

## **EuroGOOS: Operational Oceanography Services in support of the European Maritime Policy**

Introductory remarks bei the Chairman Peter Ehlers:

1. An integrated maritime policy is more needed than ever. The oceans have turned into an intensively used economic area, in particular our coastal waters, and thus the European seas in general:

- From time immemorial, the oceans have been transport routes of vital importance; globalisation without shipping is unthinkable.
- Fisheries being the heart of maritime uses have been pursued on an industrial scale worldwide for a long time now, more and more complemented by aquaculture, the fastest growing sector in the food producing industry.
- Marine biotechnology is becoming an area of increasing interest.
- The exploitation of mineral marine resources, oil and gas seems indispensable to cover our demands and is extending to depths of several thousand meters and ice covered regions; deep sea mining and the extraction of gas hydrates offer future chances.
- In the search for regenerative energies, the focus has been shifting toward the oceans. Offshore wind farms are becoming a growing industry. Although the required technological developments of exploiting the almost unlimited energy resources of the oceans by means of tidal, wave, current and thermal power plants are still in their infancy, the first plants have been put into operation.

2. As a consequence the protection of the marine environment, being an indispensable prerequisite for a sustainable development of the seas, is an even greater challenge than before. The marine environment is considerably polluted, especially due to land based inputs of pollutants, but also by maritime uses. Commercial user interests may conflict with the requirements of marine habitat protection and the preservation of biological diversity. A very careful balance

between the different uses and protection interests is required, based on an ecosystem approach.

3. The oceans are also a decisive factor of the global climate and influence climate change. The impacts of climate change are not only a threat to the marine ecosystems, but may cause additional natural hazards not the least for European coasts.

4. To meet these challenges, sufficient information is a basic requirement for a successful ocean management aiming at a sustainable maritime development. The knowledge about the complex physical, chemical, and biological processes taking place in the ocean, in the coastal waters, and on the sea floor still is largely insufficient, fragmented and not easily accessible. Considering the importance which the oceans and the coastal waters have for our lives and even our survival, there is an urgent need to improve our understanding by collecting, processing and managing all data needed for describing the processes, and make them accessible to all who need them for planning and decision making.

5. In the light of this, oceanographic activities – and that includes physical, chemical, biological as geological parameters – are gaining further in importance. Marine research projects have to be supplemented by sustained, permanent oceanographic monitoring and observation systems. In order to identify trends, data series covering long periods of time will be indispensable. On an international level, long-range concepts have been established under GOOS. However, their implementation depends on the States' readiness to undertake long-term commitments. And that is what is still lacking.

6. In Europe many efforts have already been undertaken through various initiatives, in particular by the monitoring programmes of the regional marine environment protection regimes, which will be intensified and further advanced, following the requirements of the EU Marine Strategy Framework Directive. The European contribution to the global ARGO programme, either, is an encouraging step

forward. The Common Fisheries Policy and the establishment of GMES are also important incentives taken by the EU. As part of the development of the Integrated Maritime Policy the European Commission is now developing an European Marine Observation and Data Network (EMODNET).

7. A sustained observation system must be secured by long term commitments of the European Union and their Member States and corresponding financial support. These needs are also becoming obvious within the frame of “My Ocean”, a quite ambitious European project on ocean monitoring and forecasting aiming at the establishment of marine core services. In the end these services will depend on sufficient reliable observations and sustained operational service providers. That requires a specific European organisational infrastructure. In this regard EuroGOOS may play an important role. In providing an operational oceanographic network already since long, EuroGOOS could serve as an experienced and integrative basis.