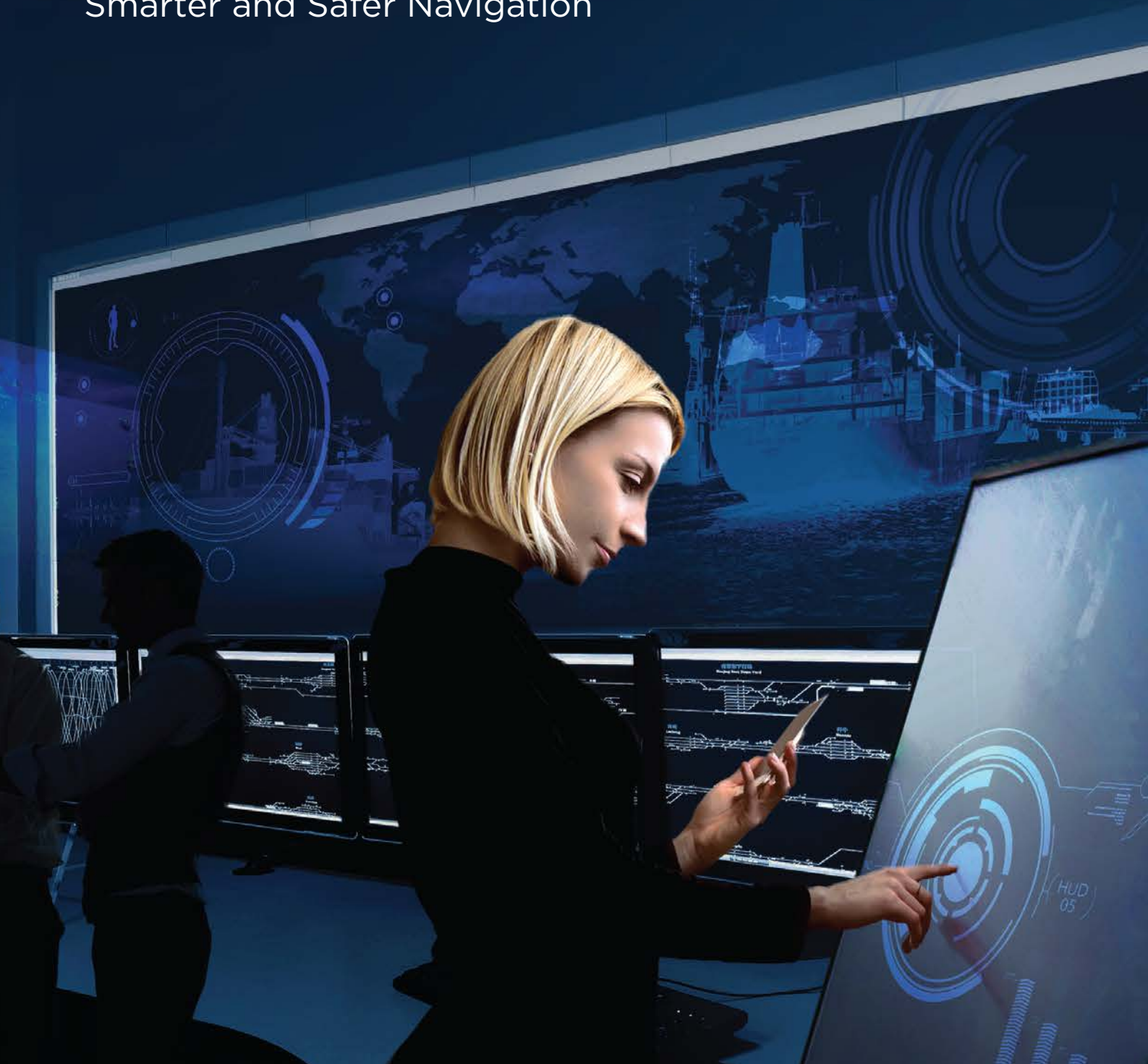


VESSEL TRAFFIC MANAGEMENT SYSTEM

Unlock Revenue Growth with Smarter and Safer Navigation



ACHIEVE GREATER MARITIME MANAGEMENT

Our unique solutioning approach for Vessel Traffic Management System (VTMS) unifies actionable intelligence, smart detection and intuitive visualisation for maritime operators to tighten both onshore and offshore management.

