



Technical Assistance
for the realisation and management of:

International Centre of Sea Sciences in Albania

***‘A good chance for the oceanographic
science in Albania’***

28 February – 2 March 2007

Tirana, Rogner Hotel

A question..

Why CISM is a good chance for the oceanographic sciences in Albania ?

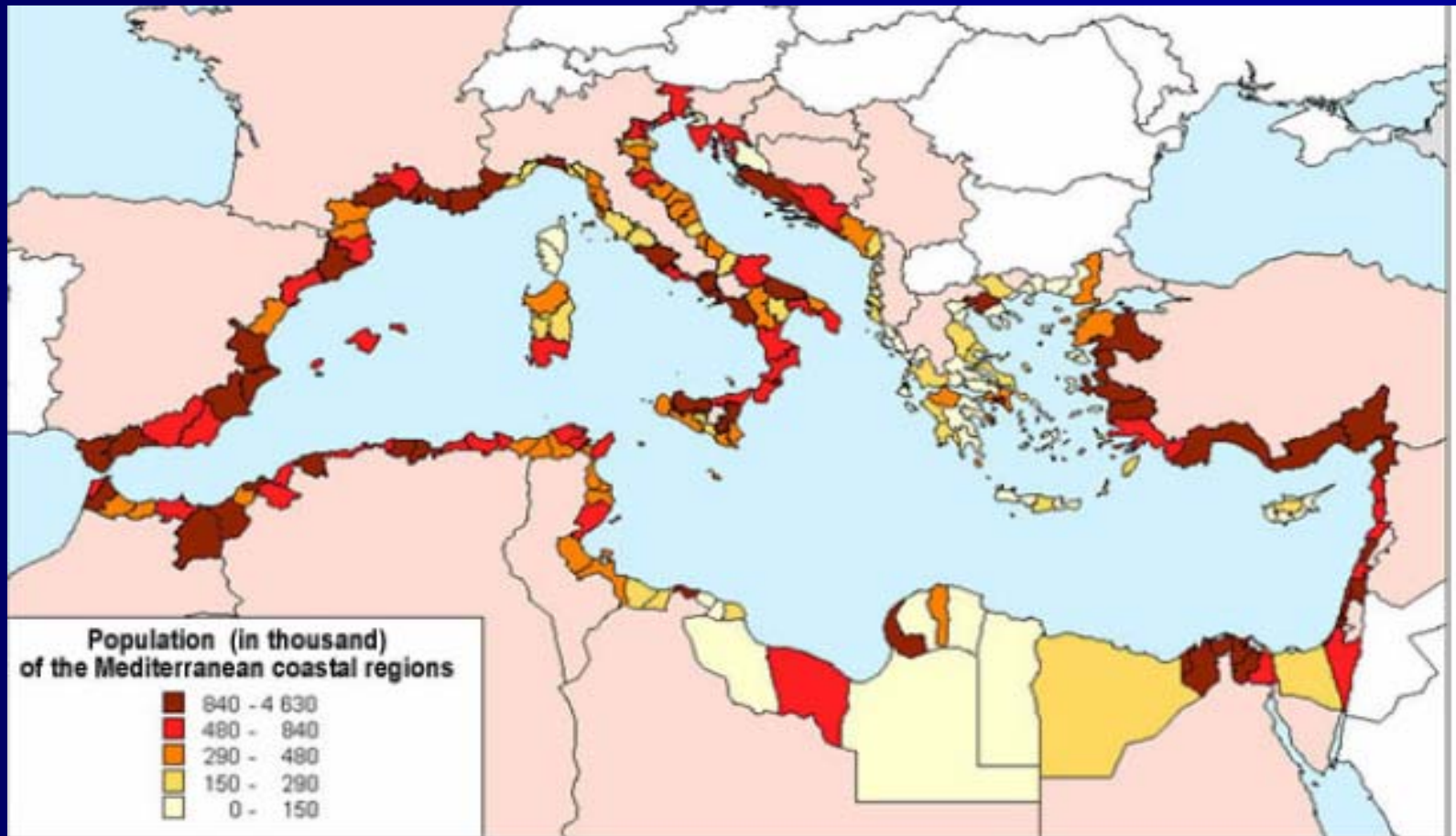
Coast & Sea: Situation

- **Marine and coastal degradation** is caused by increasing pressure upon natural resources, both in the seas and land, as well as upon the capacity of the seas to absorb wastes.
- **Population growth and increasing urbanisation and industrialization** - concentrated in coastal areas, are **root causes** of this increased pressure.
- The effect of population is multiplied some times from **human consumption patterns** and **lower economy**.
- The **exploitation of living marine resources** and **loss of habitats** are now recognized as being at least as threatening to seas, as marine pollution.

