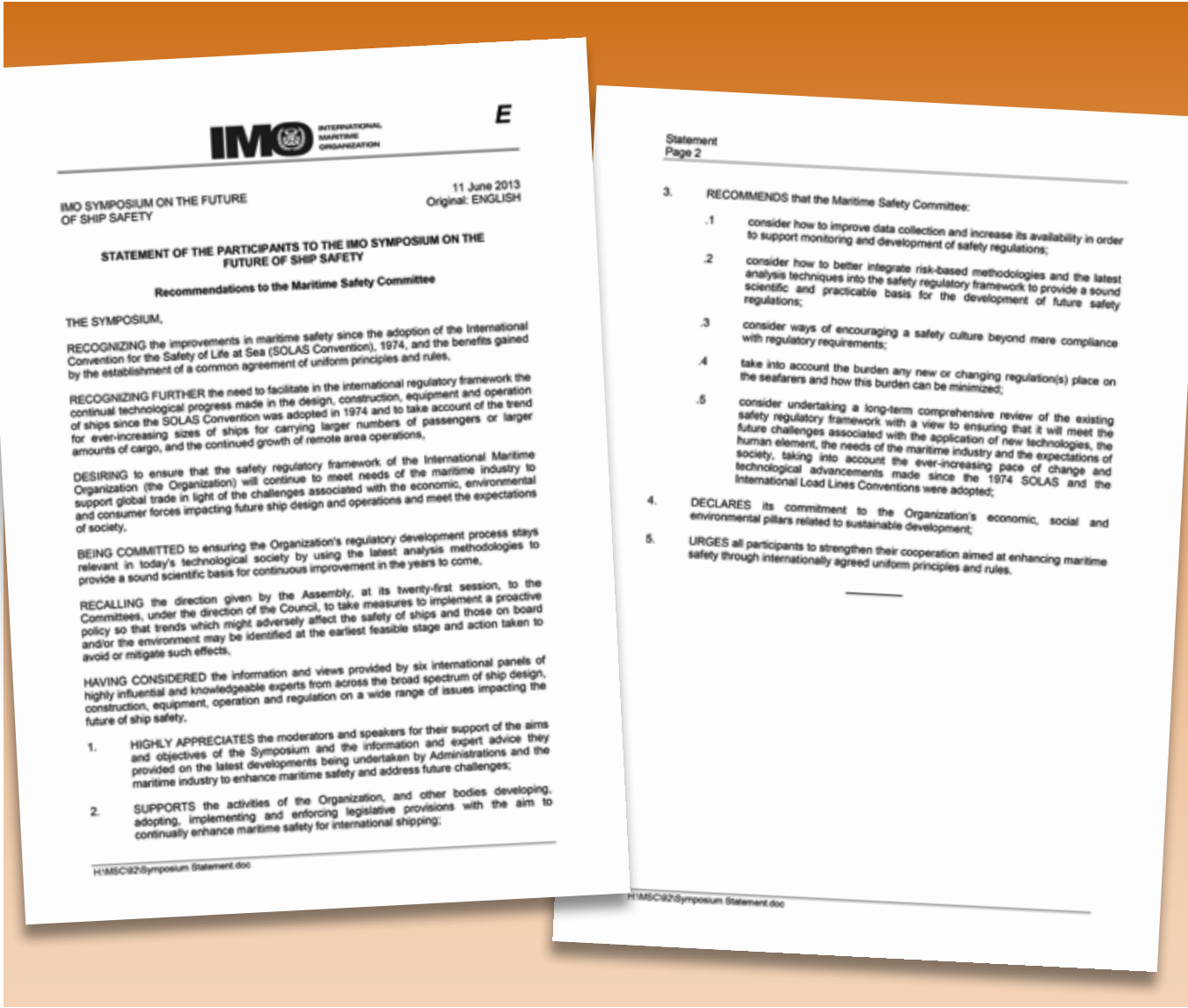
challenges and innovation and new technology associated with the ever-increasing sizes of ships and the need for compliance with environmental regulations; and, if we should change the safety system, how should we do that?

You talked about the human element, the need for self-regulation, and education and training. The serious challenge maritime training institutes are now facing is to keep up with new technology and this must be addressed. Currently, the shipping industry is facing serious financial difficulties but they need to comply with regulations for marine environment protection. I am sure IMO's Committees will take into account the cost of immediate compliance and ensure the smooth implementation of pending IMO conventions.

But the subject of the symposium has been something beyond overcoming the present challenges. The subject was safety of ships in the future; and discussion on the future must cover all issues relating to ensuring competent seafarers free of stress and fatigue; support for seafarers must be continuously addressed at IMO.

We have touched upon various important issues and I believe that those issues raised during the last two days will remain with us in the years to come when we discuss at the MSC exploring future safety regulations. The symposium was, to my mind, a great success.





