Overview on the National Reviews prepared for the

Portuguese EPBRS meeting (6-9 November 2007): ”Life on the Blue Planet: Biodiversity research and the new European Marine Policies”

Biostrat Project

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Introduction

In the framework of the Portuguese EPBRS meeting, Biostrat partners were invited to fill a questionnaire on the status of marine biodiversity research in their country.

The aim of this review was:

- to assess the research in marine biodiversity funded at national level relevant for the themes of the meeting
- to have an overview of the organisations involved in marine affairs in the different countries

The questionnaire was divided into four parts:

- Part I: Programmes and projects

Partners were asked to give information about the marine biodiversity research programmes running in their country in the last 5 years, or research programmes not specific but which could include marine biodiversity research.

Information about projects not funded through programmes, their themes and budget, as well as an indication of the number of projects directly relevant to different policies was also requested.

Part II: Institutions

Information was asked to the partners about the main institutions that have responsibility over marine research in their country as well as about the institutions responsible for the development of marine policies at national level.

Part III: Interactions

The objective of this third part was to determine the existing structures and mechanisms involved in the coordination of policies and activities in the marine area in the partner countries.

Part IV: Research for Policy

The last part of the questionnaire focused on examples from the partner countries of research that influenced or that can influence policy.

The questionnaire was sent out on 23 August 2007.

Results

11 replies were received until 16 November 2007. On 9 November, a summary of the 10 replies received at this date was presented during the EPBRS meeting.

Replies were received from Portugal (12/09), Finland (16/09), Norway (24/09), Belgium (04/10), Russia (19/10), Bulgaria (23/10), Ukraine (26/10), Croatia (31/10), UK (02/11). Information from Cyprus was received on 16/11.

Part I: Programmes and projects

The first question was related to the programmes specific to marine biodiversity in each country. Some precisions were asked by some partners about the definition of a research programme compared to a research project: the reply that was given stated that a programme consisted in this case of a call for proposals about a specific topic like marine environment. For the programmes not specific to marine area, an estimation of the percentage of the programme that could be regarded as being marine biodiversity in terms of themes and budget was asked (question 2).

Question 3 of Part I concerned bottom up programmes. These were understood as programmes with no thematic priorities. The way to analyse this specific kind of programmes was to list the projects related to marine biodiversity that were funded, and to classify them according to the themes that were proposed.

Some misunderstandings appeared in the replies received by some partners.

The definition of a research programme and of a research project was not understood in the same way by all, which led to a high variability in the responses.

The definition of “biodiversity research” was also a source of inconsistency, some partners being much more restrictive than others and therefore considering far less projects than others.

The information that was sent was also in some cases incomplete. Information about the duration of a programme/project, or about its budget, was lacking.

These inconsistencies did not allow for an analysis of the results of this Part I.

Information was sought from other sources.

These sources included information from databases of projects already built under two ERA-Nets: BiodivERsA, ERA-Net in biodiversity research (not only marine), and MarinERA, ERA-Net in marine research (not only biodiversity).

- Information form BiodivERsA

BiodivERsA is an ERA Net involving 19 major research funding agencies from 15 countries in Europe with significant research funding in the field of terrestrial, freshwater and marine biodiversity.

