Europe's underwater vehicles gather online

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The European Centre for Information on Marine Science and Technology (EurOcean) has established an online database for underwater vehicles used throughout Europe for marine scientific research

EurOcean was officially launched in February 2002 as a result of a French-Portuguese initiative involving the Portuguese Foundation for Science and Technology (FCT) and the French Research Institute for the Exploitation of the Sea (IFREMER). Since then five more member organisations have joined: the Flanders Marine Institute (VLIZ), Belgium; the Marine Institute, Ireland; the Institute of Marine Research (IMR), Norway; the Institute of Oceanology, Poland; and GeoEcoMar, Romania.

The Centre's aim is to be a focal point for the sharing of information and the creation of synergy in the marine science and technology sector. Its main objective is to contribute in an effective manner to the construction of a Marine European Research Area and its first task has been the creation and development of an internet portal for marine science and technology in Europe. The portal was officially launched in March 2003 and can be found at www.eurocean.org

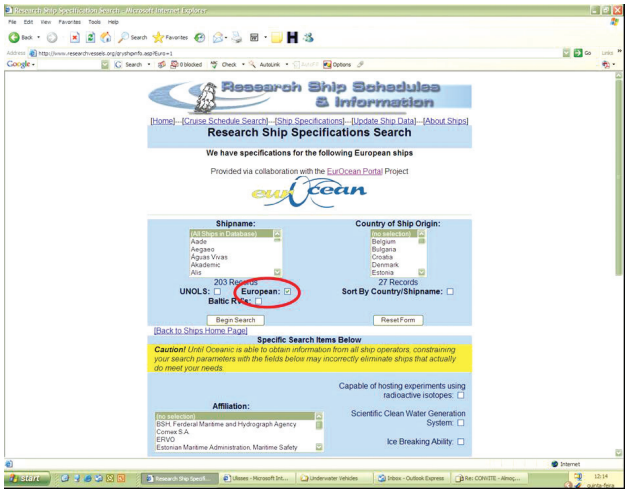

Figure 1. European research vessels database.

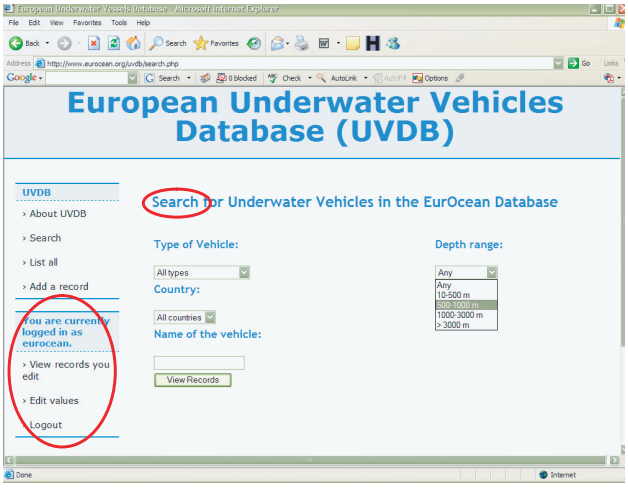

Figure 2. Criteria of selection for the underwater vehicles database.

The EurOcean internet portal

Recognising that information on European marine science and technology on the Web is very dispersed and not easy to access rapidly, EurOcean decided that an internet portal was needed to provide all those with an interest in European marine science and technology with an electronic platform for communication and information. Its implementation is being carried out with the support of the Intergovernmental Oceanographic Commission (IOC). The present services provided by the portal are:

- A directory of existing websites relevant to marine science in Europe, which includes more than 800 URLs.
- A compilation of marine science and technology information with priority given to marine research infrastructures – an example of this is the database of European research vessels (Figure 1), with the specifications for 205 RVs available online.
- Search tools personalised to the user's profile.
- Selective mailing to registered members.