**IMO** INTERNATIONAL MARITIME ORGANIZATION **E**  
 11 June 2013  
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 IMO SYMPOSIUM ON THE FUTURE OF SHIP SAFETY

**STATEMENT OF THE PARTICIPANTS TO THE IMO SYMPOSIUM ON THE FUTURE OF SHIP SAFETY**

**Recommendations to the Maritime Safety Committee**

**THE SYMPOSIUM.**

RECOGNIZING the improvements in maritime safety since the adoption of the International Convention for the Safety of Life at Sea (SOLAS Convention), 1974, and the benefits gained by the establishment of a common agreement of uniform principles and rules,

RECOGNIZING FURTHER the need to facilitate in the international regulatory framework the continual technological progress made in the design, construction, equipment and operation of ships since the SOLAS Convention was adopted in 1974 and to take account of the trend for ever-increasing sizes of ships for carrying larger numbers of passengers or larger amounts of cargo, and the continued growth of remote area operations,

DESIRING to ensure that the safety regulatory framework of the International Maritime Organization (the Organization) will continue to meet needs of the maritime industry to support global trade in light of the challenges associated with the economic, environmental and consumer forces impacting future ship design and operations and meet the expectations of society,

BEING COMMITTED to ensuring the Organization's regulatory development process stays relevant in today's technological society by using the latest analysis methodologies to provide a sound scientific basis for continuous improvement in the years to come,

RECALLING the direction given by the Assembly, at its twenty-first session, to the Committees, under the direction of the Council, to take measures to implement a proactive policy so that trends which might adversely affect the safety of ships and those on board and/or the environment may be identified at the earliest feasible stage and action taken to avoid or mitigate such effects,

HAVING CONSIDERED the information and views provided by six international panels of highly influential and knowledgeable experts from across the broad spectrum of ship design, construction, equipment, operation and regulation on a wide range of issues impacting the future of ship safety,

1. HIGHLY APPRECIATES the moderators and speakers for their support of the aims and objectives of the Symposium and the information and expert advice they provided on the latest developments being undertaken by Administrations and the maritime industry to enhance maritime safety and address future challenges;
2. SUPPORTS the activities of the Organization, and other bodies developing, adopting, implementing and enforcing legislative provisions with the aim to continually enhance maritime safety for international shipping;

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3. RECOMMENDS that the Maritime Safety Committee:
  - .1 consider how to improve data collection and increase its availability in order to support monitoring and development of safety regulations;
  - .2 consider how to better integrate risk-based methodologies and the latest analysis techniques into the safety regulatory framework to provide a sound scientific and practicable basis for the development of future safety regulations;
  - .3 consider ways of encouraging a safety culture beyond mere compliance with regulatory requirements;
  - .4 take into account the burden any new or changing regulation(s) place on the seafarers and how this burden can be minimized;
  - .5 consider undertaking a long-term comprehensive review of the existing safety regulatory framework with a view to ensuring that it will meet the future challenges associated with the application of new technologies, the human element, the needs of the maritime industry and the expectations of society, taking into account the ever-increasing pace of change and technological advancements made since the 1974 SOLAS and the International Load Lines Conventions were adopted;
4. DECLARES its commitment to the Organization's economic, social and environmental pillars related to sustainable development,
5. URGES all participants to strengthen their cooperation aimed at enhancing maritime safety through internationally agreed uniform principles and rules.

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Ms Birgit Liodden, Secretary-General, YoungShip International, addressed Future Challenges for the Maritime Industry

### Panel Discussion: SOLAS 74

This session discussed whether the time had come for a new SOLAS Convention.

Following two days of intense discussions on a wide range of issues impacting the future of ship safety, the participants in the symposium adopted a formal Statement, to be presented to IMO's Maritime Safety Committee (MSC). The statement recommends that the MSC should:

- consider how to improve data collection and increase its availability in order to support monitoring and development of safety regulations;
- consider how to better integrate risk-based methodologies and the latest analysis techniques into the safety regulatory framework to provide a sound scientific and practicable basis for the development of future safety regulations;
- consider ways of encouraging a safety culture beyond mere compliance with regulatory requirements;
- take into account the burden any new or changing regulation(s) place on the seafarers and consider how this burden can be minimized; and
- consider undertaking a long-term comprehensive review of the existing safety regulatory framework with a view to ensuring that it will meet the future challenges associated with the application of new technologies, the human element, the needs of the maritime industry and the expectations of society, taking into account the ever-increasing pace of change and technological advancements made since

the 1974 SOLAS and the International Load Lines Conventions were adopted.

Speaking at the close of the symposium, IMO Secretary-General Koji Sekimizu said that the symposium had been fascinating, stimulating and insightful and had considered wide-ranging issues.

The symposium statement and speeches can be found on the IMO Website: [www.imo.org/About/Events/FSS/Pages/default.aspx](http://www.imo.org/About/Events/FSS/Pages/default.aspx)



Dr Tor E. Svensen, President, DNV Maritime and Oil & Gas, was keynote speaker on day two



The symposium gathered a wide-ranging audience from all sectors of the maritime community