

Marine Science and Technology Projects Funded under the 6th Framework Programme of the European Commission

- A Statistical Overview -

by

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Summary

The Office of EurOcean –European Centre for Information on Marine Science and Technology- has been listing the research projects financially supported under the Sixth Framework Programme (FP6), 2002-2006, of the European Commission (EC), which are partly or entirely related to marine science and technology. Since there is no research programme dedicated to marine RTD, the present inventory, including 245 projects under execution or completed, results of a comprehensive survey of all the FP6 funded projects.

The report outlines the key features of the Info-Base and presents a preliminary statistical overview in terms of: 1) participation of the European countries; 2) number of projects per activity area and repartition of the funding by activity areas and countries; and 3) evolution of the FP budget of the EC allocated to marine research from 1987 until now.

Background

EurOcean - European Centre for information on marine science and technology, officially created on 28 February 2002, is a non profit organisation composed of nine Member Organisations⁴. The main objectives of EurOcean are to: 1) facilitate the access to information; 2) promote the development of indicators on marine science and technology, environment, and socio-economics; 3) encourage cooperation between the existing European organizations; 4) contribute to the preparation of syntheses. The implementation of these objectives is designed in collaboration with all interested relevant partners in order to avoid any duplication and to maximize benefits. Special attention is given to the end-users in order to ensure the efficiency and the usefulness of the activities developed by EurOcean.

The main activity of EurOcean is presently to develop an Internet portal being an electronic platform of communication and information for all actors with interest in marine science and technology in Europe (www.eurocean.org). Priority is initially given to the inventory of the marine research infrastructures in Europe and to the inventory of European funded projects in marine RDT.

1. Introduction to the Sixth Framework Programme (FP6)

The main objective of the Sixth Framework Programme (FP6) of the European Commission (EC), 2002-2006, is primarily to facilitate the creation of the European

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Research Area (ERA) through supporting collaboration in research, promoting mobility and co-ordination, and investing in mobilizing research in support of other EU policies.

A limited number of thematic priorities are identified in FP6 as presented in a schematic overview (Figure 1) of the FP6 structure. It has to be noted that there is neither a single point of access to nor a dedicated programme for marine RTD in FP6.

The implementation of the FP6 projects is achieved through various *instruments*⁵: 1) new FP6 instruments: Integrated Projects, Networks of Excellence and Article 169; 2) traditional instruments: Specific Targeted Research Projects, Coordination Actions, Specific Support Actions, Specific projects for SMEs and Specific activities to promote research infrastructures; 3) Marie Curie actions: Host-driven actions, Individual-driven actions, Excellence recognition, and Return and Reintegration mechanisms.



Figure 1 – Schematic overview of the FP6 structure

2. EurOcean FP6 Info-Base - Statistical Overview

The EurOcean Office has been listing the research projects partly or entirely related to marine science and technology financially supported by FP6⁶. As of 16 October 2006, EurOcean has identified 245 marine related projects. The information compiled for each project includes: acronym, activity area, title, contact, coordinator country, participating countries, type of instrument, total amount of funding per project, project summary and keywords (Info-Base available in the EurOcean Portal at <http://www.eurocean.org/contents.php?id=346>).

⁵ Please visit <http://www.cordis.lu/fp6/instruments.htm> for a detailed explanation of each instrument introduced in the framework programme

⁶ This work has been carried out in cooperation with the General Directorate for Research and the General Directorate for Fisheries and Maritime Affairs of the European Commission.

EurOcean has carried out a preliminary statistical analysis of the 245 FP6 projects and every effort was made to ensure, but does not guarantee, the accuracy of the information which has been assembled. The results presented here should therefore be considered as indicative.

Updates to the Info-Base are still undergoing and, consequently, this report does not intend to presently provide a final assessment of the marine projects funded under FP6.

2.1 Participation of the European Countries

83 countries are participating in the 245 FP6 marine science and technology related projects (completed and on going): the 27 EU Member States, two EU applicant countries, eight other European countries and 46 non-European countries.

United Kingdom has the majority of participation in FP6 marine related projects, contributing in 164 research projects. This country coordinates 44 projects and holds partnership in another 120 projects. France follows this leadership, participating in 134 projects, coordinating 31 projects and has partnership in 103 projects (Figure 2).

