

Assessment Study on Requirements for Technologies, Decision Making Tools and Baseline Information Requirements for Operational Oceanography and Integrated Zone Coastal Management

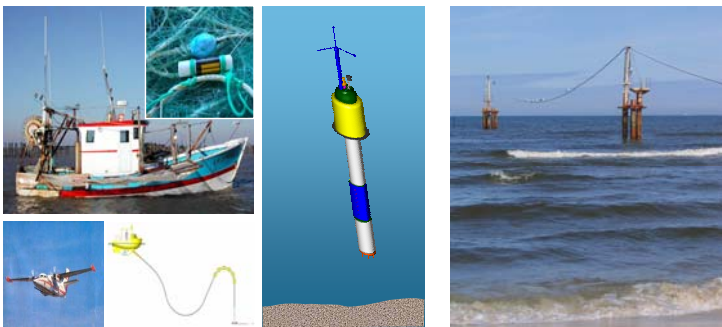
« ASTIR »

AF-c-17-K

Brief Project Summary

This InterMareC subproject conducted an assessment of presently available technologies, platforms, instrumentation, sensors and tools for applications in operational oceanography in the three regions. Further information needs and services to support integrated coastal zone management (ICZM) and for decision support in marine spatial planning, sustainable use and environmental protection.

A variety of new technologies, approaches and methodologies are presently developed or applied in pilot applications and qualification or reference projects in European seas and coastal waters. These have a great potential for future operational applications and related services to match the increasing monitoring and observing needs expected in the near future in Europe and worldwide. They also have large potentials for transfer to other maritime and coastal countries which have to monitor their exclusive economic zones, implement the Global Ocean Observing System (GOOS). The need for improved maritime security and surveillance, forecasting and warning systems as well as for services to better manage coastal and marine areas is emerging worldwide. In the three regions exists large and competent science and industry communities and, accordingly, the technology base to support these demands and to gain a perspective share in related market areas.

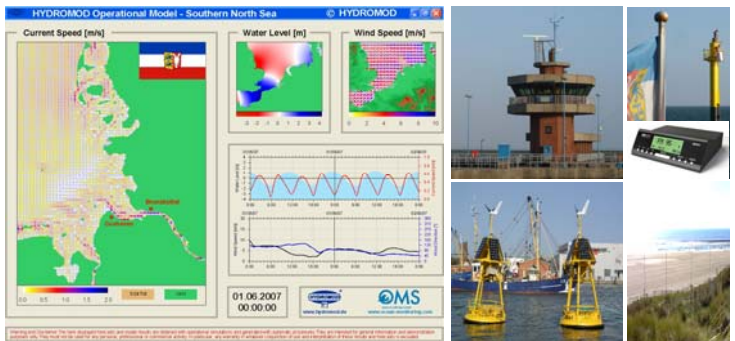


New approaches such as using ships of opportunity as applied by IFREMER in the voluntary fishing boat project or as demonstrated in the European FerryBox project, increased surveillance from air and space, autonomous devices or innovative deployment systems are presently developed and tested to improve spatial and temporal coverage of observations and to reduce data acquisition costs and efforts for deployment and maintenance

The coastal research station of IBW PAN in Lubiatowo provides infrastructure and facilities for a wide range of coastal investigations and for in-situ testing of sensors and measurement equipment

Aims and Objectives

The first aim of the sub-project was to identify and review the present status in operational oceanography, marine monitoring and observation plus related activities and services in the three regions. Secondly, the existing regional science, industry and technology base and potential in these fields had to be reviewed. Finally, expectable future trends and already emerging demands ought to be identified to support upcoming developments of platforms, instrumentation and methodologies and services. The large amount of results is to be compiled in a report which shall be made available to communities and users concerned.



Local and regional operational forecast models and related information services as applied for the OMS pilot and reference system for the Southern North Sea and the west coast of Schleswig-Holstein and also developed in Brittany in the PREVIMER project become increasingly important in modern coastal and ocean observing and monitoring systems

Large potentials are expected in the combination and end-to-end integration of maritime security surveillance and monitoring technologies and systems together with operational fore- and now-cast models, information and public warning services as developed with the OMS pilot and reference system in Schleswig-Holstein

Future Perspectives

The results of the project provide a variety of topics and guidance towards future research and development priorities, application of pilot and reference systems and implementation of improved surveillance technologies, information services and related tool. Accordingly, potential is seen in responding to calls for proposals of suitable programmes and initiatives (e.g. EU FP7, InterReg, other regional national, bilateral and transnational cooperation programs). Joint endeavours will be taken to further exploit the project results and collaboratively endorse, initialise and conduct further projects in these and affiliated thematic areas. For this the partners intend to continue exchange of information and experiences in the thematic areas considered in ASTIR.

Main Project Results and Outcome

- ✓ Compilation of an assessment report
- ✓ Building links to operational oceanography activities and approaches
- ✓ Identification of perspectives and thematic areas for future cooperation and conduction of joint projects
- ✓ Identification of possibilities for testing and qualification of new equipment and sensors at the research laboratory of IBW PAN in Lubiatowo, IFREMER laboratories and sites in Brest and the OMS pilot and reference prototype and site in and around Büsum
- ✓ Exchange of approaches, operation experiences and knowledge gained in complementary and affiliated projects (e.g. the French PREVIMER and the German OMS projects)
- ✓ Outreach into operational and scientific oceanography and ICZM communities and networks (e.g. ENCORA)



Contact: Klaus D. Pfeiffer
pfeiffer@hydromod.de



Contacts: Jacques Legrand
jacques.legrand@ifremer.fr
Yannick Aoustin
yannick.aoustin@ifremer.fr



Contacts: Zbigniew Pruszk
zbq@ibwpan.gda.pl
Rafal Ostrowski
rafi@ibwpan.gda.pl