

# National Oceanography Centre Marine Data Products

## POLPRED and the Hydro-DLL

This document attempts to explain the relationship with our offshore tidal software called POLPRED and the NOC Hydro-DLL which is an offshore tidal computation engine for Microsoft Windows. This document may be useful if you have a requirement for offshore data and an in-house software development capability and want to decide which is best suited to your requirements.

The POLPRED software consists of four parts:

- **The interface** - this is the part of the software that you use and contains all the facilities that allow you to interact with the program, as well as the various visualisations of the data that you see on the screen. The interface talks to the Hydro-DLL. Works under Microsoft Windows.
- **The Hydro-DLL** - this contains all the mathematics required to derive the numbers from the model. A request can be made to the DLL from a Microsoft Windows application for the tidal elevations and current speed and direction for any location within the model area (latitude, longitude) and for any date and time. The DLL will return the results to the calling application, usually the POLPRED interface.
- **The data sets** - these are used by both the POLPRED interface and the Hydro-DLL.
- **The licence files** - these are used by the Hydro-DLL to show which

areas and time periods the user is licensed to access (i.e. which areas have been purchased).

As a stand-alone application, you require all 4 of these components to make use of the software. However, the system can be made available without the interface component (i.e. you would be getting the mathematical engine of the system only). To use this, you would need to be able to develop your own Microsoft Windows-based application to access the Hydro-DLL and data (effectively your software would replace the POLPRED interface program).

This approach is usually taken up by companies developing their own marine software packages (for example navigation and chart plotting software) that want to incorporate a tidal layer onto their electronic charts. These companies will usually have a royalty agreement with us.

However if you want to produce an application using offshore tides that is not being developed for commercial sale, then you can obtain the DLL from us for a one-off charge. You would basically be buying the POLPRED system

(which we would include for validation purposes with your software) however we would provide the additional documentation on how to access the DLL from your own Windows application. Having the POLPRED interface allows you to check the results coming from your own software, but gives you the flexibility to manipulate the data and use the results however you want.

The cost for this is the same as buying the POLPRED package without the DLL documentation - i.e. cost of the software plus a licence charge based on the area size and duration of the licence.

The data sets are all encrypted and can only be accessed through the Hydro-DLL.