Coastal area: Population settlements

- The area of Adriatic and Ionian sea is a very important location for population settlements in many countries as in Italy, Slovenia, Croatia, Monte Negro, Albania and Greece.

Population of the Mediterranean coastal regions, 1995



Source: Statistical yearbooks, census and Blue Plan estimates,
<http://www.planbleu.org/indexa.htm>

Coastal & Sea: Resources (1)

- A lot of tourist areas are developing, around the coastal areas.
- Coastal areas support the livelihoods of many resident settlements.
- The coastal zone has a rich archaeological and historical heritage, wetlands, including UNESCO World heritage sites.
- The involvement of international bodies, such as UNESCO, UNEP, etc, is considered to be indispensable in the conservation and development of these sites.
- There is a need to promote public awareness of this heritage, both within the sub region and abroad.

Coastal & Sea: Resources (2)

- The Adriatic and Ionian sea and wetlands form a valuable resources for marine fisheries and aquaculture.
- Rich nutrient area is important for marine fisheries.
- Although artisanal fishery resources are still important in the Adriatic and Ionian sea, industrial fishing practices are poorly developed.
- There is rapid production development of farm fish in the recent years.
- Freshwater resources available in the coastal zone are generally scarce (situation is exacerbated due to increasing demand from coastal urbanisation & industrial development)

Coastal & Sea: Resources (3)

- Oil reserves in the region are situated in coastal areas
- Investments for development have been done recently
- Construction of refineries, terminals and processing plants are planned too.
- Littoral has various landscape and important natural resources under a variety of pressures, such as pollution, concentration of the human activities along the coast causing environmental problems linked to the fragility of the marine ecosystems.

Monitoring of the coast and seas: A priority (1)

- MEFAW develop monitoring environment policy
- Research institutions monitor environment in general through projects supported by MEFAW
- In coastal and marine areas: not sufficient & necessary monitoring and scientific research according to required standards

