



Key Issues

Navigational Safety

The cause of the collision and devastating fire, in January 2018, that led to the tragic loss of the Panama flag (and Iranian owned) tanker 'Sanchi' and its 32 crew, in waters between China and Japan, is currently unknown. But this terrible incident serves as a stark reminder that there is always a risk associated with seafaring that can certainly be greatly mitigated but unfortunately not entirely eliminated.

A central function of ICS's Marine Department is to engage on behalf of the global industry in the detailed work of IMO's technical committees. These meet in almost continuous session throughout the year as IMO Member States seek to further improve maritime safety. This includes the important work of the IMO Sub-Committee on Navigation, Communications and Search and Rescue (NCSR).

IMO's work on navigational safety is currently focused on three thematic priorities: digitalization of information exchange, modernisation of communications and the standardisation of bridge equipment.

Much effort is being made by IMO Member States to develop new standards and guidance for the digitalization of information exchange between ships and between ship and shore, with the intention of ensuring that Masters and bridge teams have access to digital maritime services that will provide additional information which is reliable and easily assimilated into navigational decision making. This also includes work at the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) and at the International Hydrographic Organization (IHO).



However, the pathway to global implementation remains uncertain, and new risks are emerging. There is an apparent belief that it is always desirable for ships to have more and more data in order to navigate safely, requiring increasingly complex systems on board to manage this. It may be difficult for digital aficionados to accept, but international shipping already has well developed navigational data and information needs. There is always an appetite for additional information which contributes further to safety and efficiency. But there is little appetite among shipowners for data that is not absolutely necessary for the safe and efficient execution of a voyage. In particular ICS is concerned that bridge teams may be overwhelmed by information to the detriment of navigational safety.

Modernisation of the Global Maritime Distress and Safety System (GMDSS) has been ongoing at IMO for the past five years. The plan when first developed included a comprehensive package of amendments to the SOLAS Convention and associated IMO instruments. The objectives were ambitious and included support for the e-Navigation concept, and ensuring that any human element risks associated with a modernised GMDSS would be properly addressed. It is therefore surprising that the modernisation to date has been a much more limited exercise, mainly focusing on removing obsolete provisions, providing clarifications and allowing for additional mobile satellite service providers. No new carriage requirements are planned or expected, and the GMDSS is unlikely to change noticeably for the bridge teams that use them.

IMO work on the standardisation of bridge equipment has emerged from experience with the entry into force of the IMO carriage requirement for electronic chart display and information systems (ECDIS). During 2017, under the leadership of Australia and the Republic of Korea, draft guidelines for standardised display (S-Mode) were developed which were considered by the NCSR Sub-Committee in February 2018. With the support of manufacturers, these guidelines should enhance the standardisation of user interfaces and recognition of key functions, making ECDIS familiarisation in accordance with the STCW Convention and the ISM Code a more efficient process.

The support for the IMO guidelines offered by the manufacturers they affect is a welcome sign of positive intentions. However, ICS is still unconvinced that non-mandatory requirements for standardisation will be sufficient to respond to the needs of Masters and bridge teams.



Notwithstanding the human cost of major maritime incidents and the ongoing work to enhance navigational safety, the law of diminishing returns suggests that the effort required to achieve further marginal improvements will need to be significant. The question is whether the thematic priorities of current work will make a tangible contribution to enhancing maritime safety.

Ship routing and reporting measures are a continuous element of navigational safety work at IMO. ICS remains an active participant in the consideration of new and amended measures for ship's routing. Increasingly, however, this work now involves the challenge of balancing protection of the marine environment and wildlife, with optimum safety and freedom of navigation. ICS is committed to ensuring that all proposals for new measures are objectively assessed based on the evidence provided, and that they genuinely optimise solutions for protection of the marine environment and the safety of navigation.

Meanwhile, in June 2017, the IMO Maritime Safety Committee (MSC) agreed to a major regulatory scoping exercise to accommodate the expected development of Maritime Autonomous Surface Ships (MASS). This work will begin in

May 2018. While not an issue exclusively related to navigational safety, it is expected that navigation and collision avoidance will be activities where autonomous systems are applied first.

ICS does not currently agree with the ambitious timescales for adoption of MASS expressed by some IMO Member States. Instead ICS believes that autonomous systems on board ships will be adopted, but at a more conservative rate driven by the operational and commercial needs of shipowners. Consequently, ICS will attempt to guide the IMO discussion towards ensuring that the work comprehensively addresses the process of change that the adoption of autonomous systems represents, rather than simply providing for specific types of autonomous vessel.

Indeed, the consensus within ICS is that automated systems already present challenges with respect to the knowledge and skills required to manage and operate them safely and effectively. ICS will therefore seek to ensure that the regulatory framework for vessels making use of autonomous systems is sufficiently robust that it allows adoption of autonomy in the future without negative impacts on safety or pollution prevention.