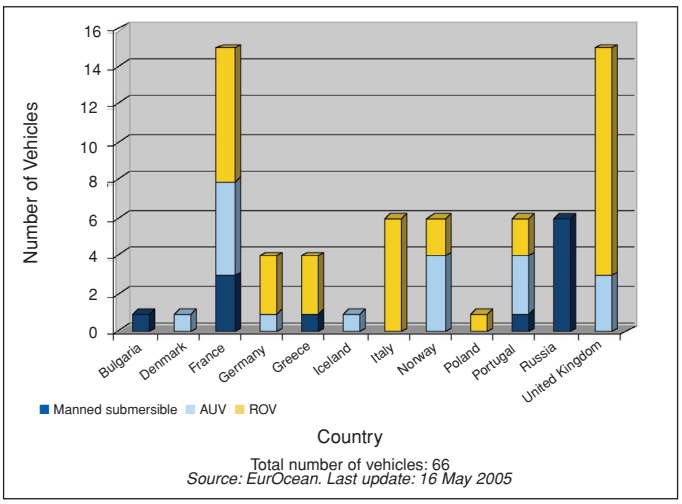

Figure 3. Research underwater vehicles by country.

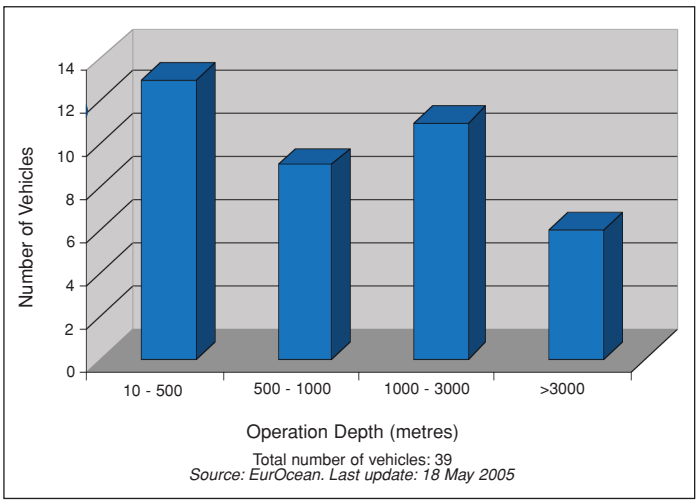

Figure 4. Underwater vehicles vs operation depth.

EurOcean's underwater vehicle database (UVDB)

A new database created by EurOcean for European underwater research vehicles (UVs) in both the public and the private sectors has recently been put online. The database has been developed in co-operation with scientific experts in this domain from Portugal, France and United Kingdom. Their contributions were essential in defining the most appropriate descriptors for the UVs. Fifteen descriptors have been defined and four categories of UVs have been identified:

- Remotely Operated Vehicles (ROVs)
- Autonomous Underwater Vehicles (AUVs)
- Manned Submersibles
- Other Underwater Vehicles (gliders, etc.)

The database is available on the EurOcean internet portal webpage dedicated to underwater vehicles (see www.eurocean.org/contents.php?id=314). Other related information, such as a list of the research laboratories involved in underwater vehicle technology development, a virtual library of publications and a directory of useful links, is also available at this site.

The UVDB offers three main functionalities:

- A user-friendly interface that allows the end user to select the UVs according to the name of vehicle, the country of origin, the category of the vehicle and the vehicle's depth range in metres (Figure 2). A list of the specifications is associated to each selected vehicle.
- The operators can be provided with a login account to directly modify their vehicle specifications as required.
- Each end user is able to insert a new record in the database. When a new record is submitted, a message is automatically sent to the EurOcean webmaster to activate that record.

At present, the main specifications for forty-six European underwater vehicles are available in the database for consultation. Some statistical analysis of the information collected so far is presented in Figures 3 and 4.

EurOcean is now in the process of contacting the vehicle operators and providing them with passwords in order to get the online information completed and validated.

Conclusion

The UVDB is part of an ambitious plan set out by EurOcean to realise a comprehensive mapping of the marine research infrastructures existing in Europe. To be successful, EurOcean needs the co-operation of those involved in underwater vehicle technology development and the vehicle owners/operators. Contributions from all interested *IOS* readers would be most welcome. ■