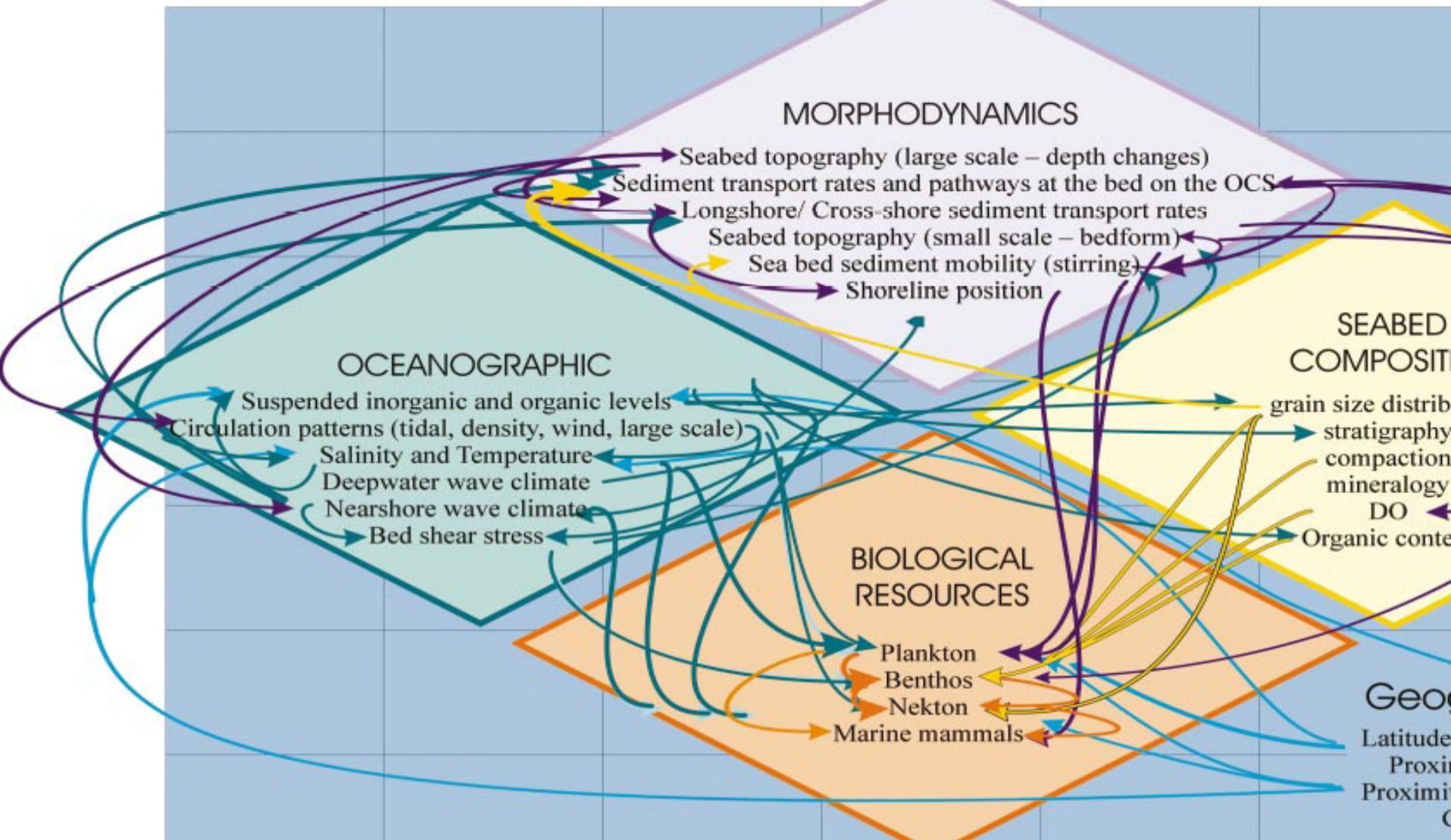
Monitoring of the coast and seas: A priority (2)

- Scientific and monitoring activity in coast and sea areas needs to be intensified
- Capacity building of human resources and scientific inter-institutional coordination for activities like:
 - - monitoring of sea waters
 - prediction and control of pollution phenomenon
 - selection of optimal management models in the coast area

Monitoring of the coast and seas: A priority (3)

- Staff training for their implementation
- Turn results in circular / normative policies
- Creation of the national D-B of monitoring sea waters in the framework of the national D-B for environment, etc.

