



MARBENA

Creating a long term infrastructure for marine biodiversity research in the European Economic Area and the Newly Associated States.

CONTRACT N°: EVR1-CT-2002-40029

Deliverable

“Topics and priorities in European Marine Biodiversity Research, with emphasis on the New Member States and on Emerging Business Opportunities for SMEs, preparatory workshop”

Hosted by the Estonian Marine Institute

Tallinn, Estonia

19-20 February 2006

SHORT REPORT

PROJECT CO-ORDINATOR: Prof. Dr. Carlo Heip
Netherlands-Institute of Ecology-
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PARTNERS :

1. Netherlands Institute of Ecology Centre for Estuarine and Coastal Ecology (NIOO-CEME) - The Netherlands
2. Flanders Marine Institute (VLIZ) - Belgium
3. Centro de Investigação Interdisciplinar Marinha e Ambiental (CIIMAR)- Portugal
4. Natural Environment Research Council (NERC) Centre for Ecology and Hydrology - United Kingdom
5. Ecological consultancy Services Limited (EcoServe) - Ireland
6. Fundació Universitat-Empresa De Les Illes Balears (FUEIB) - Illes Balears, Spain
7. University of Oslo (UO) - Norway
8. Forshungsinstitut Senckenberg (SNG) - Germany
9. Instituto do Mar (IMAR), Center of IMAR of the University of the Azores - Portugal
10. National Environmental Research Institute (NERI), Department of Marine Ecology - Denmark
11. Institute of Marine Biology of Crete (IMBC) - Greece
12. Marine Biological Association of the United Kingdom (MBA) - United Kingdom
13. Polish Academy of Sciences, Institute of Oceanology (IOPAS) - Poland
14. Institute of Oceanology, Bulgarian Academy of sciences (IO BAS) - Bulgaria
15. National Institute of Biology (NIB) - Slovenia
16. Centro Marino Internazionale (IMC) - Italy
17. Estonian Marine Institute (MEI) - Estonia
18. Akvaplan-Niva AS and University Studies on Svalbard (AN/UNIS) - Norway
19. Alfred-Wegener-Institute for Polar and Marine Research (AWI) - Germany

PROJECT START DATE : 1 December 2002

DURATION :40 months

MARBENA workshop

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Agenda

Appendix 1.

Topic 1. The status of marine biodiversity research and potential extensions of the related network of institutes

Contents of the reports.

- a) Short introduction
- b) Marine Biodiversity Research in regions (see below)
 1. Present status (description = bibliometric study)
 2. Strengths (description = analyses + personal view)
 3. Problems / bottlenecks / gaps (description = analyses + personal view)
 4. Recommendations to improve integration (synthesis + personal views)
- c) Possibilities for the extension of the network in the region
 1. Present status – how to fill gaps, uncork bottlenecks (data base + description)
 2. Expected problems with the integration (analysis of c.1 and b.3)
 3. Recommendations for the improvement of the extension of the network. (synthesis, including a list with proposed scientists / institutes and the expertise they bring in)
- d) Synthesis

We would like you to provide short reports about these topics for some regions (with potential contributors – this is open for changes).

- 1.1) Atlantic + Iberian (incl. Biscay): John Gray, Carlos Duarte, and Ricardo Serrão Santos
- 1.2) North Sea + Celtic: Fred Buchholz, Chris Emblow, Jan Mees
- 1.3) Baltic Sea (+ Skagerak): Jan Marcin Weslawski, Henn Ojaveer
- 1.4) Mediterranean: Alenka Malej, Vesna Flander-Putrlle, Christos Arvanitidis, Carlos Duarte
- 1.5) Southern Mediterranean and Black Sea: Paolo Magni, Snejana Moncheva
- 1.6) Arctic: Salve Dahle, Jan Marcin Weslawski

Taking into considerations (if possible):

- deep sea
- coastal
- pelagic

1. Regional approach (eco regions)

This will facilitate the use of existing sources, like the OSPAR review on existing knowledge (state of the art) carried out approximately five years ago.

Henn Ojaveer (task) will provide a proposal about what will be considered ‘marine biodiversity’ in this context.

2. Bottom up (national) approach

a. Bibliometric study of the last 5 years

The results of the bibliometric studies of Jan Marcin Weslawski and Alenka Malej & Jan Marcin Weslawski, presented during the Mars Meeting of directors (2003), are useful and should be added to the reports. A similar approach should be developed for the other regions as well. From the presentations indicators will be selected. Information about gross national products by nation will be provided by **Jan Marcin** by 3 February 2006 (**task**).

b. Questionnaires.

Jan Marcin Weslawski has made an inventory of the level of integration of institutes.

Participating Institutes have filled in a questionnaire on research, expertise, etc. and on basis

of a statistical analysis on the provided data the level of integration (clustering) between the institutes can be visualized.

