

From Products to Data Services



When looking at the classic work of Hydrographic Offices (HOs), the most prominent outputs had been navigational charts – either printed or as ENC's – and other products for navigators, like publications. But while these are still the main deliverables of HOs, times are changing. S-102, the first so-called 'Product Specification' within the S-100 series of standards, is intentionally not defining a product that navigators or other end-users can buy and consume. It is a data stream for various uses.

Today's world is highly connected. Buzz words like IoT and Big Data Analysis are indications that data is nowadays used in a wider sense than originally envisioned: Through integration with other data streams, the value of hydrographic data is enriched and reaches user communities which haven't been focussed on before.

The January-February 2018 issue of *Hydro International* has a focus on Oceanology. It underlines the trend described above. Oceanology looks at the conditions of the oceans and helps us understand this source of life on Earth better. Hydrography is an essential aspect. Utilising oceanographic and hydrographic data together makes analytical tools possible to provide information that enables new views on topics of importance for Oceanology. It is enabling new strategies for human communities in the future. But in doing so, the hydrographers need to enable access to their data stream without restricting it to a specific use like navigation. Bathymetric data in S-102 is geared up for this and shows that, in its working groups, the IHO has already recognised the transformation from end-user product creation to usage-independent data streams years earlier.

Now it is up to the individual Hydrographic Offices to migrate their organisations in this direction to bring this forward-looking development of IHO to life. And, the industry is already seeing this development. Some HOs are starting to provide the data in this format for various uses. As we see more and more HOs moving in this direction we can increase applications, both in academic research as well as in industry used applications integrating hydrographic data in far reaching 'Big Data Analysis' tools.

But all of that only works if the HOs develop usage agreements supporting this concept. The underlying legal framework with usable and economically viable conditions is essential so that the new data streams can be utilised. This will require a shift in how HOs license their data for commercial use. Again, some HOs have already moved in this direction, but full usage will require larger coverage of available, licensed data – ultimately worldwide. Only then will the community, locally, regionally and globally, be able to really benefit to the largest extent.

Thus, in essence the request to the hydrographic community is

1. Develop and provide data streams in usage independent form, such as, but not limited to, S-102
2. Create data usage agreements to enable and support this.

Research and industry are ready....