

Five Hundred Years on and Still Exciting Times



It was 500 years ago that the Portuguese explorer Ferdinand Magellan organized a Spanish expedition to the East Indies that resulted in the first circumnavigation of the world. Sadly, he died in the Philippines (from a poisoned dart) and the voyage of discovery was completed by Juan Sebastian Elcano. It was perhaps dangerous, but it was also a very exciting time, as it is today.

Standards and Guidelines for our profession are something we sometimes take for granted or, as specialists and experts in certain systems and data, we might forget that many do not have knowledge, and may not be aware that any guidance is available or that some standards exist. The RICS works across a broad spectrum of geospatial and related disciplines and in recent years the development and maintenance of supporting

documentation has benefitted from our cooperation and collaboration with our colleagues in other professional bodies. The recent land & resources video (<https://communities.rics.org/connect.ti/Wikigeo/view?objectId=44498725&exp=e1>) highlights this effort and our recent progress. Looking forward, we are planning a number of papers and documents including the AUV (Drone) Insight Paper also mentioned in the Policy Watch column.

Further afield both in terms of operation and subject matter, the recent FIG/IHO/ICA Standards board meeting in April recognized another set of Hydrographic Surveying and Nautical Cartography courses against the International Standards of Competence for Hydrographic Surveyors and Nautical Cartographers. The Australasian Certification Scheme was also recognized. With countries now beginning to include and adopt spatial strategies and planning, finally the seas and oceans have also become an important, if not an absolutely critical arena, for developing national aspirations and securing various sources of energy, food and a sustainable habitat. With the expected value of business associated with our seas and oceans increasing from some 1.5 trillion to almost 3 trillion by 2030 there are plenty of opportunities to exploit, manage and monitor, but only if we have established some form of initial baseline data to begin with. How can we manage the seas if we have yet to create some decent mapping?

Nevertheless, there is a value which is becoming increasingly important. How do we measure this and leverage support and resources on the basis of the benefits? This might not be as obvious as it should be but just think about that hotel room you're about to book for the summer. You can have the garden view or, for a premium, an ocean view. So immediately, before you even arrive, there's a value to this water, even if only to look at it. So as professional surveyors we have a role to play in establishing the limits and boundaries of our seas and oceans but also in developing standards for the datasets as part of a Marine Spatial Data Infrastructure but also across all types of acquisition, management and web-enabled services to make the data available for the common good.

The UK government has recently announced a further free release of some 130 terabytes of data in an effort to promote its use in renewed offshore energy exploration and development. Quite impressive and although perhaps a somewhat obvious attempt to generate interest in future offshore oil & gas licence rounds across the UK Continental Shelf, it is surely only a matter of time before some of the more media savvy energy companies start to release their data in order to show their willingness to further our understanding and knowledge of our seas.

Technology is a key enabler, and also in support of global exploration are the Global Navigation Satellite Systems (GNSS), and now in 2019 (since 27 December 2018 in fact), we have the fully operational BeiDou Navigation Satellite System from the Chinese government. So, with four different GNSS to pick and choose from we are truly in a period of strategic spatial enlightenment and data availability. If you're quick, you'll see some units at GEO Business 2019 that should be able to demonstrate the current GNSS performance. So, 500 years on, it is still exciting times.

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