

THE BELGIAN HYDROGRAPHER

“As it Is”™

The fascinating world of hydrography confronts the current hydrographer with an interesting challenge: to serve a wide variety of customers as quickly as possible with a wide variety of products, from high-quality hydrographic data to tailor-made digital products.

On a world scale Belgium is a relatively small country, with only 60km of coastline. However, one of the busiest sea routes passes across the Belgian Continental Shelf and there is heavy shipping traffic along the River Scheldt to the harbours of Antwerp and Ghent. These navigation channels are characterised by highly dynamic morphology. In order to optimise its hydrographic tasks, in September 2004 the two Belgian Hydrographic Offices, namely in Ostend and Antwerp, were reorganised and unified to form “Flemish Hydrography”™. As the new name of our hydrographic office suggests, we are a part of the Flemish Government and, more specifically, of the agency for Maritime and Coastal Services.

All hydrographic tasks are centralised within the new Flemish Hydrography. This provides a great opportunity, but also a real challenge, to serve our main customers with the various products they desire. To serve the cartographic world, paper charts and high quality ENC's are produced. The dredging and coastal departments have as quickly as possible to be provided with bathymetric data and sounding charts in order to steer and control dredging activities on the River Scheldt and in the main Flemish harbours and marinas. Pilots and traffic controllers are supplied with the high-density Scheldt “ECS (Electronic Chart System), a combination of ENC's and sounding charts. Taking into account a limited number of personnel, this means that a modern, efficient and solid work process has to be developed in order to fulfil all these different goals.

In order to optimise and facilitate the production of electronic and paper charts, Flemish Hydrography has begun implementation of the Caris Hydrographic Production Database system package in its offices in Ostend and Antwerp. The use of this database technology should optimise workflow and charting of overlapping areas in the charts of the North Sea and the River Scheldt. It should also allow and optimise production of ECS, an ENC-derived electronic product that contains more detailed bathymetric information and has a very high update frequency.

Our ENC's are distributed to the end user by IC-ENC and its various VARs. In order to broaden the narrow commercial market for ENC's, I personally hope that IC-ENC and Primar Stavanger can come to a closer collaboration in the near future, perhaps as one organisation for handling the ENC's of the entire hydrographic community.

Besides significant internal use of hydrographic data, Flemish Hydrography also distributes validated bathymetric data to the dredging department in order to steer and control dredging activities, and to the Flanders Hydraulics Research division to perform additional hydraulic modelling and scientific research. As already mentioned, a new, complete and integrated system, the Caris Bathy Database, is being implemented to manage and distribute bathymetric data together with all the relevant metadata in a quality-improved, database-oriented way. These developments clearly indicate the necessary evolution of the role of Hydrographic Offices into efficient data providers in the near future.