For more information, see www.eurobiodiversa.org

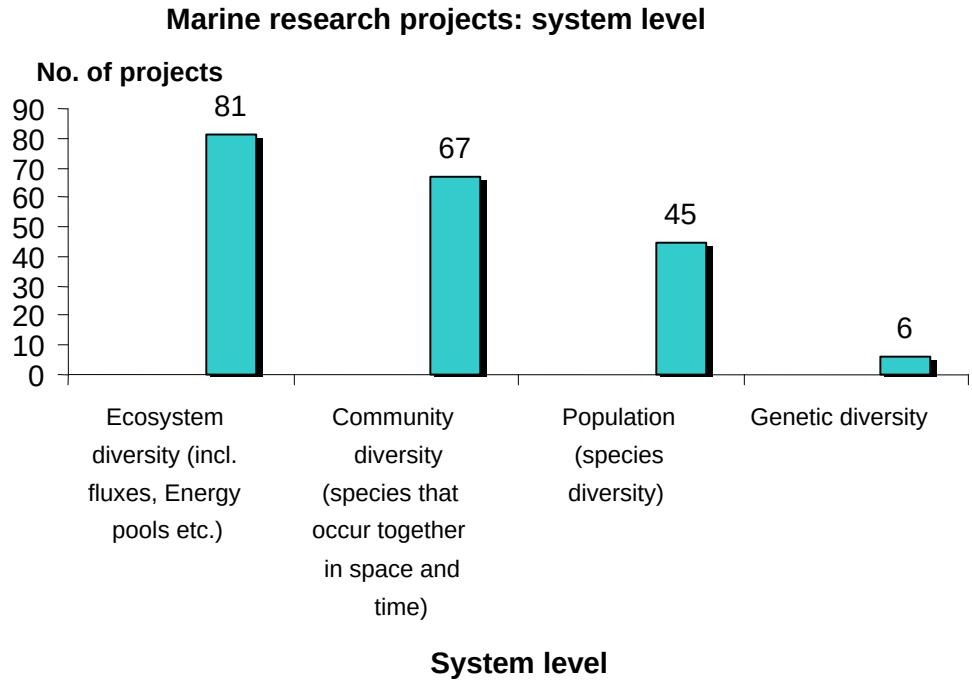
Previous studies at the beginning of the BiodivERsA ERA-Net (2005) were interested in determining the kind of biodiversity research undertaken in the last 5 years in the partner countries. A list of over 1000 projects was put together and classified according to different criteria:

- the ecosystem considered in the study: this would allow us to select the projects only related to marine biodiversity
- the ecosystem level: from ecosystem studies to genetic studies
- the biological model used in the study: microorganisms, plants or animals

- the topic of the study

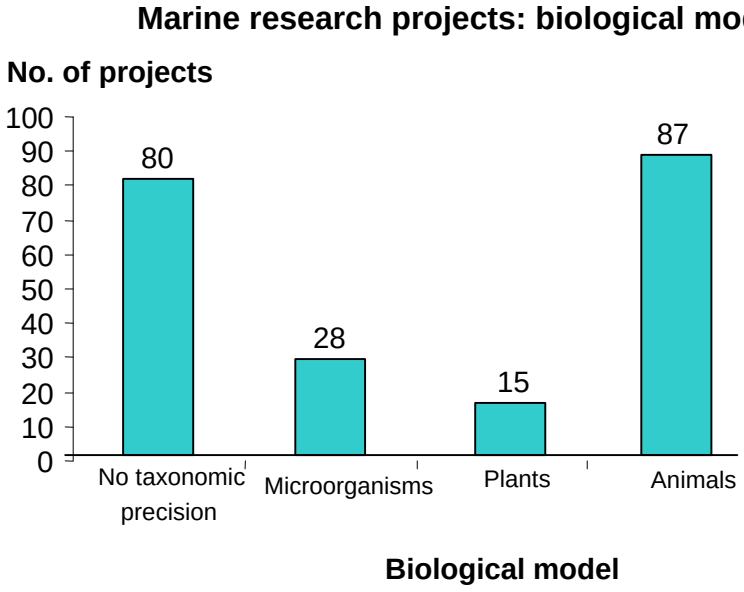
198 projects were selected as being specific to marine biodiversity. They were retrieved from the information sent by 10 BiodivERsA partner countries, and were classified, from their title, according to the criteria cited above.

1. Considering the ecosystem level of each project study:



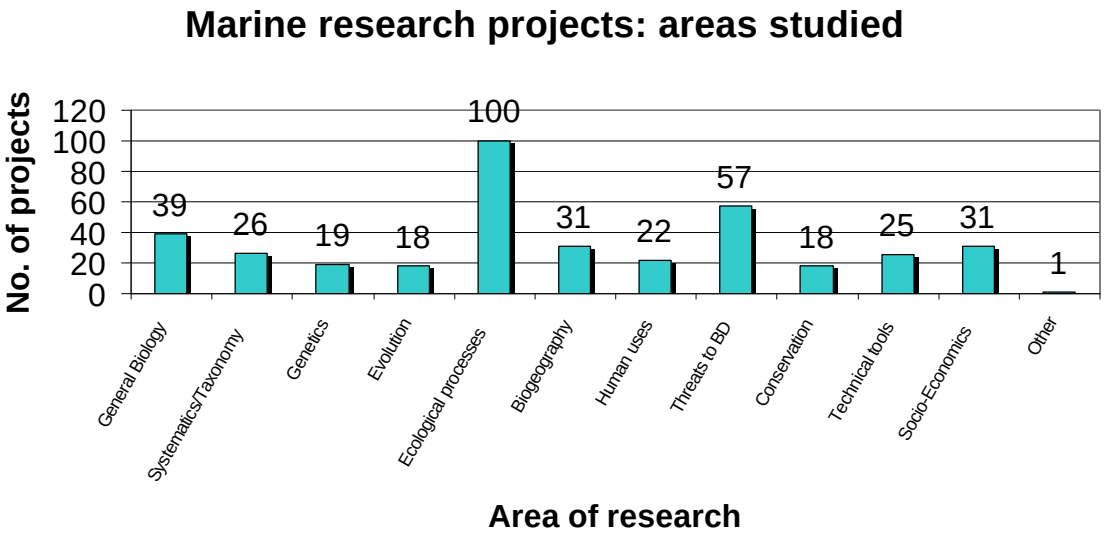
This graph shows that many of the projects considered the ecosystem as level of study. Community (species that occur together in space and time) and population studies (species diversity) represented more than half of the number of projects.

