

## **CML Seminar Series: IMO Mass Code and The Functional Approach To 'Hu-Manning' On the Basis of Goal-Based Standards**

15 August 2024  
The Executive Centre



The CML Seminar Series on 'IMO MASS Code and the Functional Approach to 'Hu-manning' on the Basis of Goal-Based Standards' was held on 15 August 2024 (Thursday) from 4.30 pm to 6.00 pm. The speaker was Dr Alexandros Ntovas, an Associate Professor (Reader) of Maritime Law and a former Director of the Institute of Maritime Law at the Southampton Law School. Dr Ntovas is a Visiting Associate Professor at the NUS.

The session started with a short introduction to the path leading to the present automation in the shipping industry and future projections for autonomous ships. Dr Ntovas analysed the different levels of automation and showcased the most recent successful trials of autonomous vessels in Japan. He described funding of US\$ 152 billion for remotely controlled vessels by 2031, 45 per cent of which will be financed in the Asia and Pacific markets. Singapore's position as one of the leading maritime ports was discussed, particularly its pioneering role in testing rules for MASS vessels and its potential to influence the dynamics due to its strategic position. However, the speaker noted that crewless vessels could follow economically beneficial routes, skipping replenishment stops and resulting in higher revenue. Further, he presented research published in 2019 showing little confidence from people in the shipping industry in Australia, Hong Kong, China, the USA and Singapore, caused by the lack of a regulatory framework to regulate this technology strictly and acceptably.

Dr Ntovas reflected on the importance of safety and the absence of agreed definitions within the IMO. His functionalist theory for replacing humans by AI led to vivid discussion. The regulatory initiatives by the IMO since 2017 were then showcased. Dr Ntovas described the goal-based standard chosen by the IMO and explained the basic parameters of the MASS Code. One of the principles accepted by the IMO was the need for a human master to be in a supervisory, interventional and controlling role without being aboard. Dr Ntovas indicated that the IMO is currently looking at the first three degrees of the MASS Code with the presence or control of the humans of the ship operations. Fully autonomous vessels most likely will be regulated by national legislation. The speaker suggested that the MASS Code might restrict UNCLOS but will retain its constitutional primacy in relation to other IMO Conventions.

Lastly, Dr Ntovas briefly introduced the human element in the definition of 'ship' in legislation and recent case law in England and Wales, South Africa and Singapore. The session closed, depicting a straw master as a possible evolution of the frontman for liabilities from the use of autonomous vessels. Dr Ntovas expressed his belief that the legislation will avoid this allegorical picture.

