

Half a minute with **Thomas Tan**

Vice President, Business Development at **ABS Singapore**

Q. Talk to me about the Singapore cluster - its strengths and its weaknesses. How is it changing in light of shipping's changing fortunes and competition from other clusters and how does Singapore best serve the needs of ABS. Where are the growth areas in the region and in what sectors?

A. Singapore provides a uniquely supportive environment for shipping and offshore operators – despite the presence of competitors in the region. We are lucky that the commitment to these sectors goes from top to bottom and across the sectors.

Singapore also has a physical gateway presence, given its geographic location which is very hard to replicate elsewhere and means that skills and resources are attracted and retained.

Singapore has also continued to make substantial investments – in infrastructure and more recently in sustainability of the port and for local businesses. This ranges from a commitment to quality in bunker operations, the provision of alternative fuels and a desire to increase quality in the marine and business environments.

Finally, Singapore has a focus on new technology that is unrivalled. It is a hub for innovation with financial support from the Government agencies for testbeds, pilots and new projects that can be turned into commercial opportunities.

Q. Shipbuilding levels are down and focus is being directed to the environment, technology

and smart shipping. How is ABS tackling these key issues - with particular attention to the use of drones, digital twins?

A. Within the ABS class business, our focus is on these three areas, the need for sustainability with digital as the enabler, underpinned by foundational safety.

There are a number of opportunities to make the survey process more efficient for clients. These include the increasing take-up of remote & condition-based surveys which are moving towards a faster and simpler process. E-class certificates are already available and more digital documents will help to remove duplication and manual processes.

ABS continues to move ahead with use of drones for survey and has managed to achieve very similar level of functionality in a way that saves time and resources for owners. At present drones are being used for general topside inspection of the offshore structures and internal inspection of tanks on tankers. We see great potential in using drones for structural inspection, data collection and analysis.

ABS is on a long-term digital journey that will include a Structural Digital Twin for our clients' vessels. ABS provides a suite of solutions executed through ABS Nautical Systems, including Enterprise Asset Management that will provide visibility across an owners' fleet from any location.

Q. Tell me about your efforts towards cyber security - you have recently signed an agreement with Fleet Management.



A. ABS has a unique offering in cyber security; a topic that sometimes includes some confusing and contradictory advice. We think cyber should be simple and to make that happen we leverage a methodology known as Functions, Connections and Identities (FCI) to generate risk level ship by ship, across the fleet.

These elements cover critical functions on the ship or facility, the connections between assets and facilities and the people and devices that have access to the network.

ABS is also working across the supply chain – we don't stop at the gangway – but are extending our evaluations to equipment vendors and ports and terminals, as well as across the ship owners' business. Many of the greatest risks that accrue from cyber result from the lack of a supply chain approach. Our assessments can provide an actionable roadmap that enables clients to move forward on cyber in a manageable, deliverable way.

ABS Advanced Solutions and Fleet Management Limited signed an agreement to implement the ABS industry-leading cyber security solution for Fleet Management's 220-vessel liquid cargo fleet.