



## where your data matters

#### Customer Case Study

# **Bathymetric and Port ENCs for Peel Ports Pilots**

High resolution Electronic Navigational Charts (ENCs) created by OceanWise are now an essential tool in our ability to safely navigate vessels within the River Clyde. Being able to get detailed up-to-date information into our Portable Pilotage Units (PPUs) quickly has made us more confident in manoeuvring larger ships in confined spaces and in other pilotage operations.

Gillan Locke, Marine Officer at Peel Ports

### **The Requirement**

Pilots and other operators are increasingly demanding higher resolution and comprehensive datasets on which to base port and maritime operations. Usually this means being able to access S-57 data files which can be loaded easily and reliably into ENC compatible devices, such as Portable Pilot Units (PPUs).

Clydeport Pilots had a requirement to access more detailed chart data for use in their PPU's to make pilotage situations safer for both the vessels and tugs. The hydrographic survey team at Clydeport were regularly surveying the port area; however the Pilots were unable to access this information in a digital format from the bridge of the ship when under pilotage, as standard ENC updates take much longer.

#### **Key Benefits for Peel Ports**

• Ability to export compliant S-57 files for use on its PPU's



- Pilots are able to overlay high resolution bathymetry from local surveys and other locally held operational data
- Provides a simple mechanism for the production of Port ENC's, derived from source data, that can be stored and read directly from a common spatial data management system
- Avoids the need for stand-alone software products and replicate datasets

### Methodology

The combination of **OceanWise Maritime Toolbar** and **ENC Writer Extension** as now used by Clydeport, is a valuable addition to **OceanWise** maritime workflow software suite that Peel Ports has used for a number of years. These tools provide users with the ability to create Bathymetric and Port ENCs directly from locally collected survey data, managed in a centralised data store as part of a fully integrated system, without the need for a standalone solution. The system avoids multiple copies of the same datasets being stored, making it more efficient and easier to keep up to date. A summary of the workflow implemented at Peel Ports is as follows:

Firstly the Clydeport hydrographic team imports the Digital Terrain Model files directly from their chosen survey control software, in this case Reson PDS



2000. **Maritime Toolbar** is then used to generate natural looking depth contours to the required specification.



#### **Maritime Toolbar**

functionality generates the S-57 topology model and creates the attributed depth areas required for Bathymetric ENC production. Peel

Ports are then able to incorporate other useful features such as Bollards and Fenders to give a more detailed picture. These features are not normally incorporated into a Hydrographic Office published ENC but are extremely useful in a pilotage situation.

Finally the completed ENC is exported to an S-57 file and validated using openly available software before loading into the PPUs.



This workflow avoids the need for stand-alone software products and replicate datasets.

Note that all source datasets are managed within the Peel Ports Marine Department's central data store for other purposes as part of their overall 'Maritime Information Infrastructure'. Ask OceanWise for details.



Enjoy the confidence of working with marine data experts For information contact info@oceanwise.eu or phone +44 (0)1420 768262 WWW.OCEanwise.eu