Editorial

Improvements in sensor sensitivity, reliability and detection capabilities, and improved modelling techniques have all contributed to increased capability enhancements and new applications for magnetometry. This includes environmental monitoring in littoral waters, offshore oil exploration and naval battle-space awareness. Rapid technological progress is enabling reliable instruments originating from university research to be made available to the operational field. Included here is Electro-Magnetics (EM), which is coming under increasingly consideration for hydrocarbon exploration. There are several reasons for this; one being that integrated interpretation with seismics reduces the risk of wrong conclusions.
Magnetometry is accepted as a preferred sensing technology and one complementary to acoustics, especially in the shallow water environment for localisation of sources and seismic investigation.
Combining sensing techniques gives added value. Due to ever-increasing computer processing power we may expect good results in the (near) future. One such being that airborne survey for underwater topography with integrated EM, Acoustic and Optical sensing will become operational.
Ongoing university research in the discipline of electromagnetics is being directed towards the geophysical and environmental aspects of marine electro-magnetics. However, for academics to be able to continue their research they need funding from both the commercial sector and the military.

In this issue we give attention to the (potential) shortage of qualified surveyors. Those interviewed for our 'Invited Reply' were not selected on the basis of their expected answers, but simply represent a random selection. Like the answers given by three experienced surveyors, mine would also be: "Yes, I love the profession and I have had a marvellous time out at sea." But telling this to our inner circle of surveyors at workshops, conferences or at the bar does not bring the youth into our profession.
The feature 'Probably, Possibly, Maybe?' by Jean Debney discusses this aspect of (potential) shortage and offers some worthwhile recommendations for change. In this light, I want to give a special mention to the initiative of some Benelux companies in visiting high schools and nautical colleges to promote hydrography.

I would also like to draw your attention to the feature 'The Future of ECDIS', by Horst Hecht of BSH Germany. I hope his recommendations for improvement will result in increased ENC production and distribution. However, there would seem to be a dilemma here. While HOs need to realise the capacity of the private sector, must this mean less of a role for government? Promotion aimed at making use of the capacity of the private sector (e.g. in some form of public-private partnership) might be considered. And have HOs actually pointed out to government institutions and politicians the critical importance of ENCs? After all, they allocate the money. Do people outside the HOs really understand the importance of worldwide ENC coverage and distribution, and the significance of ENC for a nation's wet cadastre and marine information system?

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