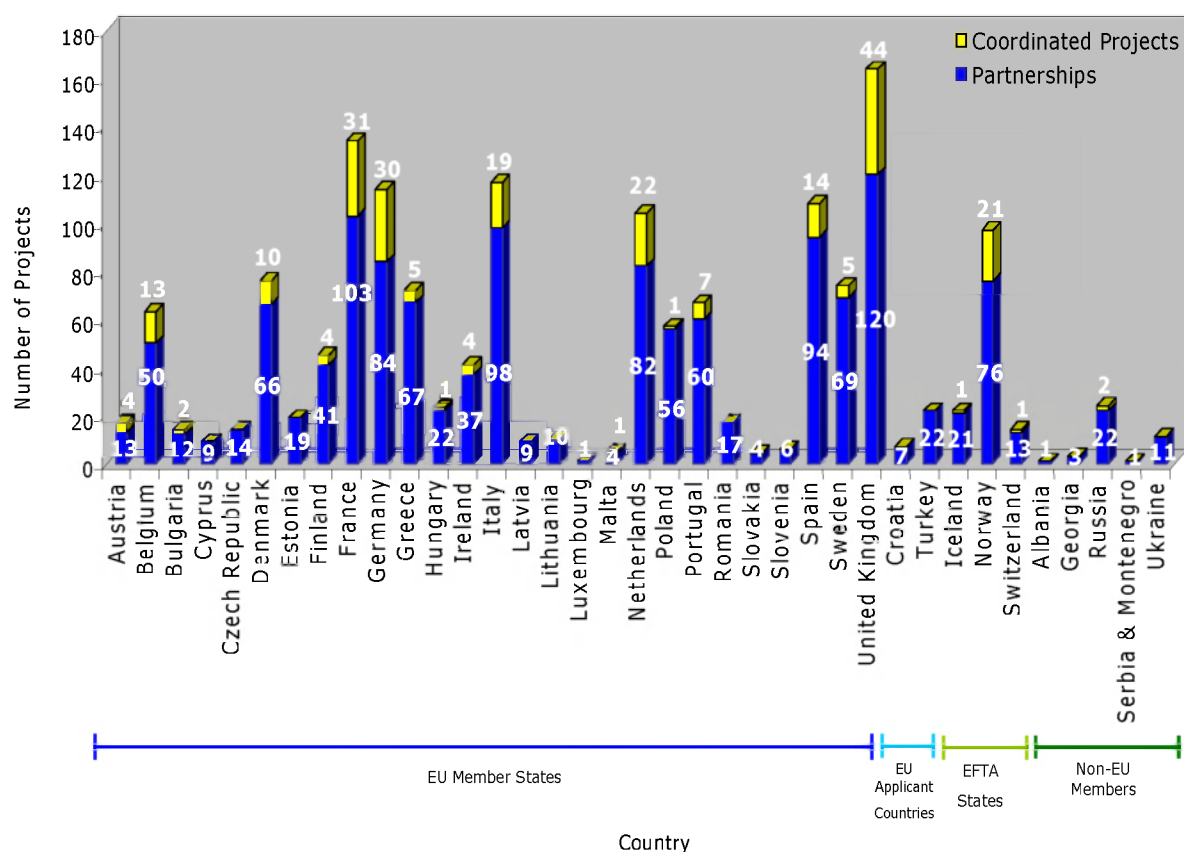


Figure 2 – Coordination and Participation in the FP6 projects by European countries

Source: EurOcean Last updated: 8 January 2007

Germany and Italy share third position in this ranking. Germany holds a higher number of projects coordination comparatively to Italy (30 projects with German leadership

versus 19 with Italian leadership). However, Italy has higher partnerships in projects than Germany (98 Italian partnerships versus 84 German partnerships). As for non EU countries, Norway has the highest responsibility in terms of coordinated projects, 21 projects, and it is involved in partnership of 76 research projects.

Russia (Non-EU Member) coordinates two project. Iceland and Switzerland (EFTA states), and Argentina, Israel and United States (Non-European countries) coordinates one FP6 marine related project each.

