



## Editorial

For a number of years ECDIS and the production of Electronic Navigational Charts (ENC) seemed to dominate the interest of many national Hydrographic Offices (HOs). Today, attention has turned on two main subjects, one is the ongoing pursuit of better methods to handle the huge amount of data produced by multibeam systems and the other is the development of data bases that can feed many product lines. In this issue, while we still have a paper dealing with an aspect of ENC development and a Note dealing with exchange standards evolution, we have two papers examining data management of acoustic multibeam systems. Two of the Notes, reproduced from papers given at the recent CARIS Conference in Germany, advocate the need for HOs to take the lead in developing marine spatial data infrastructures, at the national and ideally, the international level. Outside of these main hydrographic thrusts we include our usual historical paper. This paper discusses how Russian explorers travelling to Siberia and Russian Alaska, learnt much from the native people and instead of subjugating their methods to those of the explorers they actually adopted them for their own use. Also included in this issue, is a paper discussing tidal measurements in Spain with the objective of comparing the performance of tide gauges and thus having a broader than national interest.

The Notes, dealing with data management in Hydrographic Offices, seem particularly pertinent to their future activities. There has been an increasing realisation that the seas are not just for navigators or even fishermen and there is more and more demand for a very broad range of data and for products that make them available to users. There has been also the increasing realisation that it is inefficient to manage these many different kinds of data by numerous data storage and distribution channels and that the ideal is a single multi-dimensional data base from which the different products can be developed. This is in fact a Geographical Information System. However, apart from the huge size and complexity of such an information system there remain some difficult problems to resolve. These include the need for truly international standards – a matter discussed in yet another Note on the future of the IHO S 57 standard, the need for datums, both horizontal and vertical, that satisfy both land and sea mappers and the need to develop truly satisfactory generalisation algorithms so that products of an infinite number of scales can be produced from a single density data base.

The Note describing a Future Edition of IHO S-57 (4.) is of great importance and has already been published on the IHO website. Given the difficulty experienced by many HOs in starting to produce ENCs, some may have wished that there would never have seen another edition of S 57 but the approach taken to develop Edition 4 is important because it will considerably broaden the international scope of S 57 by allying it to the ISO (International Standards Organisation) standards.

Adam J. Kerr, Editor