2. Considering the biological model used in the various studies:



It was not possible in almost half of the cases to determine the biological model that was used. However a large majority of the remaining projects were exclusively related to animals as biological models.

3. Considering the areas studied in the projects:



Most of the projects considered conducted studies on ecological processes, threats to biodiversity (which included pollution studies) or general biology.

- Information from MarinERA

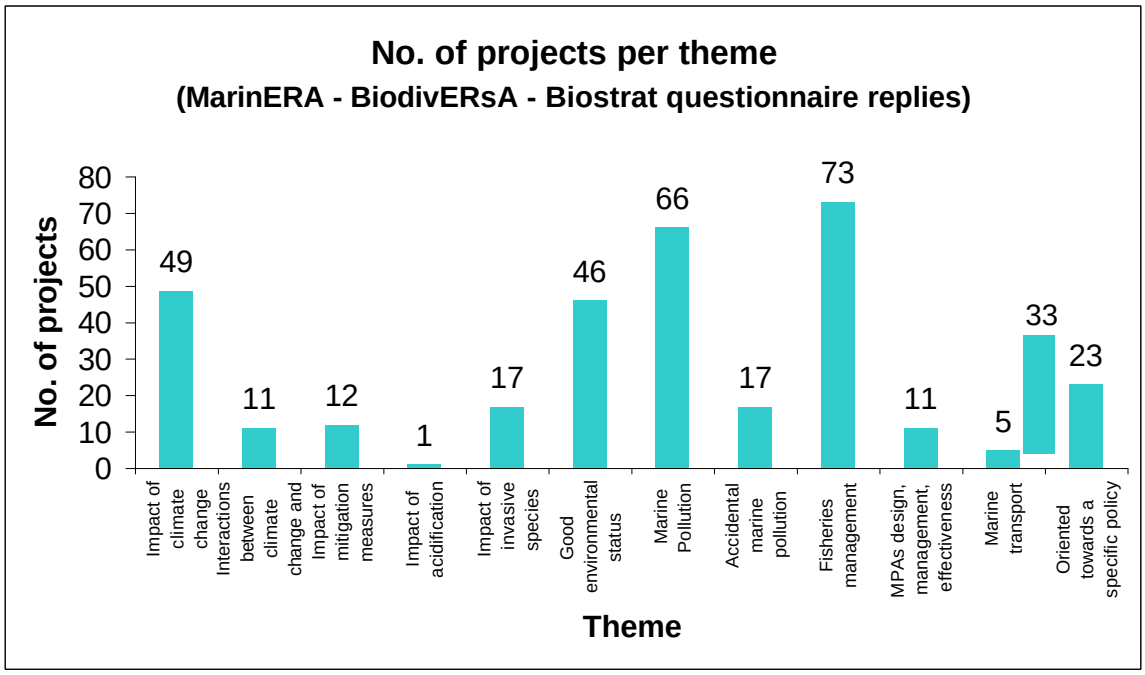
MarinERA is an ERA-Net dedicated to marine RTD, gathering 14 funding organizations from 13 countries.

A new pilot on-line searchable marine research projects database was launched in October 2007, gathering over 900 current marine research projects funded by MarinERA partners.

Information was copied from the Internet onto an Excel spreadsheet: country, title of the project, duration, and budget range as specified in the database.

