Presentation by Singhai Group MD on "The Impact of Green Shipping and Smart Shipping on the Career Development of Seafarers in the Future" during the "Career Development Seminar for Chinese Seafarers" held in conjunction with the International Day of the Seafarers on 25 Jun 2022





To celebrate the 12<sup>th</sup> anniversary of International Day of Seafarers, a "Career Development Seminar for Chinese Seafarers" was co-hosted by Xinde Marine News and Dalian Guohe Maritime on 25 Jun 2022 at Dalian Nanhai Center Building. The seminar was well-attended by more than 3000 online participants, garnering more than 10,000 Likes.

Singhai Group MD, Mr. Terence Zhao Wei was invited as a guest speaker to address one of the pressing issues; how will green shipping and smart shipping impact the career development of seafarers in the future?

Mr. Terence Zhao Wei believes that green and smart shipping will increasingly become realities in the shipping industry's future. He highlighted that the "United Nations 2030 Agenda for Sustainable Development" had been adopted by 193 Member States. This agenda provides for 17 Sustainable Development Goals including clean energy, conserve and sustainable use the oceans, seas and marine resources. Mr. Terence Zhao Wei stated that following the UN's 2030 Agenda, the IMO is working towards ensuring safe, secure and efficient shipping on clean seas. The IMO also addressed the issue of climate change through regulating of air pollution and greenhouse gas emissions from ships. He mentioned that the goal of eliminating CO2 emissions by ships to zero by 2050 is crucial in the fight against climate change, and that ships need to move away from traditional fossil fuels to new zero-emission energy sources such as hydrogen, ammonia, methanol and even wind. Since green and smart shipping will increasingly become realities in the shipping

industry's future, industry stakeholders need to work together to future–proof seafarers by developing the capabilities that green and smart shipping require of them.

To cope with the evolution towards green shipping, Mr. Terence Zhao Wei informed the participants that the Maritime Just Transition Task Force was formed by the International Chamber of Shipping (ICS) and International Transport Workers' Federation (ITF), in partnership with the International Maritime Organization (IMO) and International Labour Organization (ILO). The Maritime Just Transition Task Force was formed to support millions of seafarers as the shipping industry's green transition takes place by focusing on the development of new green skills, green and decent work, identifying best practice across the value chain and providing policy recommendations for an equitable transition. To support the effort and programme of the Maritime Just Transition Task Force, he advised seafarers to adopt the following measures in anticipation

- a. enhance their environmental awareness
- b. uphold the green concept
- c. be familiar and comply with the carbon emission reduction requirements required by the MARPOL amendments and IMO technical and operational measures to reduce carbon intensity of international shipping
- d. attend relevant training to drive green ships including training on the maneuverability of ships using various green fuels.

Mr. Terence Zhao Wei then touched on smart shipping and reiterated that smart shipping is not a future concept but an impending reality. He highlighted that many players in the maritime industry are vouching for the concept and agitating for the adoption of autonomous ships, motivated by its foreseeable advantages including minimizing ships' turn-around and cargo handling time at ports, increased safety at sea, better fuel economy and, pertinently, lower manpower requirement. Widespread introduction of autonomous ship may invariably result in reduced job opportunities for seafarers.

Mr. Terence Zhao Wei Zhao highlighting that there are currently more than 1,000 autonomous ships (MASS) in the world, belonging to 53 institutions. Looking ahead, the optimistic forecast is for 1,000 fully autonomous and 2,000 semi-autonomous ships by 2025. If this scenario pans out, it could possibly reduce global crew requirements headcount by 30,000 to 50,000. On the other hand, Mr. Terence Zhao Wei pointed out that with autonomous ships, more highly-skilled remote control operators, new pilots and new riding gangs are required to ensure the normal operation of such ships.

Analyzing this equation, Mr. Terence Zhao Wei is of the opinion that the number of crew on board will decrease with the introduction of autonomous ships. However, the number of fully autonomous ships world-wide will be very small in the next 10 to 20 years. He further highlighted that in the next few years, autonomous and semi-autonomous ships will mostly be small remote-controlled vessels sailing in strictly controlled waters. At the same time, the total number of ships in the world will continue to increase. As such, Mr. Terence Zhao Wei believes that the current officers required on board will remain stable at least and the number of seafarers undertaking support functions ashore will possibly increase significantly.

Mr. Terence Zhao Wei reiterated that smart shipping is not designed to take away seafarers' jobs. Rather, it reflects development in the shipping industry and requires changes to seafarers' job scope and seafarers to adapt to a combination of traditional and new roles. He then projected the scenarios on how the smart shipping will impact seafarers in the next 5 to 10 years and beyond 10 years. Mr. Terence Zhao Wei highlighted that the maritime industry need to, as a whole, transform future maritime education and training by revising current STCW and SOLAS regulations, IMO Model courses and Administration approved courses so that seafarers are equipped with different and more technically advanced knowledge and expertise to handle the increasing digitalized and automated shipping industry, both on board and ashore

Mr. Terence Zhao Wei concluded by re-emphasizing that green shipping and smart shipping will become reality and is the future of the shipping industry. Green shipping and smart shipping will certainly impact future seafarers and their careers. Luckily, the advent of its impact is still gradual. Nevertheless, industry stakeholders need to work together to future –proof seafarers' job opportunities by ensuring that seafarers have the competencies required for future shipping development now.

Finally, Mr. Terence Zhao Wei wished all seafarers a happy seafarer's day. He hoped that more organizations will pay attention to the life and happiness of seafarers and work together for the future of Chinese seafarers.