Interactions Between Key



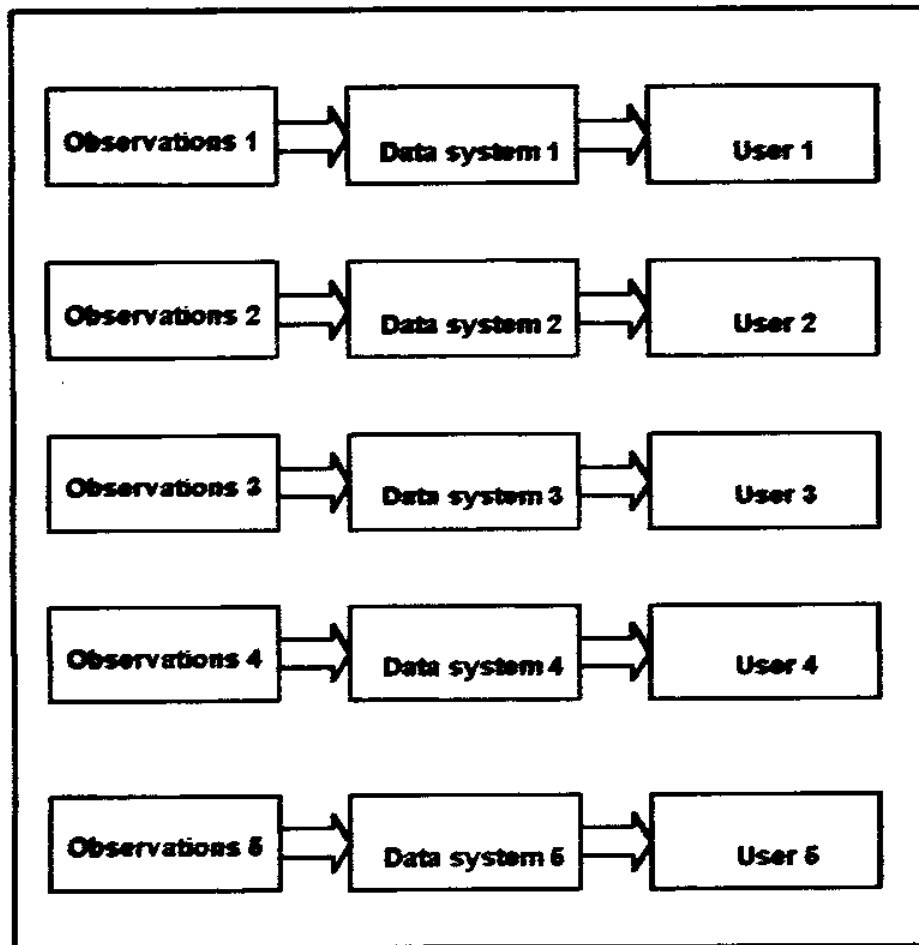


Figure 2. Historically, programs have been developed independently by different groups to address specific issues and mission based goals.

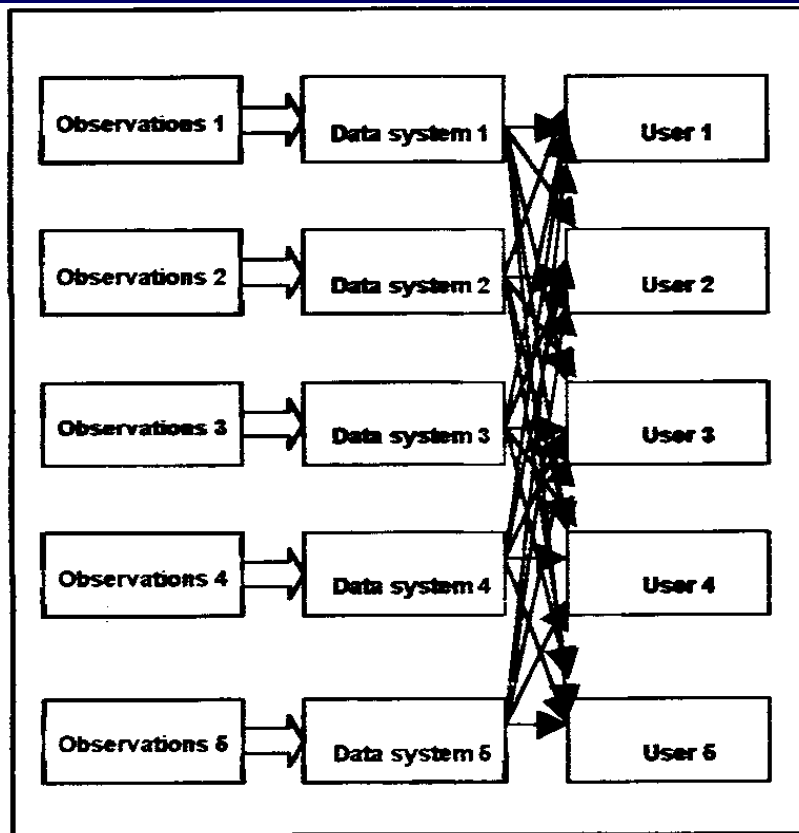


Figure 3. As the interdisciplinary and multidimensional nature of environmental issues became clear, efforts to collate and synthesize data from multiple sources have increased. Under present conditions, this is an expensive and time consuming process that inhibits the timely analysis of data and severely limits the development of predictive capabilities.

What are our promising inputs for establishing CISM?