Jan Marcin will forward more details of the approach to the participants (**task**). The approach will be adopted by MARBENA and a questionnaire will be sent to (potential) network participants. Also the management of other related networks will be included in the survey (e.g. MEDGOOS). If possible information about existing databases, commercial related research (with no scientific publications in peer reviewed journals) and other available 'grey' literature will be added to the survey. This questionnaire will also be used to monitor the interest of new partners (of the new member states and the Southern Mediterranean countries) to join the existing networks (e.g. MarBEF).

The questionnaire should be crisp and clear and easy to be filled in. An online service (survey monkey) will be used. **Chris Emblow (task)** will develop the online questionnaire, and will put it online.

Remarks

- The new member states, Southern Mediterranean countries and SMEs will be the focus of these studies.
- EUROCEANS has similar plans and cooperation could be considered.
- The bibliometric study and survey are both based on a national approach. It will be studied whether the bibliometric study and, to a lesser extent, the survey (questionnaire) can record regional research efforts (**task Jan Marcin Weslawski**). In this way the bottom up approach can be linked directly to the first study.
- As other possible sources for relevant information were mentioned:
 - Register of Resources of MarBEF (task Chris Emblow)
 - OSPAR survey
 - Survey of EU funded projects by Richard Warwick and Herman Hummel (**task Herman Hummel**)
 - MARS-BIOMARE survey on existing infrastructure (**task Chris Emblow**)
 - Paper on marine infrastructure by ESFRI: (**task Ricardo Serrão Santos**)
 - MAMA questionnaire (**task Paolo Magni**)
- **Task Force: Jan Marcin Weslawski, Henn Ojaveer, Pim van Avesaath, Chris Emblow, Jan Stel, Fred Buchholz.**

Request for E-conference on seamounts.

Karin Zaunberger (MARBENA EC-officer) has asked the MARBENA consortium to study possibilities to organise a 10 day electronic consultation on Seamounts for the next EPBRS meeting in Austria (March 2006). Ricardo Serrão Santos is finishing a book on seamounts, and offered to make a synthesis on this topic in cooperation with the other editors of the book. The outcome then will be presented during the EPBRS meeting in Vienna. This excellent idea and kind offer from Ricardo will be forwarded to Karin.

Topic 2. The market of 'supply and demand' of marine biodiversity information, and the possible role of SME's and large industries.

In this section we will focus on the "demand" for marine biodiversity information from GO's and NGO's (as OSPAR, Helcom, CIESM, ICES, EEA, ...) and SME's and industries (as oil companies, pharmaceutical companies, aquaculture, marine technology, ...).

The "supply" can in fact be abstracted from the reports under topic 1.

- a) Short introduction
- b) Present status for the "demand" on marine biodiversity information by stakeholders from public and governmental sectors
 1. GO's and NGO's
 2. SMEs
 3. Industry
- c) Match and mismatch of the "supply" and "demand" (Where are the gaps? What can we do about them? Who can do the research? Which tools are available?)
 1. Opportunities
- d) Synthesis

Split into the same regions as for topic 1

- 1.1) Atlantic region: John Gray, Fred Buchholz and Carlos Duarte
- 1.2) Deep Sea, Open Ocean and Pelagic: Wulf Greve and Ricardo Serrão Santos
- 1.3) Baltic Region: Jan Marcin Weslawski and Henn Ojaveer
- 1.4) Mediterranean and Black Sea region: Alenka Malej, Snejana Moncheva, Christos Arvanitidis, and Carlos Duarte
- 1.5) Southern Mediterranean Region: Paolo Magni

Potential contributors for the specific "demand" questions can be colleagues from the mentioned GO's, NGO's, SMEs and industries. There is a budget to invite them.

First list of invited participants:

- Akvaplan-Niva (Salve Dahle, Sabine Cochrane)
- Ecoserve (Chris Emblow)
- ICIS (Jan Stel)

SMEs

Two perspectives

- 1. The Scientist's ideas of the bright future for biodiversity and lots of money to be earned. The problem with this is that the time horizons, and the perspective for earning money, are not clear at all. Market will be primarily stimulated by new laws of the EU, like new marine policies or maritime policies, and not by scientific research. The market is only slowly developing.
- 2. The SME's perspective: how to survive, and how to get involved in the market (find the right niche).

The business and scientific community goals are the same, but how to reach it is different. The potentials are real, but to get these realistic is the challenge. For this an interface is needed and that could be the goal of MARBENA/MarBEF.

The Management of marine protected areas is one of the main opportunities for selling marine biodiversity and EU policies (HD, WFD, etc.). In Poland there is a demand for management/ policy statements and documents for the marine protected areas, but at the moment these documents are made by engineers, and not by biologist. MarBEF should try to influence this process. They are selling what we should sell. Could MarBEF influence the directives....to contact the marine biodiversity (water habitat directives).

