

Marine Sciences and Technologies within the European Framework Programmes

**Historical Perspective
The Past and the Future**

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Between 1984 and 2004 Marine Sciences and Technologies benefited from successive EU framework programmes

- **MAST and FAIR Programmes**
 - **Key Action 3 within FP5**
 - **New Instruments within FP6**
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- **Networking and Structuring of European Research Potential**
 - **Improving Efficiency and Competitiveness**

"Sustainable Marine Ecosystems"

CLUSTERING

**Ocean Margin Deep-Water
Research Consortium
(OMARC)**

**13 projects
130 Partners
€25 million EU funding**

**European Land-Ocean
Interaction Studies
(ELOISE)**

**25 projects
250 Partners
€43 million EU funding**

**Effects of Pollutants
on Marine Ecosystems
(IMPACTS)**

**11 projects
113 Partners
€17 million EU funding**

Operational Forecasting

**16 projects
225 Partners
€31 million EU funding**

**Marine
Biodiversity**

**13 projects
102 Partners
€23 million EU funding**

**Harmful Algal Blooms
(EUROHAB)**

**11 projects
75 Partners
€12 million EU funding**

IMPLEMENTATION OF FP6 SUCCESSFUL "NEW INSTRUMENTS" PROPOSALS

Indicate a Start in the Integration Process
(1) At Research Institutional Level

Networks of Excellence

MARBEF (Marine Biodiversity)
MARINE GENOMICS Europe
EUR-OCEANS (Pelagic Ecosystem)

Integrated Projects

MODELKEY (Modeling Pollution Behaviour & Impacts)
MERSEA (Global Observing System)
SEAFOOD (Seafood Quality and Safety)
HERMES (Deep-Sea and Margin Ecosystems)
CARBOCEAN (Carbon Sink and Sources)



IMPLEMENTATION OF FP6 SUCCESSFUL STREPS & SSA PROPOSALS MARINE S&T

PoP&C (Pollution Prevention and Control)
EXOCET (Instrumentation for Deep-Sea Ecosystems)
FISH&Chips (Genomics & Species Identification)
ELME (Socio-Economic Impacts on Marine Biodiversity & Ecosystems)
CoBo (In-situ Monitoring of Sediments)
SSA GRAND (EU Contribution to Global Observing Systems)

Several STREPS in support of the EU Fisheries Policy

Several STREPS in the field of HAB

IMPLEMENTATION OF FP6 CALLS 1 & 2 SUCCESSFUL PROPOSALS MARINE S&T

(2) At National Programme Level

ERA-NETs

- BONUS Baltic Sea Science Network of Funding Agencies
- ECORD European Consortium for Ocean Drilling building upon FP5 project 'JEODI'
- MarinERA Co-ordination of National and Regional Marine RTD Programs in Europe

FP6 IMPLEMENTATION

CALL 3⁽¹⁾ Priority 6.3 'Global Change & Ecosystems'

NoE

- Taxonomy (including marine species)

IP

- Earth System Observations
(Interoperability; climate change
issues) / GEO
- ICZM

STREPS

- Ocean-Atmospheric Chemistry Interactions
- Technologies and Risk Assessment in
Pollution Disaster Areas

**(1) Publication: 16 June, 2004. Deadline stage 1 (NI&TI): 26 Oct. 2004.
Deadline Stage 2 (NI): 3 March 2005**



FP6 IMPLEMENTATION

CALL 4

Which Topics?

- Observation & Modeling ? – GEO/GMES
- Deep Sea observatory ? – GEO/GMES
- Others ?
- Marine technologies ? (ETAP)

To be prepared in 2004 and published in 2005

THE FUTURE

*Science and Technology... Orientation for
future research policy in Europe*

*Commission Communication
COM(2004) June 2004*

*Context: « Lisbon Process »
3% Objectives
Post-2006 EU Financial Perspectives*

6 KEY STRUCTURAL CHALLENGES

- Consolidate co-operation
- Launch technological initiatives at European level
- Stimulate competition between individual research teams
- Strengthen human resources
- Develop research infrastructures
- Support the co-ordination of National Programmes

1. CONSOLIDATE COOPERATION

- ◆ *Strengthen European co-operation on the basis of strategic priorities; poles of excellence; attracting researchers from all over the world*
 - Reduced number of priority areas^{*)}
 - Criteria for selection of priority areas^{*)}
 - Instruments (“Marimon” report)
 - Integrated Projects
 - Networks of Excellence
 - Specific Targeted Research Projects

**) Consultation process with scientific community and industry*

CRITERIA FOR SELECTION OF PRIORITY AREAS

- ◆ *Need for wider frame than just national Infrastructures
Critical mass (funding / human resources)*
- ◆ *Need for strengthening excellence
Transnational (Europe) and International cooperation "Weight" of Europe*
- ◆ *Public Good; Support to EU objectives (EU policies)*
- ◆ *Large array of stakeholders / interest*

2. LAUNCH TECHNOLOGICAL INITIATIVES AT EUROPEAN LEVEL

- ◆ *Support for technological research through large scale applied and industry-based research initiatives*
 - Definition of Strategic Research Agenda “Technology Platforms”
 - Implementation via existing instruments in most cases
 - Limited number implemented using Article 171 “Joint European Technological Initiatives”

3. STIMULATE COMPETITION BETWEEN INDIVIDUAL RESEARCH TEAMS

- ◆ *Strengthening scientific excellence through support for individual teams in competition at European level*
 - Excellence - exclusive criterion
 - All fields of Science & Technology
 - European Research Council / European executive agency

4. STRENGTHEN HUMAN RESOURCES

◆ *Developing scientific and technological research capacity through strengthened and more structured support for human resources*

- Essential condition for attracting research investment
- Build on success of Marie Curie fellowships
- Trans-national, trans-sector, industry – academia mobility
- Researchers' career development
- International dimension (outgoing/incoming)



5. DEVELOP RESEARCH INFRASTRUCTURES

- ◆ *Developing scientific and technological research capacity through strengthened and more structured support for research infrastructures*
 - Development of a real European policy for new infrastructures
 - Access to existing infrastructures
 - Support to new large scale infrastructures (role of high-level strategic group)
 - Role of intergovernmental organisations (CERN, EMBL, ESO)
 - Promotion of other support (EIB, etc.)



6. SUPPORT THE COORDINATION OF NATIONAL PROGRAMMES

- ◆ *Support and co-ordination of national and regional RTD and innovation programmes*
 - Bottom-up (ERA-NET)
 - Mutual opening
 - Top-down (Art. 169)

WHAT HAS BEEN DONE?

- ◆ Political context (Lisbon) set-up
- ◆ 3% objective (2/3 from private sector)
- ◆ *"Building our Common Future"* (EU Financial Perspectives, Commission, Jan. 2004)
- ◆ Other more specific communications ('ETAP/GMES/Europe and Basic Research/Scientific "visa"')



NEXT STEPS

- ➔ Communication to Council and European Parliament: June 2004, on Support to Future Research Policy in Europe
- ➔ Informal Competitiveness Council: 2-3 July 2004
- ➔ Competitiveness Council: 25 September 2004
- ➔ Competitiveness Council: 25 November 2004
- ➔ Early 2005: Proposal for FPVII