

Welcome to the Geo-Seas International Workshop



***9 & 10 October 2012
De Vere Hall, University
College, Cork***

Logistics

- Breaks/lunches
- Fire alarms
- Internet access
- Point of contact: Virginia Hannah

Marine Strategy Framework Directive

Directive 2008/56/EC of the European
Parliament and of the Council



“In respect of each marine region or sub-region, Member States shall make an initial assessment of their marine waters, **taking account of existing data where available** and comprising the following:

- a) an analysis of the **essential features and characteristics**, and **current environmental status of those waters**, based on the indicative lists of elements set out in Table 1 of Annex III, and covering the **physical and chemical features, the habitat types, the biological features and the hydro-morphology**;
- b) an analysis of the **predominant pressures and impacts, including human activity, on the environmental status of those waters**;
- c) an **economic and social analysis** of the use of those waters and of the cost of degradation of the marine environment.”

Marine Strategy Framework Directive

Ecosystem approach



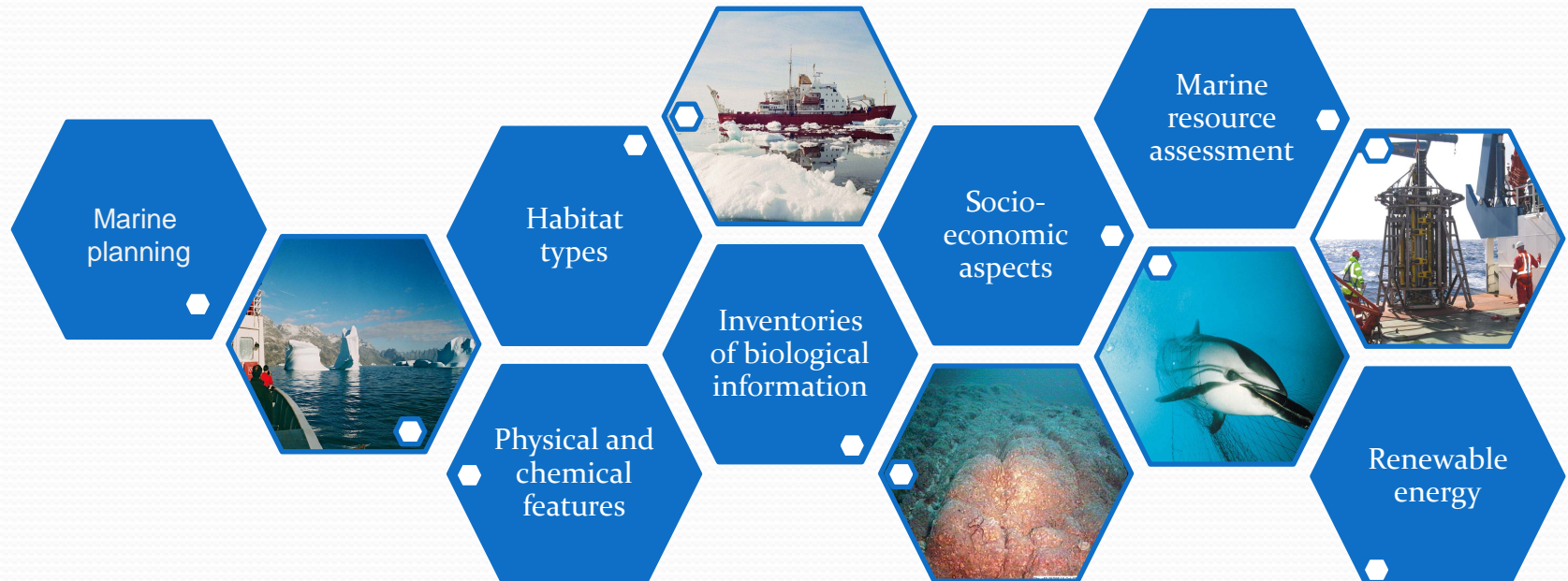
Approach

*“Marine strategies shall apply an **ecosystem-based approach** to the **management of human activities**, ensuring that the collective pressure of such activities is kept within levels compatible with the **achievement of good environmental status** and that the capacity of marine ecosystems to respond to human-induced changes is not compromised, **while enabling the sustainable use of marine goods and services** by present and future generations.”*

“The Ecosystem Approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way”

*Fifth Conference of the Parties to the Convention Biological Diversity,
December 1993*

- * Based on the analysis and processing of a large amount of heterogeneous data for knowledge generation**



MARINE KNOWLEDGE 2020

Communication from the Commission to the EU Parliament
and Council 8 Sept, 2010

- Data are essential for all aspects of marine assessment and planning

“The creation of marine knowledge begins with **observation of the sea and oceans**. Data from these observations are **assembled, then analysed to create information and knowledge**. Subsequently the knowledge can be applied to deliver **smart sustainable growth, to assess the health of the marine ecosystem or to protect coastal communities**.”

Geo-Seas: Implementing Marine Knowledge 2020

- Providing on-line access to harmonised geoscientific and oceanographic data
- Achieved through:
 - use of common technologies and methodologies
 - implementation of common vocabularies and standards
 - defined set of data delivery and exchange formats
 - 63 data centres delivering 1050000 data sets and associated metadata

GEO-SEAS COMMON DATA INDEX (CDI) V2

Reset all steps > Rock and sediment chemistry > sediment grabs > Marine geology > Rock and sediment physical properties > German Oceanographic Datacentre (NODC)

Search by:

Geographical Box	Time period	Measuring area type	Parameter categories
		point (339)	Anthropogenic contamination (339)

Data set name	Variables measured	Instrument / gear type
20000148sed_MUDAB	Chemical oceanography > PCBs and organic micropollutants > Hydrocarbons > Carbon, nitrogen and phosphorus > Environment > Anthropogenic contamination Marine geology > Rock and sediment physical properties > Rock and sediment chemistry Terrestrial > Rock and sediment physical properties > Rock and sediment chemistry	sediment grabs
20000148sed_MUDAB	Chemical oceanography	sediment grabs



“Through data infrastructures Europe is leading the way in developing a coherent and multidisciplinary approach to marine data management at both the European and global level”

Marine Knowledge 2020