

# As it Is™ by the Hydrographer of The Netherlands

Given her maritime orientation, the Netherlands has historically played a significant role in the development of hydrography and nautical cartography. From the sixteenth century onwards this nation demonstrated her global objective. From the mid-eighteenth century there were systematic hydrographic surveys of Dutch and other waters of interest, generally carried out by officers of the Royal Netherlands Navy. In 1787, a committee for the improvement of nautical charts was formed in the Netherlands, for which members of the Admiralty of Amsterdam were particularly recruited. This established formal government control over hydrography and nautical cartography and the Navy became officially responsible for the supply of hydrographic information for both Navy and Merchant Navy.

The Hydrographic Service was founded in 1860 and moved from Batavia (Jakarta) to the Netherlands. In 1874 this service became the fifth Department of the Royal Netherlands Navy and is seen as such to constitute the formal foundation of the Netherlands Hydrographic Office (NLHO): a formal responsibility of the Secretary of Defence. This has not changed since. But many other things have.

The NLHO recently moved its office of sixty employees to a defence location in The Hague: the Frederick barracks. The NLHO, however, remains the national authority responsible for charting the waters of the Netherlands Continental Shelf and the waters around the Netherlands Antilles and Aruba. It is consequently the official representative of the Netherlands to the International Hydrographic Organisation (IHO) and two of its relevant Regional Commissions in Europe: NSHC and Caribbean MACHC. In a similar way, NLHO is responsible for additional military data (AML) in accordance with NATO guidelines and product standards.

As a result of the increasing demand for actual and reliable hydrographic information, a new national survey policy has been developed in conjunction with the University of Twente and the Ministry of Transportation and Waterways (Rijkswaterstaat). NLHO executes systematic surveys in the North Sea and Caribbean Sea and is responsible for issuing nautical publications and charts, including SOLAS Chapter V. The Ministry of Transport and Waterways is generally focused on water management and quality, both for the North Sea and inland waterways. There is close co-operation between both ministries in the identification of additional hydrographic requirements and harmonisation of hydrographic survey plans. An emerging area of common interest is the development of INLAND ENC, in close co-operation with the Ministry of Transport and Waterways, in particular for the Rivers Scheldt and Rhine.

To meet quality requirements in this increasing demand for hydrographic data for both military and civilian purposes, the Royal Netherlands Navy recently commissioned two new survey vessels. HNLMS *Snellius* (2003) and HNLMS *Luymes* (2004) feature state-of-the-art equipment such as multi-beam echo sounder systems and high-speed side-scan sonar. The ships work on the concept of a multiple crew (three for two) and generate a vast amount of hydrographic data. For military survey operations only, a mobile hydrographic team™ are established capable of global deployment with a mobile survey kit fit for small boats, such as a RHIB.

In order to be able to verify, analyse, validate and continually update all source data for the efficient production of paper and digital products, our present production process needs to be optimised. A modified production process based on the Caris Hydrographic Production Database will be installed from 2007 onwards. This development indicates the growth of the NLHO towards becoming a public hydrographic data provider and as a consequence NLHO will shortly review present data policy and distribution mechanisms. The change to being a public service provider is perceived as clearly in line with national and European initiatives for the re-use of data (INSPIRE) and will contribute to meeting the changed objectives of the IHO. The Dutch Secretary of Defence has signed the protocol for change of the IHO-convention and it is hoped that within weeks this will pass parliament for approval.

So, as the world goes digital, the requirements of our customers, both civilian and military change significantly. There is a growing demand for ENCs, AMLs and digital hydrographic publications. Next to the officially issued products, there is a growing demand for tailor-made and operation-specific products, and a one-stop-shop principle for distribution. Private industry is seen as a strong partner in meeting these challenges. All such developments have far-reaching consequences for our survey operations, production and distribution of traditional and digital products and our data policy. This is the challenge the NLHO faces today.

In this complex environment, with many innovations in the fields of survey and production technology, data policy and management it is important for the NLHO to realise that it exists in order to serve the mariner (and the maritime community): *Ex Usu Nautae™*.

*Captain RNLN Floor de Haan, Hydrographer Royal Netherlands Navy*