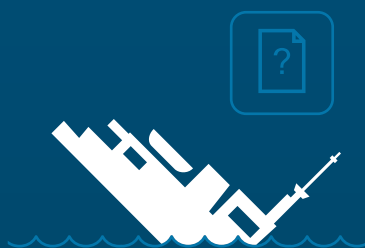
VTMS is the solution towards seamless and effective maritime management, utilising technology advancements to reduce the reliance on manual intervention.

THE HIGH COSTS OF HUMAN ERROR

80%-90% of marine accidents in harbours are caused by human error¹

54.2% of casualty events are caused by contact, collision and grounding³

78% of accidents happen in internal waters and territorial seas³



41 cases of total maritime losses, involving human casualties and assets, were reported worldwide in 2019²



75-96% of marine liability insurance claims are a result of human error²



Emerging potential risk factors could stem from uncertainty of public health and economic implications on top of climate change, piracy and political risks²

¹The Japan Ship Owners' Mutual Protection & Indemnity Association

²Shipping & Safety Review 2020, Allianz Global Corporate & Specialty

³Period 2018, Annual Overview of Marine Casualties and Incidents 2019 (EMSA)

REDUCE HUMAN ERROR WITH E-NAVIGATION READY TECHNOLOGY

Our VTMS reduce human error – and costs – through intelligent monitoring and pro-active alerts before the crisis strikes.

We enhance business performance and productivity for shipborne and offshore partners with:



Smarter decisions through Artificial Intelligence (AI)



Safer navigation through digital geo-fencing and environmental change detection



Better situational awareness and vessel traffic visibility through intuitive visualisation

RESEARCH EXCELLENCE

In collaboration with Maritime & Port Authority of Singapore, the driving force behind one of the world's busiest ports, we bring together real-world insights and next-generation technology to future-proof your investment.

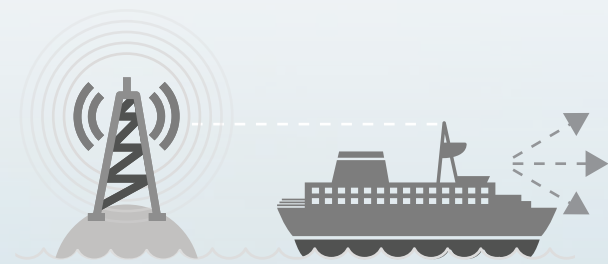
Accelerate your transformation into a digital hub port today.

ENHANCING ONSHORE MARITIME MANAGEMENT WITH DIGITALISATION

Our VTMS is a next-generation software that **powers the command centre onshore**, connecting multiple sensors port-wide and serving as the eyes and ears of port operations at every level.

PORT AUTHORITY

Port operators deal with an overwhelming amount of data and must be armed with the right tools to manage vessel traffic flow and deflect potential crisis.



This is how we help:

Machine learning analyses port-wide traffic trends for efficient vessel traffic management and predict abnormal vessel behaviour. Contextualised relevant operating picture collates disparate sensor data and distributes information to the right users for greater situational awareness.

COASTAL DEFENCE

Border security is the front line of coastal defence. Sophisticated surveillance for vast expanses of water is critical to detect and deter suspicious maritime activities.



This is how we help:

Proactive coastal defence planning and smart vessel surveillance improves overall situation awareness and aids swift law enforcement.

BALANCING MOBILITY WITH AGILITY FOR OFFSHORE OPERATORS

Our VTMS has a mobile version that connects the command centre to shipborne, and is **easily installed shipboard** and on ground vehicles.

VESSEL/SHIP OPERATORS

Maritime incidents including bad weather, piracy and vessel malfunction risk loss of assets, crew and passengers

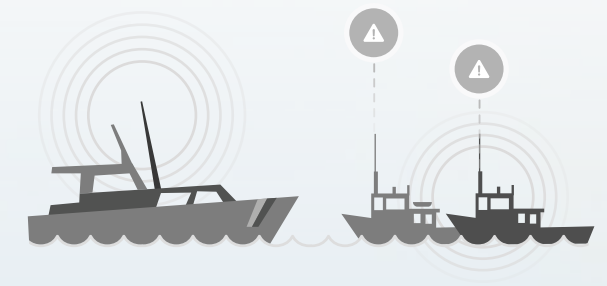


This is how we help:

Streamlined ship-to-shore communication ensures responsiveness to safety and security alerts and improves turnaround time in ports.

COAST GUARD

Lack of timely information and miscommunication can lead to inefficient on-scene intervention of suspicious maritime activities, or search-and-rescue operations.



This is how we help:

Seamless communication and enhanced data visualisation ensures a swift and effective response to maritime threats and emergencies



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