

Is Broadband a Pitfall for Motivation?

Do you still remember that for the first 10 years of Hydrointernational we had the columns 'As it Was' (by Admiral Steve Ritchie) and 'As it Is' (by a national Hydrographer)? It was regularly suggested by us and our readers that we should complete these with a column 'As it Will Be' (or 'As it Should Be'). However, a column demands continuity and who is (or was) brave enough to cast a monthly view on the future? Despite our invitations, no readers materialised a promise to look 10–20 years ahead in their field of expertise.

One of our thoughts was "how things would change with internet on the high seas". At that time, we were on land using relatively slow analogue telephone connections, and 'streaming video' was a thing of the future. We fantasised about no longer updating nautical charts as the updates relevant for one day of sailing would be automatically sent to us by satellite communications. We thought of near-real-time processing of logged water depths as tide gauge data could be available 'online' to support our tidal models, and many more ideas that would improve surveyors' lives.

Well the future is here: with broadband now available at sea and high expectations of this (still expensive) means of communication being adopted by users (including survey ships). Broadband at sea is certainly 'hot' at shipping exhibitions. Applications vary from continuous monitoring, security, passive and active tracking of products and personnel, wireless CAMs on helmets for expert shore-based assistance with, for example, maintenance problems, and video conferencing to downloading the latest film for crew entertainment.

This technology also makes it possible for an experienced surveyor to plan and supervise a survey and process the data all from behind a desk on shore, and less trained surveyors (to put it politely) could collect the data (and perhaps pre-process parts, too).

However, is this the future we are searching for? Or are we partly regressing to the past? Due to the high price of computers in the early days of digital automation in hydrography, data were commonly logged on board on a simple computer and the processing was done by a 'bigger' computer with a larger and better plotter ashore. This forced a division of work processes that were logically connected. It was neither motivating for those who were surveying nor for those processing ashore, and it also affected workflow efficiency and product quality. Another problem was the issue of responsibility and as soon as affordable computing power made it possible, the processing was (once again) done, in most cases, by surveyors on board, with the advantage of being able to re-investigate or adapt the survey plan when processed results gave reason to do so, while still in the area.

Technology gives us opportunities for improved and more efficient working procedures and we must try to use these (and steer R&D with our requirements), but at the same time try to learn from past proven practices.

Note: No doubt license pricing of software packages will be influenced if the use of broadband technology is adopted for shore-based survey control and data processing.

Technology changes at a rapid pace, but our invitation remains to submit your views on what hydrography will be like in 10–20 years from now. Who dares?

Enjoy your read!