

**OPENING REMARKS BY DR LAM PIN MIN, SENIOR MINISTER OF STATE FOR
TRANSPORT AND HEALTH, AT THE OPENING CEREMONY OF THE
INTERNATIONAL SAFETY@SEA CONFERENCE 2018 ON 20 JUNE 2018, 9.00AM,
AT THE MARINA MANDARIN HOTEL, SINGAPORE**

Introduction

Distinguished Guests,
Ladies and Gentlemen,

1 Good morning, I am happy to join you at the third International Safety@Sea Conference. To our overseas guests, a warm welcome to Singapore.

Singapore Is Committed To Maritime Safety

2 Shipping is the backbone of our global economy. 90% of world trade today is carried by some 50,000 merchant ships, and manned by more than one million seafarers. Safety at sea not only prevents economic losses, but more importantly, protects people and the environment from harm. Working collectively as a global shipping community, we have seen the number of ship losses at sea falling steadily over the past decade.¹

3 Safety at sea too has always been a critical area of focus for Singapore as a key hub port and the littoral state to a busy international waterway. There were more than 830,000 vessel movements in our waters last year. Despite the heavy traffic, the number of major incidents has dropped over the last ten years, from about 1 incident per 100,000 vessel movements in 2008 to less than 0.3 last year.

4 Such an improvement is only possible when each and everyone of us takes personal responsibility to put safety first. But we cannot be complacent. We must continue to work at this. Let me share with you three MPA initiatives to enhance navigational safety in our ever busy waters.

¹An overall 50% decline in number of shipping losses between 2007 and 2016.

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Number of shipping losses	171	151	130	127	97	124	112	88	101	85

Source: *Safety and Shipping Review 2017*. Allianz Global Corporate & Speciality.

Enhancing Safety at Sea in Singapore

5 First, MPA will step up outreach to the seafaring community, and the ferry and cruise passengers, to emphasise the importance of individual actions in ensuring safety at sea for all. For example, MPA has put up posters at our ferry and cruise terminals to remind travellers of the safety precautions they should take. MPA is also developing a Safety@Sea website, which will contain information pertaining to safety at sea.

6 To extend our outreach, pilots from PSA Marine will join the MPA Port Inspectors to serve as our safety at sea ambassadors. They will share important points on safety with seafarers as they go about their duties on board vessels that call at our port.

7 We hope these efforts will go towards fostering good habits and a culture of shared responsibility when it comes to safety.

8 Second, MPA will continue to invest heavily in state-of-the-art vessel management systems. This includes regular enhancements to the Vessel Traffic Information System (VTIS) so that our Vessel Traffic Service (VTS) officers are always equipped with the best tools to perform their job. For instance, MPA is currently making improvements to the resolution of VTIS radar video plots. This allows our officers to track and monitor vessels more accurately, enhancing their situational awareness for safer navigation in our busy waters.

9 MPA is also working with IBM to apply automated detection and sense-making analytics to maritime safety. By creating virtual geo-fences of shallow sea areas in the port, vessels near these areas and at risk of grounding will automatically be flagged to VTS officers, who can then quickly contact the vessel to guide it to safety.

10 Third, MPA is investing in advanced ship-to-shore communication capabilities to support digital data exchange. To this end, MPA will invest \$500,000 to develop a VHF Data Exchange System (VDES) over the next three years. The VDES is capable of real-time, high-bandwidth ship-to-shore communications. It will enable MPA to collect a wider range of navigational information from vessels calling at Singapore. By combining this data with predictive analytics, MPA can predict traffic hotspots and areas with higher collision risk. These are information that will be useful for vessels in port or coming into port. The VDES will be piloted later this year at the MPA Living Lab, as part of the Next-Generation Vessel Traffic Management System project.

Setting Standards for Research and Innovation on Safety at Sea

11 Over the years, we have gained considerable experience from our efforts to enhance safety at sea in Singapore. To pay it forward, our vision is for Singapore to facilitate the research into maritime safety solutions and innovations, and to be a standard bearer pushing frontiers to enhance safety at sea.

12 On this note, I am pleased to announce that the Singapore Maritime Institute and Singapore Polytechnic will launch the Centre of Excellence in Maritime Safety this morning. \$10 million has been allocated under the Singapore Maritime Institute Fund for the Centre to contribute to training our seafarers on the use of new technologies that are being developed. The training programmes, which will use augmented reality and virtual reality, will focus on new modelling and simulation tools that enhance navigational safety, in tandem with the development of Maritime Autonomous Surface Ships (MASS).

13 MPA is also looking beyond the maritime industry for technologies that can help us improve and reinvent safety solutions. For instance, 3M is working with MPA, PSA and Jurong Port to study the applications of material science to address safety-related environmental challenges in our port and waters.

14 Lastly, we must have a sound regulatory framework to support all these efforts. In this regard, MPA proactively studies the safety, security and environmental aspects of new technologies to develop a business-friendly regulatory environment. For instance, MPA will establish a steering committee in the coming months to develop policies and regulations to prepare for the introduction of MASS in Singapore. The Committee will include industry stakeholders, technology developers, research institutes and relevant government agencies.

Conclusion

15 To conclude, safety at sea is a shared responsibility. A life lost is one too many. Let us build on our track record, and continue to live a safety culture as a way of life.

16 I wish you a fruitful discussion ahead. Thank you.