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MERSEA Information Management: federated data bases for the development of an operational monitoring and forecasting system of the ocean

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Marine EnviRonment and Security for the European Area (MERSEA) is an EC Integrated Project having the aim to develop a European system for operational monitoring and forecasting on global and regional scales of the ocean physics, bio-chemistry and ecosystems. The prediction time scales of interest extend from days to months. This integrated system is the ocean component of GMES. The applications of the MERSEA system will be:

- improvement of the safety and efficiency of maritime transport and marine operations
- support safe and efficient offshore oil and gas industry activities
- mitigation of effects on environmental hazards and pollution crisis
- contribution to ocean climate variability studies
- advancements in marine research on global climate, the ocean and its ecosystems

The development of such a system requires an unprecedented level of collaboration and coordination of multidisciplinary research, development and operational activities. The project is federating the resources and expertise of diverse institutes, agencies and companies in the fields of satellite data processing, in situ observing systems, data

management, ocean and ecosystem modeling, ocean, marine and weather forecasting and fisheries.

The information system is strategic for accessing data, model results and added value products residing in different data bases located in different sites. The MERSEA Information Management (MIM) will facilitate the routine real-time exchange of high quality information, data and products within the project and the provision of appropriate information for a wide range of external users both in real time and delayed mode. The architecture of MIM is based on OPeNDAP/THREDDS.