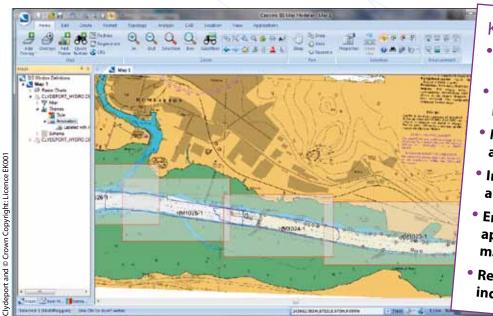


Maritime Toolbar

Hydrographic Survey Management Extension

Tools to meet the workflow demands of the maritime user



Key Benefits:

- Implements the philosophy of 'lean' management
- Streamlines data and information exchange
- Monitor status of survey areas quickly in GIS
- Improves productivity and efficiency
- Enables consistent approach to data management
- Reports customised to individual organisations

Geographic Information Systems (GIS) offer multiple benefits to maritime users wishing to acquire, analyse and disseminate environmental, asset and business data using 'location' as a common factor. Maritime Toolbar Extensions build on the data management and manipulation tools inherent in GIS and OceanWise Maritime Toolbar to address particular workflow demands within an overall maritime information infrastructure.

Organisations carry out specific tasks to address business and operational needs. Efficiency is improved by breaking these tasks down into well-defined steps or processes. Each process often relies on data that is developed as a result of a previous task, output from a different system or is acquired externally. The interface between processes can be a source of major inefficiencies and frustration, either because information is not easily accessible or requires considerable preparation

before it can be used. **Maritime Toolbar** and its **Workflow Extensions** uses the philosophy of lean process management by providing the tools required to manage common data as a central resource and streamlining the exchange of data between processes, systems and external stakeholders.

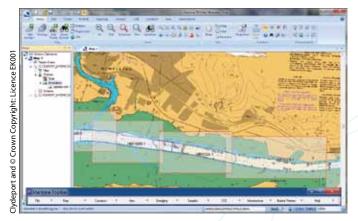
Maritime Toolbar Workflow Extensions have been developed in collaboration with port operators to meet their exact requirements. However, they will be of benefit to other maritime users involved in planning, constructing and operating all types of coastal or offshore infrastructure. Other Extensions are currently available for the following maritime processes:

- Dredging and Licensing Management
- Environmental Samples Management
- Infrastructure and Asset Management

Each extension can be installed alone or in combination depending on individual requirements. Extensions for other maritime processes are in development, please contact **OceanWise** for further details.

Hydrographic Survey Management

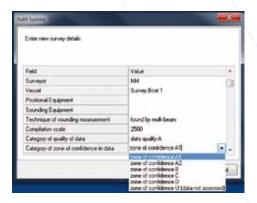
The planning and recording of hydrographic surveys is an important task, with the acquired data feeding into a wide range of other processes including the safety of navigation, engineering design, dredging and other maritime operations.



Generate actual surveyed boundaries and link them to predefined seabed or chart areas

Hydrographic Survey Management Workflow Extension

is not a survey control or processing package; there are many established applications that undertake this work. Instead, the Extension complements these packages by providing an overview of survey needs and helping to manage a survey programme. On completion, survey metadata is recorded to create a survey history and can be shared with stakeholders.

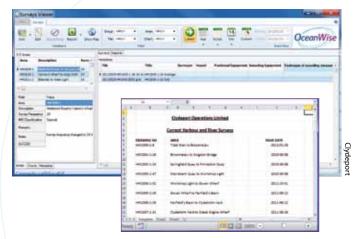


Create and maintain metadata for each survey according to accepted IHO standards

Links to the actual survey data from the metadata records enables data to be loaded, viewed and interpreted in Cadcorp SIS. In many cases, soundings data can be retained in its native format e.g. PDS 2000 and loaded directly into GIS, thus avoiding the need for replication. Alternatively, by utilising **OceanWise**'s Bathymetry Extension to **Ocean Database** and its associated toolset, soundings data can be stored centrally, thus extending the workflow and creating further efficiencies.



Register published charts and maintain a record of status and latest survey data



Generate reports of survey programmes for performance monitoring and planning

Maritime Toolbar and its Workflow Extensions run as a standalone application or as an 'Add-In' to Cadcorp SIS, which provides the spatial or mapping functionality. At their core is Ocean Database, comprising a bespoke data model developed from many years' hands-on experience. Ocean Database can be realised in a range of Relational Database Management Systems (RDBMS), such as Oracle, Microsoft SQL and PostgreSQL, and is at the heart of the OceanWise's maritime information infrastructure product and service range. Data templates, exchange standards and reports provide the link with stakeholders. They can be customised to contain user details, logos and to match with specific regulatory regimes or practices.