



FRANK COLES

CHIEF EXECUTIVE OFFICER TRANSAS, LONDON, UK



In September 2015, Frank Coles joined the maritime technology company Transas as its new CEO. Frank Coles started his career almost 40 years ago when he first went to sea as a merchant navy deck officer. After 12 years of sailing throughout the world, he left the sea and gained an LLM in Legal Aspects of Maritime Affairs and practiced maritime law for 5 years. In more recent years, his roles at Globe Wireless and Inmarsat have seen him at the forefront of the technology revolution in maritime bringing the industry's connectivity capability to where it is today.

HOW DO YOU SEE THE FUTURE OF THE MARITIME INDUSTRY?

With low rates and every increasing regulations and requirements, the challenge is how to run a safe efficient operation that is profitable. Imagine a world where the paperwork is done ashore, where the master and chief discuss in a team environment with the shore the operational decisions based on shared data. Where those ashore are rotated from the ship and so there is mutual respect? Where the decisions are taken based on analysis of the data from the ship, its operational requirements and the environment, and with decision tools that can make recommendations. Software and automation can remove much of the mundane and increase efficient and safe operations.

HOW ARE YOU PART OF THE 'SMART' REVOLUTION, AND AS YOU ARE NEW IN THE ROLE, WHAT ARE YOU LOOKING TO MAINTAIN IN THE TRANSAS STRATEGY

AND WHAT ARE YOU LOOKING TO DEVELOP?

Our key aim at Transas is to create an ecosystem of harmonised integrated solutions in safety, navigation, training and ship operation that will enhance ship and shore integration. In January 2015, we introduced THESIS – the Transas Harmonised Eco System of Integrated Solutions. Ship, ship operations offices, training facilities around the world, and a properly created ship traffic control environment can all be connected to the ecosystem, effectively a community that is able to talk to one another. This is THESIS.

Transas wants to create a platform that provides a community for several key stakeholders to enable a change in attitude to ship operations and navigation, and thereby improve safety and safe operations.

The vision is for all sectors to share data and enable one another to make better decisions, better operations and better training. Ship operations would be a coordinated evolution, with ship and shore based operations centres working together on shared information platforms. The ship and office would also work in a community where the ship traffic control would enable better coordination of traffic movements with decision based tools to enable direction of traffic.

The fourth element would be training, or what we call the academy. Simulators and content would be connected, connected to each other for sharing data and enabling decisions to be tested, but also connected to enable schools to share content and ship models so that the community can

learn. All of this training capability can also be shared with the ship. Scenarios can be run on the simulators using ship traffic control, ships and operations centres. We do not intend to force a standard but to enable the community to decide its level of involvement and connectivity.

HOW IMPORTANT IS TRAINING TO TRANSAS?

In order to have a successful transition to the new reality, we should consider how to train a new team. A Fleet Resource Team empowers the master but also provides training on working together as a team. The law should not control the management of the ship, but fit with everyday practice in operations. Day to day fleet resource training should replace some of the bridge resource training. The Fleet Management ecosystem will reduce the administrative load on the ship.

This is the start, bringing practical skills and applications, but now it needs to embrace ship/shore, it is also no good to have these skills if you do not feel the office will support you challenging the master/pilot or them; without an attitude change nothing will change.

The Fleet Resource Team is the connection between the operator on-board a ship and the one ashore in a connected environment. It is a relationship in which they respect one another, share decision tools and work a team approach to discuss critical issues and make operational decisions.

Bridge Resource Training is one key element of the navigation of a ship, without reference to the office. Yet the



office plays a part in influencing the operational decisions. There is going to be more and more connection and discussion on this point, so we should explore the way in which it would work. Technology removes menial admin into the office and navigation and engine operations become a team approach across the fleet. Hence, fleet resource teamwork.

I see a day when schools work together and with our community. Our data fine tunes our models and live data validates and upgrades the scenarios and models. Whether two simulator companies would cooperate is another story, but I see ship traffic working with ship operations and simulation to develop more realistic models, better training, and to analyse and support a true to life 3D picture of the operations decisions taking all aspects into consideration.

HOW DO YOU SEE TRANSAS WORKING ALONGSIDE PORTS AND TERMINALS?

If you take similar type of co-operation to the vessel traffic side you can have one VTMS cooperating with another and with the wider population that may include the

military, port and terminal management, and other parties sharing data and connecting coastal surveillance to form a continuous chain. That is a demand we are seeing in some areas and one of the other demands we are seeing is that Transas is being asked to supply operators for VTMS and to run the vessel traffic and coastal monitoring. The requests so far only go to cover monitoring and not to managing traffic. Right now no one is actually telling the ship where to go but it is the next step and its coming, it is inevitable.

The other difference is, and this is where it really takes off, that by having all these different ship models and all these schools feeding in their scenarios our simulators and algorithms are getting smarter; feeding and learning all the time. We combine it with live data we get from the ships and these things start to learn, what is the optimal alteration based on the kind of ship, in the weather, in the traffic.

You then take those algorithms and when the traffic systems do begin to manage rather than monitor, the feedback from the computer is smart enough to allow them to do so safely. If there is a

downside to this ability, it could be that governments and regional bodies begin to micromanage ports and facilities for the wrong reasons. I believe it would be unwise for the interference to begin affecting the economics of shipping.

HOW ARE YOU UTILISING DATA AS A COMPANY?

Transas does not offer equipment. The hardware is merely a box around the software solutions that Transas provides. Transas intends to enhance and increase the power of the tools to provide the analytics and decision tools using the data provided from the software solutions it produces. We have found that a lot of customers do not understand or appreciate the full capability of the solutions, and thus we want to be able to provide not only the software products but complete solutions including decision support tools. The Fleet Management ecosystem will reduce the administrative load on the ship. Almost all port entry forms, any daily reporting could be automatically prepared, without human entry. Only notes need to be added. A paperless ship is not impossible.