BiodivERsA and MarinERA projects were regrouped (projects duplicated in both databases were deleted) and classified according to the criteria of the Biostrat questionnaire.

Data for Russia, Bulgaria, Ukraine, Croatia, Cyprus, which are not part of BiodivERsA or MarinERA, were extracted from their replies to the questionnaire and added to that list (1096 projects in total).



Of these 1096 projects, 341 had relevance to one or more of the proposed themes, or to one theme and “other”.

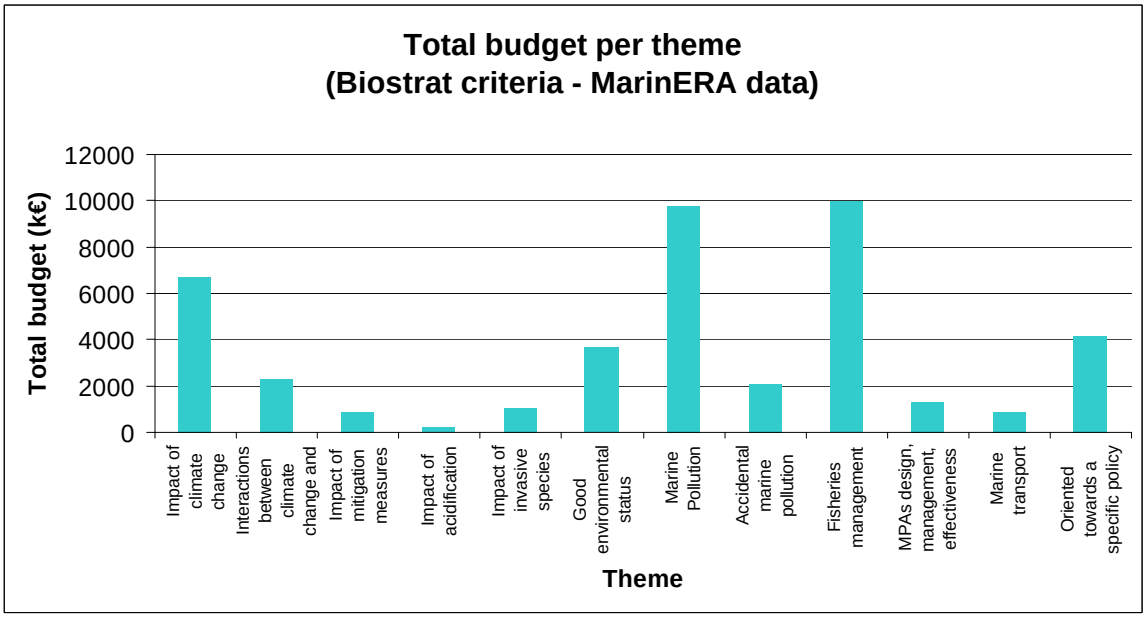
More than 800 projects would not fit in the categories of the questionnaire, which were very much related to the themes of the meeting. These were put in the “Others” section: they included mainly ecology and geosciences, but also physiology, or molecular biology, or cooperation related projects.

The results show that the projects considered in this study mainly dealt with Fisheries management, Marine pollution, Impact of climate change, and the Good Environmental status of the marine environment. 33 projects were also oriented towards a specific policy, mainly related to coastal management, EU Habitat Directive and the Common Fisheries Policy.

An estimation of the budget allocated to these different themes was made possible through the information provided in the MarinERA database of projects.

For practical reasons, information about the budget of each project was modified, to allow an estimation for each theme.

