

Extinct

This is the year before mandatory carriage of ECDIS will come into force. From 2012 onwards, vessels sailing under SOLAS regulations will be obliged to carry ECDIS on board. In phases, the entire international merchant fleet of almost 50,000 vessels will need to be outfitted with ECDIS systems and therefore go 'paperless'. The transition to paperless navigation is one that has already been prepared for years. Hydrographic Offices all over the world, together with commercial chart producers have been working on it for 10 years and recommendations were changed into regulations a few years ago. It seems there's no way back. The paper chart is something for collectors, museums and atlases on the coffee table, and any other use you can think of, but no longer for navigating.

This Hydro International features an interview with Mike Robinson, CEO of the United Kingdom Hydrographic Office. The UKHO is in the midst of the transition to digital. But Robinson argues that paper charts won't become extinct, because even vessels with adequate back up and independent power supply will have to carry a set of 'get-me-home-charts'. Other vessels with no back-up facility are obliged to carry the whole set as duplicate in paper and of the international fleet, 20,000 are still being given the choice and they will, considering the costs, keep sailing on paper charts.

Bhupesh Gandhi of MARIS A.S. in Norway states in this same issue of Hydro International that the costs of paperless navigation are lower than sticking to paper. Gandhi thinks that even if you have the choice to postpone the transition to digital to the latest possible date, you shouldn't. Direct and indirect costs could be lowered by as much as 20%. Together with safety considerations (70% of all marine insurance claims are related to navigational incidents), ECDIS has a risk reducing effect on groundings and collisions of about 36%, based on a Formal Safety Assessment (FSA) by Det Norske Veritas on behalf of IMO. Gandhi brings up the example of the airline industry which has the highest safety record statistically of all types of transportation. "In shipping we need to work towards a zero-defect work culture as even being as accurate as 99,9% can still mean a disaster in our business", says Gandhi.

Mike Robinson of UKHO thinks that business generated from digital charts will exceed that of paper charts within a time frame of some 8 years, but still with a large tail of sales of paper charts. To anticipate and accelerate the tipping point, UKHO is working hard to adapt their production processes and base it on database technology.

I think the switch to paperless will go much faster than expected by the UKHO or other Hydrographic Offices. It might well be that the maritime industry, as Gandhi says, has always been a laggard in adapting new technology and has always acted reactively rather than proactively, but the cost effects of going digital, even more so than the risk reducing effects, will be best driver for every ship owner in deciding to go paperless sooner than they initially expected. Paper charts will become extinct in the not too distant future!