2.2 Distribution of the Projects and Funding by Thematic Areas and Countries

EurOcean classified the projects according to 15 categories of activity (Figure 3) of the FP6 structure (Figure 1).

Table 1 – Budget allocated to the main FP6 activity areas and to marine projects within those activity areas.

Activity Areas	FP6 Budget (1)	Budget spent in Marine Science and Technology (2)	% Budget spent in Marine Science and Technology
Aeronautics_Space	1.182.000.000 €	14.950.000 €	1,3
Citizens and Governance in a Knowledge-based Society	247.000.000 €	0 €	0,0
Development of Research/Innovation Policies	55.000.000 €	0 €	0,0
ERA NET	292.000.000 €	26.327.339 €	9,0
Food Quality_Safety	753.000.000 €	39.305.824 €	5,2
Global Change_Ecosystems	769.000.000 €	171.205.297 €	22,3
Information Society Technologies	3.994.000.000 €	7.799.600 €	0,2
JRC_Activities	835.000.000 €	Unknown	Unknown
Life Sciences, Genomics and Biotechnology for Health	2.514.000.000 €	0 €	0,0
Marie Curie Actions	1.732.000.000 €	14.894.051 €	0,9
Nanotechnologies and Nanosciences, Knowledge based Multifunctional Materials and New Production Processes and Devices	1.429.000.000 €	0 €	0,0
Research Infrastructures	715.000.000 €	34.573.588 €	0,0
Research and Innovation	319.000.000 €	Unknown	Unknown
Policy support and anticipating scientific and technological needs*	590.000.000 €	53.641.819 €	0 €
Science and Society	88.000.000 €	0 €	9,1
Specific International Co-operation Activities	346.000.000 €	22.061.931 €	6,4
Specific Research Activities_SMEs	473.000.000 €	21.431.436 €	4,5
Sustainable Energy	890.000.000 €	20.474.155 €	2,3
Sustainable Surface Transport	670.000.000 €	146.030.016 €	21,8
Total	17.883.000.000 €	572.695.056 €	3,2

* Policy support and anticipating scientific and technological needs includes Nest and Research for Policy Support areas

Source: (1) Official Journal of the EU, 30.4.2004; (2) EurOcean Last updated: 16 October 2006

The Global Change and Ecosystems research area reveals to be the most important sector taking up to 171 205 297 € (22,3% of the FP6 budget for this area), with 38 projects running (Table 1, Figure 3). Even so, the area of research that concentrates higher number of projects is the field of Sustainable Surface Transport, where 46 projects are under development or completed. This activity area is the second most important area in terms of budget allocated, where 146 030 016 € (21,8% of the budget awarded to Sustainable Surface Transport) are being spent on marine research (Table 1, Figure 3).