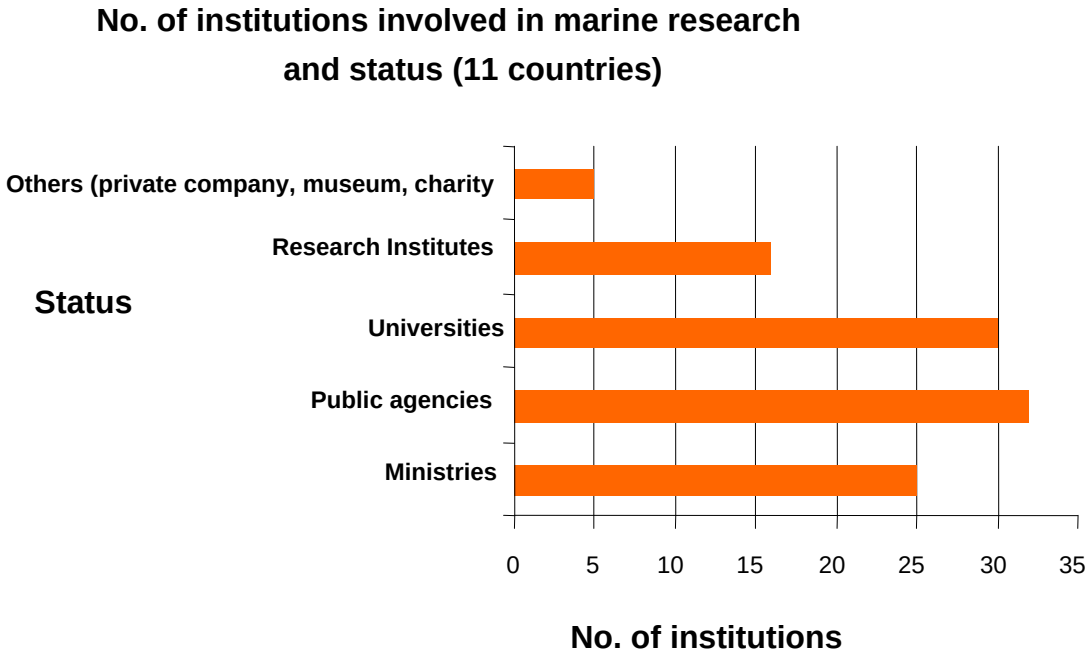
- Budget range 0-100 k€ was transformed to 50 k€
- 100-250 k€ was transformed to 175 k€
- 250-500 k€ was transformed to 375 k€
- over 500 k€ was transformed to 500 k€



According to this chart, Marine Pollution, Fisheries management, and Impact to climate change are themes that seem to have received the most in the last 5 years in the MarinERA partner countries.

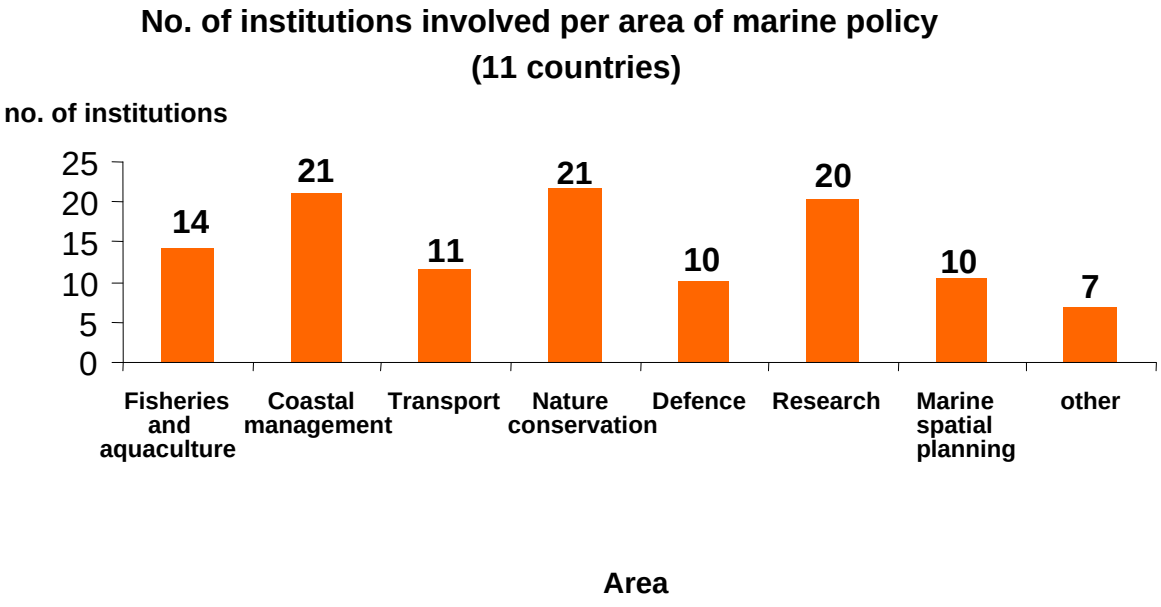
Part II: Institutions

119 institutions involved in marine research were listed from the 11 countries that replied.



