New internet development: marine XML

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With the emergence of XML as a data transfer protocol a mechanism to support the exchange of marine data is now available. The development of a marine XML will support the tracking of data from collection through to the generation of integrated global and regional datasets. XML can support the metadata describing the data collection, quality control and subsequent processing.

The IOC, through the IODE programme, is involved in the development of marine XML applications. One of the objectives of the IODE Group of Experts on the Technical Aspects of Data Exchange (GETADE) is to develop marine XML as a mechanism to facilitate format and platform independent information, metadata and data exchange. The IOC metadata system, MEDI, uses XML to validate and transfer metadata (http://ioc.unesco.org/MEDI). The IOC hosts a community portal website for Marine XML that provides a central location for document distribution and general discussion forum (http://MarineXML.net).

Cooperation between IOC and ICES on the development of a marine XML commenced in 2002 with the creation of the ICES-IOC Study Group on the Development of Marine Data Exchange Systems using XML (SGXML). This group met for the first time in April 2002 and developed a work plan to guide the investigation into how XML technology could be used in an oceanographic context.

Other activities in the development of a Marine XML include the EU Marine XML project *Marine XML: a pre-standardisation development for marine data interoperability using XML.* This project will demonstrate that XML technology can be used to develop a framework that improves the interoperability of data for the marine community and specifically in support of marine observing systems .The project will develop a prototype of an XML-based Marine Mark-up Language (MML).