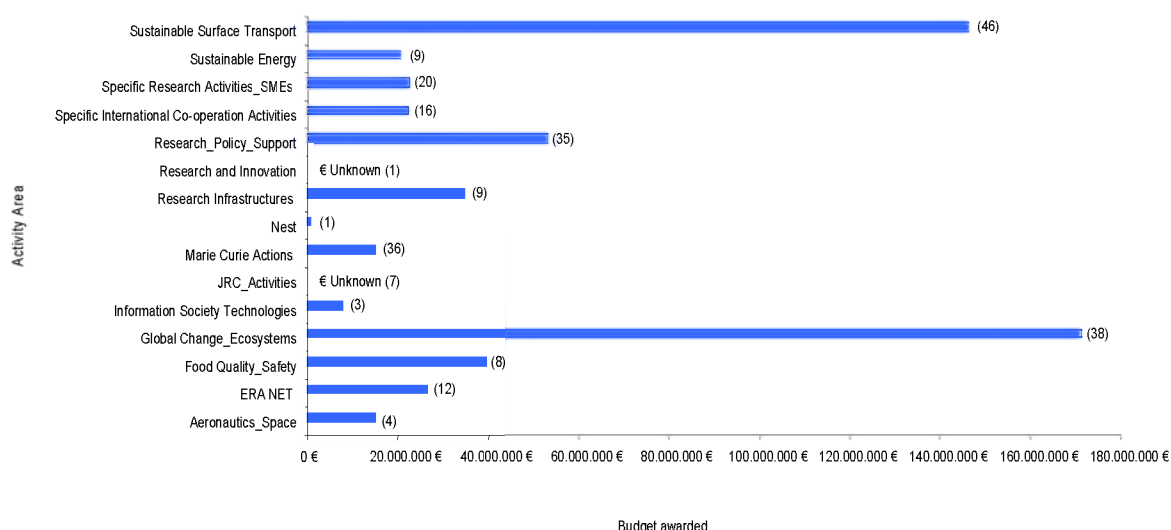


Figure 3 – Budget allocated to FP6 marine sciences related projects *per* FP6 activity area. The number within brackets represents the number of projects *per* activity area.

Source: EurOcean Last updated: 16 October 2006

The Marie-Curie Actions scheme finances 36 marine research projects, being the third largest activity area in terms of number of projects. Nevertheless, the money allocated to these actions is among the lowest values of marine research funding, around 14 894 051 € (Table 1, Figure 3).

Despite the fact that the United Kingdom coordinates the largest number of FP6 marine RTD projects, France is responsible for the coordination of the highest amount of funding, 113 189 998 € (Figure 4)⁷.

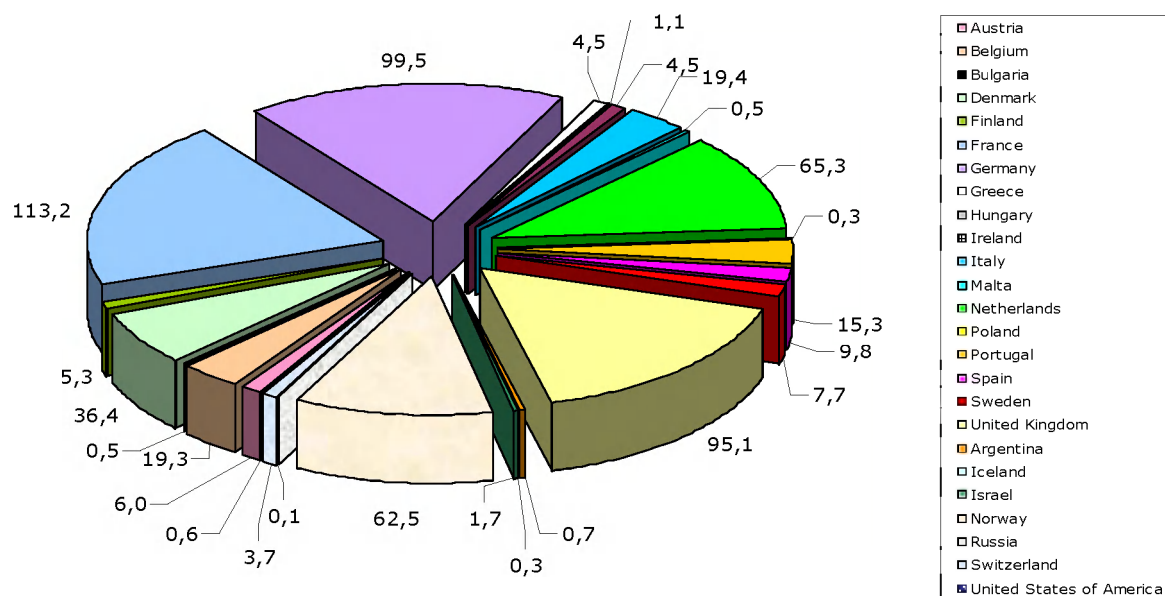


Figure 4 – Amount of money (Euro Million) by coordinator country

Source: EurOcean Last updated: 16 October 2006

⁷ For a better understanding of Figures 4 and 5, EurOcean considered that each coordinator 's country is responsible for the funding allocated to the projects. In a practical scenario, the management of the budget allocated to each project might follow a different procedure.

Considering the non EU Member States, Norway coordinates the largest amount of funding (62 539 870 €).

France and United Kingdom are responsible for the highest amount of funding awarded to marine research within the Global Change and Ecosystems activity area (Figure 5 a). France coordinates 53 999 990 € (corresponding to seven coordinated projects), as for United Kingdom, 51 179 974 € are being coordinated (corresponding to seven coordinated projects).