It was not possible through the replies sent by the partners to determine the areas of research of these institutions, but only to identify their status.
Universities, public agencies and ministries are the most common institutions involved in marine research.

It was then asked to identify the institutions involved in marine policy at national level. 71 institutions were listed between the 11 countries:



In this case, the replies sent by the partners did not allow a clear distinction between the status of the different institutions, but to get an idea of the main topics addressed by these agencies. These were mainly coastal management, research, nature conservation, and fisheries.

Part III: Interactions

Part II showed that marine policy seems to be fragmented between different institutions and areas in the different countries.

To neutralize this fragmentation, some countries have developed structures or mechanisms to coordinate the different sectors at national level. Of the 11 countries, 6 partners replied positively when asked about the existence of such a system in their country; however only 4 have structures specific to the marine domain.

In **Portugal**:

The Commissão Interministerial para os Assuntos do Mar (CIAM – Interministerial panel for maritime affairs), under the Ministry of National Defence, is composed on a permanent basis, of various State ministers, and on a non-permanent basis, of representatives from other ministries, private entities and other relevant non-governmental organisations.

It aims at coordinating transversal actions from the different ministries regarding marine affairs. Another important task consists in the coordination, evaluation and implementation of the National Ocean Strategy, guaranteeing its articulation with other strategies and management plans.

In **Belgium**:

To give Belgium a single voice and to facilitate the transposition and implementation of international standards in Belgian law, the Coordinating Committee for International Environmental Policy (CCIEP) was created in 1995. The coordination with the regions is

made within the “North Sea and Oceans” Steering Group attached to the CCPIE. It is a forum for close consultation between the federal public services and the regions on all subjects relating to protection of the marine environment.

In **Ireland**:

An Inter-Departmental Steering Group on biodiversity helps to coordinate biodiversity activities (including marine biodiversity) in different government departments. It is a forum for all relevant government departments to provide input into future biodiversity policy and assist in the drafting of the National Biodiversity Plan.

In the **UK**:

The Marine Bill Steering Group has been established between the various governmental departments to discuss the marine bill and the proposals presented.

The UK Marine Biodiversity Steering Group, a Defra led group, discusses marine nature conservation policies and direction with other governmental departments. There are many informal forums and ongoing discussions like the Sea Users Developers group.

At other levels:

In **Finland**: The Helsinki Commission HELCOM coordinates national policies and actions, and issues recommendations aimed at the protection of the Baltic Sea environment.

In **Bulgaria**: The Commission for the Protection of the Black Sea against pollution (regional level) acts as the coordinating mechanism for the implementation of the Convention on the Protection of the Black Sea against pollution (adopted in 1992) and the Black Sea Strategic Action Plan (adopted in 1996, revised in 2002).

In the **UK**: As part of the Marine Bill - UK Government is looking to establish a Marine Management Organisation to facilitate the coordination and the management of the marine environment. It also includes the development of a Marine Spatial Plan to better manage different sectorial activities occurring in the marine environment.

Part IV: Research that influence policy

- Research that influenced policy

Partners were asked to give example of projects which, through specific characteristics, influenced policy. These characteristics could include specificities of the consortium, of the themes addressed in these projects, of the research methodologies, of the format of the outputs, the dissemination strategy, or the policy interface mechanisms,

One particular example could be retrieved from the Finnish questionnaire reply: a project on the monitoring of the Baltic Sea. It consists in a multifacet synoptic data sets from several annual open-sea research cruises, added to the existing long-term monitoring data extending back to the 1960s, with permanent annual reporting. It provides direct information to support national water protection policies, and has a influence through HELCOM on a regional sea scale.

- Research that could influence policy

Partners were also asked to give examples of research projects, which, through their characteristics, could influence policy.

Several replies were received, among which a description of the BioChange project (Ireland): It is an integrative, multi-disciplinary research framework to support national and local biodiversity policy in Ireland.

Some of the characteristics that could make this project influence policy include:

- The format of final report: Policy targeted report, Technical reports, Research publications
- Dissemination through National Media, Conferences, policy reference manuals
- Direct meetings with policy makers

- Conclusion

Overall, this questionnaire showed limitations, particularly:

- the number of replies received
- their consistency, accuracy and completeness

However, some examples of structures/mechanisms in place to coordinate marine affairs at national level were given, as well as examples of how research in marine biodiversity can influence policy.

The questionnaire replies sent by the partners can be found on the website of the project: www.biostrat.org