EUR-OCEANS Overview

Bénédicte Ferré
UiT, Tromsø (Norway)

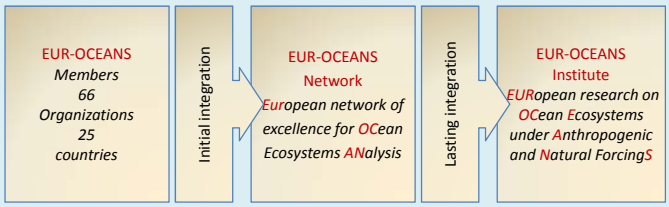
Coordinators: Paul Tréguer (IUEM, Brest, FR) and Louis Legendre (LOV, Villefranche-sur-mer, FR) http://www.eur-oceans.eu/

EUR-OCEANS NoE : EUROpean network of excellence for OCean Ecosystems ANalysis

EUR-OCEANS institute: EUROpean research on OCean Ecosystems under Anthropogenic and Natural ForcingS

History

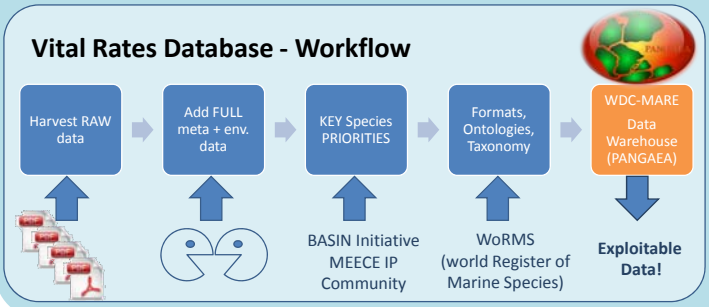
- 2005-2008: EUR-OCANS NoE with 160 scientists, from 66 research institutes and Universities in 25 countries
- Objective: forecast the evolution of ocean's ecosystem
  - define a basis for sustainable development at global level
  - achieve long-term integration of European research efforts
- From January 1st 2009: EUR-OCEANS Consortium (or Virtual Institute)



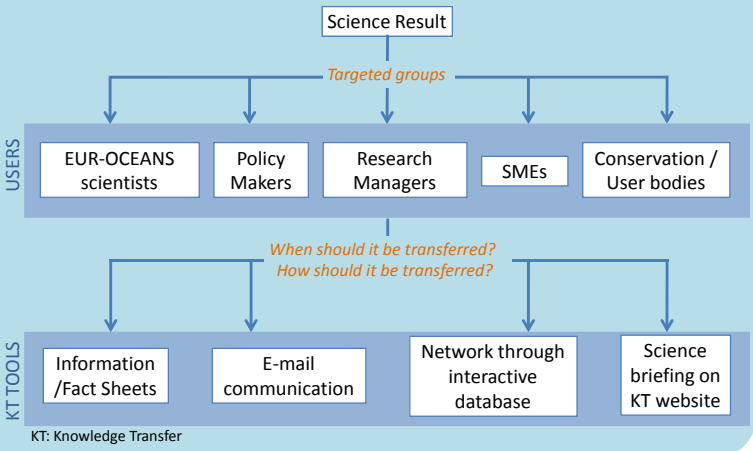
Objectives :

1- top-level scientific research on impacts of global environmental changes on marine ecosystems,
2- optimal use of shared technical infrastructures and scientific facilities,
3- Spreading of excellence (training of scientific personnel, dissemination of knowledge)

Vital Rates Database - Workflow



Example of transfer implementation

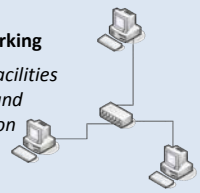


KT: Knowledge Transfer

Integrating activities

WP 1: Networking

1.1 Sharing Facilities
1.2 Mobility and communication

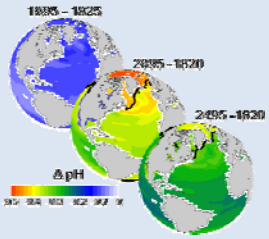


WP 2: Data integration

2.1 Observing systems
2.2 Networked database

WP 3: Model integration

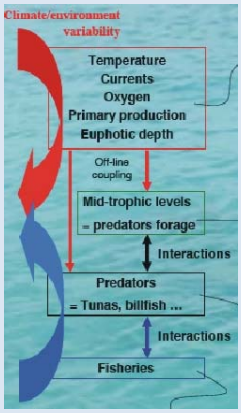
3.1 Model interfacing
3.2 Global ocean
3.3 Large-scale Earth System modeling



Research themes

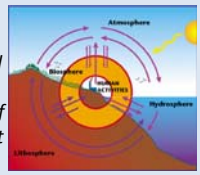
WP 4: Ecosystem end-to-end

Identify, quantify and parameterize the major processes governing the structure, functional biodiversity and stability of pelagic ecosystems, their responses to climate and anthropogenic forcing, their effects on biogeochemistry and marine resources, and their feedbacks to the Earth System.



WP 5: Biogeochemistry

Identify, quantify and model major processes governing the biogeochemical fluxes of substances that are relevant to the interactions between climate and pelagic ecosystems, their responses to climate and anthropogenic forcing, their effects on pelagic ecosystems, and their feedbacks to the Earth System.



WP6: Ecosystem approach to marine resources

Encourage, coordinate and integrate scientific efforts aiming at identifying, quantifying and modeling the major ecological mechanisms that control exploited populations, their responses to climate and anthropogenic forcing, and their effects on pelagic ecosystems

WP7 Within-system integration

Sharing generic approaches cross-systems to improve within-system integration

Spreading Excellence

WP 8: Training for researchers and personel

Expand excellence in the EUR-OCEANS objective through training of a range of personnel.

WP 9: Transfer to socio-economic users

WP 10: Public outreach

Spread the major researches of EUR-OCEANS to the European public through a network of 13 aquaria and scientific centers located in 12 European countries, as well as the European Union of Aquarium Curators.