There is a trend of market development very often in the governmental domain and driven by EU or a more local political/policy level. It is a potential market for SMEs. For instance ECOSERVE is active in this area. But it is a market by not a pure SME market. Most persons that are involved are from the government itself. There is potential for development, but mostly for the persons involved in the government themselves. The art of the SMEs is to organise how to get part of the market so that it will not go to governmental organisations. MarBEF/EMBEF can play a role in this as an interface

Subcontracting of governmental organisations involved in monitoring can facilitate the involvement of SME's. Critical is the way of funding for SMEs. Subcontracting for SME's is not possible yet and participation in projects as a full partner is often not profitable because of budgeting rules.

The several categories of SMEs as indicated in the Think-tank document need to be addressed too. Outreach could be used to address these groups. Another idea would be to make a questionnaire and send these to the SMEs. Sabine has made a list of the different categories of the SMEs in Norway. The database will be adopted as a pilot database and the effort will be extended to other regions. A questionnaire could be sent to clients of the SME's asking them if they need, and what kind of, biodiversity information. SME's are omnivorous and are able to discover the niches themselves. Strategies need to be developed at two scales; short term and long term.

Jan Stel and Chris Emblow will make a discussion paper summarizing the discussion of this morning and post a way (**task, deadline 13 February 2006**).

Possible contributions:

- Potential of the local market: **Jan Marcin (task)** will make a chapter on the potential for local market (Poland as a test case).
- Ports and Harbour areas.
- Local biodiversity action plans (as exist in Ireland and the UK)

- Legislation obligations at the EU level
- Possibilities for SMEs to stay up to date (knowledge, research, expertise)
- MES and SMEs (**task Jan Stel**)
- SMEs and outreach – (**task Chris Emblow**)
- SMEs and outsourcing: AWI as an example (**task Fred Buchholz**)
- MarBEF as a marketing item (e.g. using MarBEF mailing list for marketing issues)
- Spin-off of Universities (**task Paolo Magni**)

Remarks

- There will be no regional distinction for SMEs.
- Other links.
 - **Herman and Pim (task)** will contact Probioprise, an EU funded initiative aiming at the development of research focuses for SMEs.
 - More information is needed about the possible involvement of BIODIVERSA, and MARINERA
 - Links should be established with the Marine Pollution MAPO network. Take-up action for MarBEF?
 - Role of large industries **Chris** will contact **Salve Dahle (task)** to discuss the integration of large industries in this effort. Representatives will be invited to the March meeting.
 - UNEPMAP and MEDPOL (Selected key species.....)
 - European Marine Strategy.
 - Fp 7, Baltic initiatives, biodiversity is really integrated as a module regional co operations,..... regional money from the Baltic nations.
- **TaskForce, Jan Stel, Fred Buchholz, Carlos Duarte, Chris Emblow, Herman Hummel, Pim van Avesaath**

Deadlines

SME report: 13 February 2006

All other tasks: 3 February 2006

Acknowledgement

We are grateful to Maria Pöllupüü for the excellent local organization of the meeting and being able to assist the group during her birthday, and Henn Ojaveer for hosting the meeting.

Participants

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Annex 1. Updated agenda of the meeting

Thursday 19 January 2006

- 14.00 – 14.30 Lunch
- 14.30 – 15.15 Introduction
- overview
 - e-conference
 - EPBRs
 - link with ESF Position Papers
- 15.15 – 16.00 Topic 1. The status of marine biodiversity research and potential extensions of the related network of institutes in the New Member States
- Content and chapters
- 16.00 – 16.30 Coffee break
- 16.30 – 17.30 Topic 1 continued
- Regional division
 - Division of tasks / coverage of disciplines
- 17.30 – 18.00 Establishing a framework (who to link in the network)
- 19.00 Dinner

Friday 20 January 2006

- 09.00 – 10.30 Topic 2. The market of 'supply and demand' of marine biodiversity information, and the possible role of SME's and large industries.
- Content and chapters (MarBEF think tank)
 - Current status of pilot database – **Salve Dahle/Chris Emblow**
 - Identification of relevant categories of SMEs
 - Discussion on future developments of database.
 - Increasing SMEs involvement in MarBEF and future EU marine biodiversity research.
 - Identification of barriers to SME participation and overcoming these barriers. How to increase involvement?
 - Explore how SMEs can act as mechanism for exploitation of new and existing technologies and observing systems, in the exchange between fundamental research and industry
 - Discussion and identification of mechanisms for exploitation and how best such mechanisms can be used.
 - Strategy to attract new categories of SMEs into MARBEF network
 - SMEs and outreach activities - dissemination – **Chris Emblow**
 - Emerging business opportunities – follow-up by MarBEF
 - "European Marine Strategy" bringing the results and consideration on marine biodiversity research into EMS
 - Discussion on how best MarBEF and SMEs can provide results useful for EMS, and how EMS can support the MARBEF work and involvement of SMEs in particular
 - Regional division
 - Division of tasks
- 10.30 – 11.00 Coffee
- 11.00 – 11.30 Topic 2. Continued
- 11.30 – 12.00 Any other business
- division MarBEF – MARBENA
 - other initiatives as Probioprise
- 12.00 - End of meeting
- Lunch