Key Issues

Shipbuilding Issues

In November 2017, over 100 representatives of classification societies, shipbuilders and shipowners – including ICS – came together in Nantong, China, for their annual Tripartite forum on shipbuilding and design issues of common interest. The 2017 meeting was hosted by the China Classification Society. CO₂ reduction, safety and cyber-security were at the top of the agenda.

At the end of two days of debate it was agreed that the industry collectively needs to design future ships differently, and be more technologically innovative to achieve CO₂ reduction goals and to counter the growing problem with cyber-security risks. The organisations present also reconfirmed their ongoing collaboration towards industry self-regulation as an important complement to the mandatory regulations developed by IMO.

The Tripartite forum agreed that the shipping industry urgently needs new ship designs, equipment, propulsion systems and alternative fuels to achieve the CO₂ reduction goals established by the Paris Agreement on climate change, and the specific objectives now established for international shipping by IMO as part of its GHG reduction strategy. It was agreed that the shipping industry needs to use all available technology to a much greater extent, and increase technological innovation to reduce CO₂ emissions to the ambitious level required by the international community.

However, the meeting confirmed that the safety of life at sea must always remain paramount, and considered concerns that new regulations governing ship design, aimed at further reducing CO₂ emissions, could potentially have adverse effects on the safe operation of ships. One example would be any legal requirements that led to a further reduction of engine power. The concern is that ships could get into difficulties during bad weather if engines are insufficiently powered, putting both the crew and the environment at serious risk.

The Tripartite forum reviewed how recent cyber-attacks in shipping have increased awareness of potential threats facing the industry. When it comes to ship design and construction, it was generally agreed that the industry needs to adopt new methods and standards to create more resilient digital systems on board. A more layered approach to a ship’s digital system and greater segregation can increase safety, so that a single attack cannot readily spread to IT and other systems, both on board the ship and ashore.

It was therefore agreed that in advance of its next meeting in Korea, in autumn 2018, the industry partners represented at the Tripartite forum will work together to develop new design standards, which will help raise the resilience of ships’ digital systems and make them more resistant to possible cyber-attacks.