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CONSIDERATION OF THE REPORTS AND RECOMMENDATIONS OF THE MARITIME SAFETY COMMITTEE

The development of safety requirements at the needed pace and detail to support the achievement of a decarbonization goal

Submitted by IACS

SUMMARY

Executive summary:	This paper discusses an approach to address the multidimensional challenge posed by the pace of development of technology, decarbonization ambition and the necessary detailed requirements and regulations to deliver a safe zero-CO_2-emitting ship
Strategic direction, if applicable:	3
Output:	Not applicable
Action to be taken:	Paragraph 8
Related documents:	None

Introduction

1 IMO's Strategy on the reduction of GHG emissions from shipping has set ambitious targets. Since the adoption of that strategy, there are calls to go further and quicker. IACS remains fully supportive of IMO's pivotal role in this process and appreciates the hard work of all parties in advancing the Organization through such a complex endeavour.

2 IACS understands that the considerations within the original strategy and the proposals for an accelerated approach assume (however do not directly address) the existence and scalability of alternative fuels and technologies, which are needed across newbuilding activities sufficient to deliver a significant number of zero emitting ships "on the water" by 2030, just nine years from now. While the need for those solutions is recognized, the total scale of the effort has not been assessed, and the realization of the necessary accompanying scope of regulations will be challenging. The successful delivery of an ambitious and accelerated GHG reduction policy will therefore need to ensure that any agreement reached for mid- and long-term measures also recognizes the need for a practical and achievable implementation approach. Such an approach should account for the effort, time and investment in a holistic assessment of the suitability and deployment of the candidate

technical solutions and the associated safety risks to the ship, the people operating on board, and the surrounding infrastructure and personnel. The assessment of alternative technologies and fuels will require accepted safety regulations at a detailed level in order to support the design and fabrication of equipment for systems and ships and to enable the integration of those systems and equipment in a safe way. In addition to the technical requirements related to the "hardware" (power sources, equipment, systems, a ship, etc.), the approach would also need to address "management" aspects (ship and company management, human element, etc.) and offer safety management solutions related to the operation of systems, ships, as well as safety of people on board and ashore.

3 Therefore, IACS offers the following observations in support of a coherent approach for the delivery of requirements for detailed technical and management regulatory solutions, which would:

.1 maintain or improve the safety of shipping; while

.2 supporting the global policy on decarbonisation; and

.3 accommodate the development at speed and at the appropriate level of detail.

Developing at pace the technical and management regulatory solutions for safe shipping

4 As the timescale for decarbonization becomes increasingly compressed as time elapses and/or the level of ambition is raised, so too is there a commensurate urgency to establishing an effective assurance arrangement for the safety of decarbonization solutions.

5 Alongside traditional regulatory centres such as IMO and national governments, there are other institutions, (i.e. IMO's NGOs) with the capacity and proven capability to deliver, (i.e. develop and deploy) and the experience in addressing (i.e. designers, yards, operators) pragmatic and enforceable regulatory solutions for, as yet, conceptual ideas, in the necessary detail, and at a speed and scale sufficient to assist in the successful realization of societal goals. Once the IMO has set clear expectations (possibly utilizing the well-established regulatory framework of goals and functional requirements), those other institutions could be relied upon to develop and apply the next level of technical requirements, which could be either broader than or linked to the statutory goals. As the experience and knowledge is acquired through the initial regulatory development, proposals relevant to the scope of the IMO safety and/or environmental framework could be submitted to the Organization for consideration and adoption as statutory instruments.

6 Utilizing the experience and expertise that exists within some of the non-governmental organizations present at IMO may assist in accelerating the pace of development and implementation of technical regulatory solutions and so de-risk the target timeframe. A coherent and focused approach to identifying the most efficient route for the delivery of supporting activities necessary to achieve the set goal(s) could consider:

.1 the pace and sequence of interdependent actions needed to accelerate the delivery of zero carbon-emitting ships, and hence the reduced carbon output in line with the target timelines, (e.g. technology development, development of requirements, assessment of technology and their integration on ships, scalability of technology to match newbuilding capacity against the goal, performance of shipboard systems in operation, and finally the survey requirements of ships and their systems);

.2 the certainty and clarity of regulations applicable to technical solutions and the necessity for common standards to "assure confidence" of the proposed technology, approve the final product and expedite implementation at an affordable cost; and

.3 funding sources for the required research to support the investment in technical solutions and their practical implementation, noting the calls for the introduction of a research fund under the umbrella of IMO.

7 Delegating the detailed initial regulatory drafting work, which is associated with the development of technical and management regulatory solutions, to a level close to industry practitioners and their associated stakeholder groups, would also encourage:

.1 the formation of high-level assessment of candidate technologies based on input from industry partners and governments. This can be accomplished by facilitating industry and government ranking of the presented solutions, based on their views on practicability and impact, with the aim of developing relevant safety regulations;

.2 a deeper engagement with industry practitioners (who have a considerable understanding and knowledge of the likely practicability of various solutions) to develop minimum regulations for industry's preferred technologies (ideally a balanced portfolio addressing the decarbonization challenge as a whole) that also gives consideration to issues of availability and supply-chain safety; and

.3 work at the detailed level on the regulations aimed at assurance of safety and assurance of efficacy.

Action requested of the Assembly

8 The Assembly is requested to note the above general observations and to take action, as appropriate.