- Human resources for undertaking monitoring and scientific activities
- Existing infrastructure: universities, scientific institutes and centres
- Up to now experiences from studies on:
 - *Interreg II Italia-Puglia Progetto per l'istituzione di una rete di monitoraggiob nelle acque del Basso Adriatico*
 - *Coast (geology, geochemistry, geophysics, hydrogeology, sedimentology, flora & fauna, etc)*
 - *Sea (water, shelf geology, bottom sea movements in important navigating areas, impact on climate changes on the hydrology of Adriatic Sea, etc)*

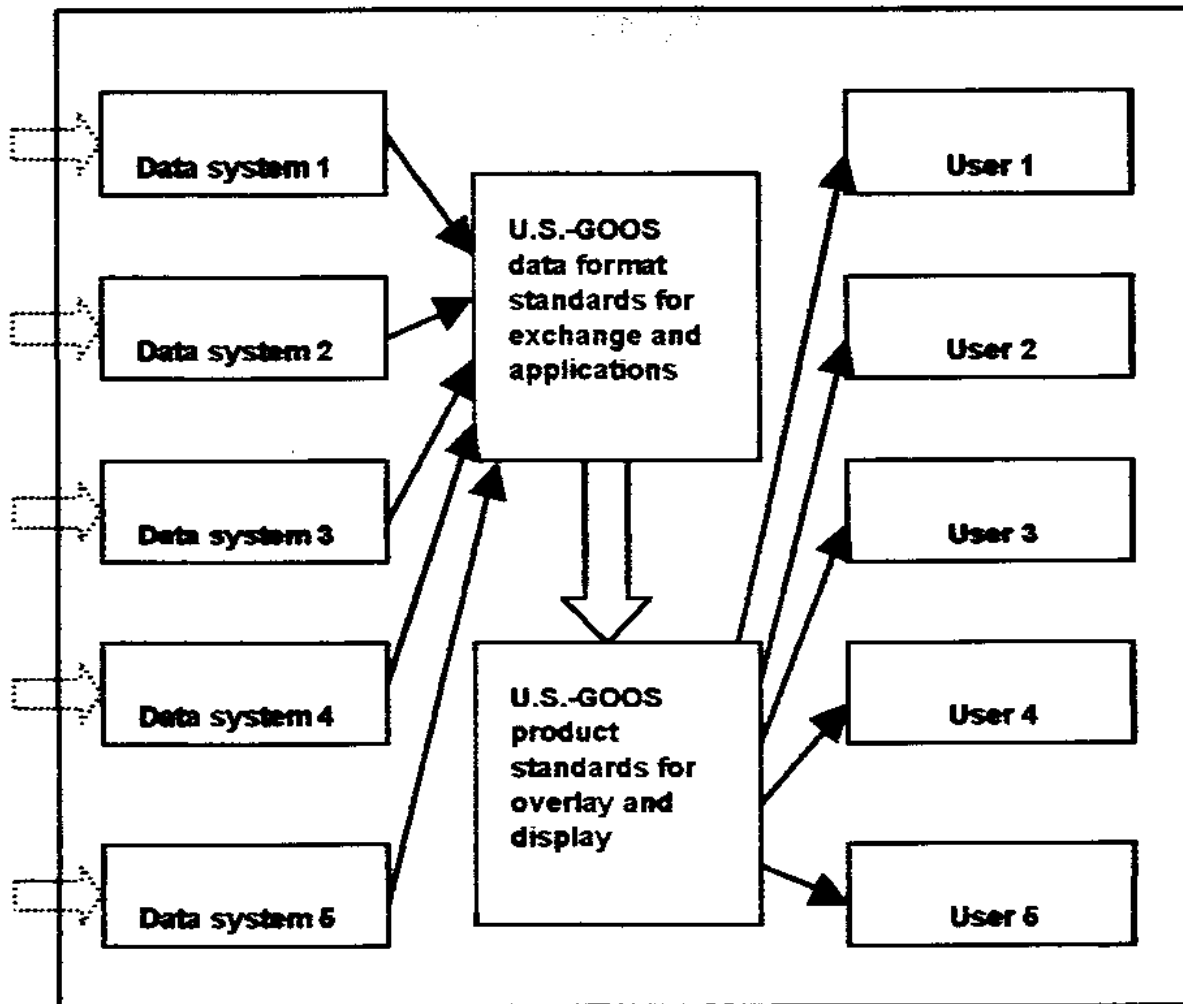


Figure 4. The objective is an integrated system that allows users to exploit multiple data sets from a variety of disparate sources through "one stop shopping." The linkages between measurements and data integration are internal to the observing system and transparent to users.

Thank you for your attention!