The investment being done in Global Change and Ecosystems marine research projects is quite high, where the most expensive project listed by EurOcean in this area, DAMOCLES⁸, costs 16 100 000 € and it is coordinated by France.

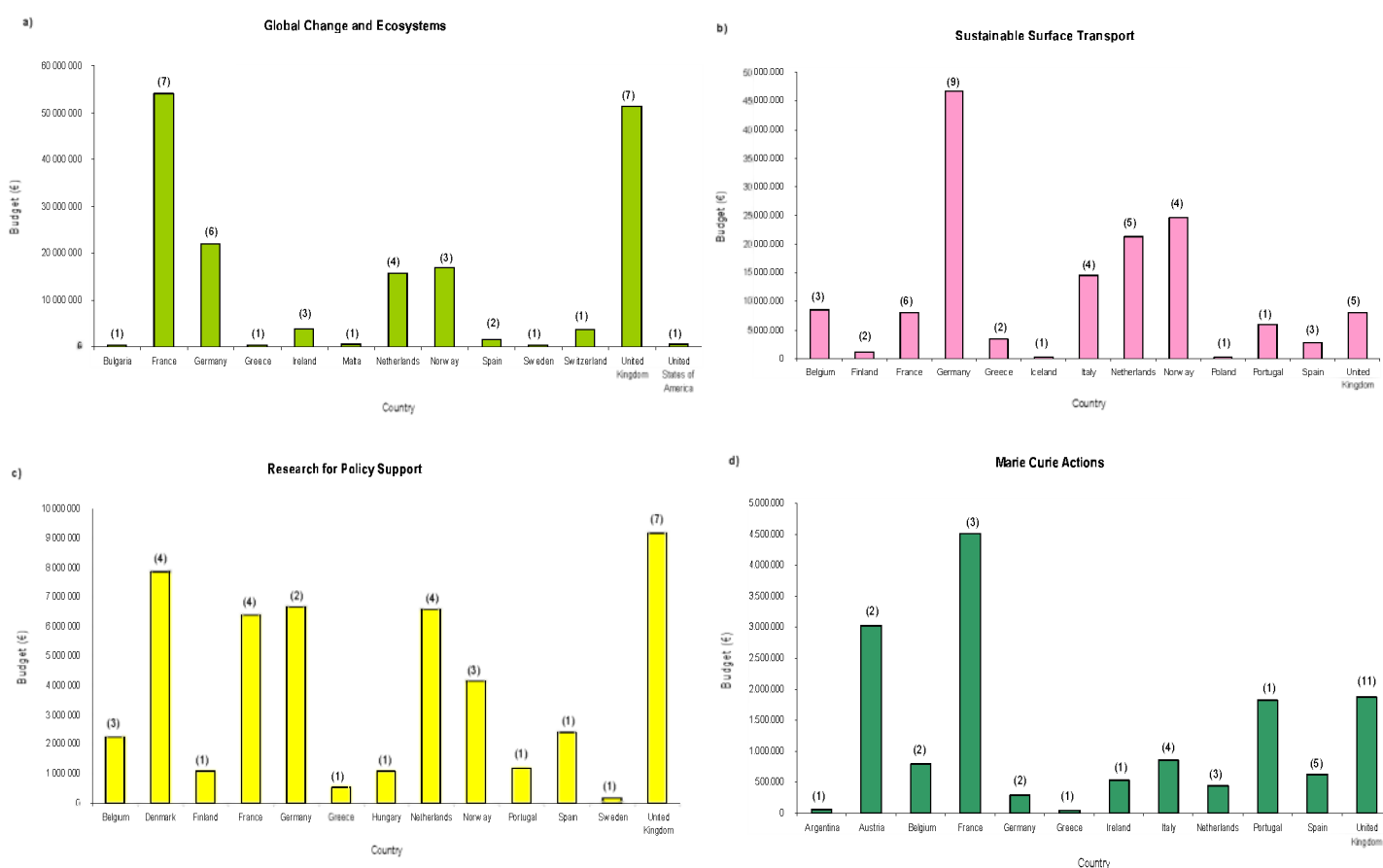


Figure 5 – Amount of money coordinated *per* Activity Area and *per* project and by country. The number within brackets represents the number of projects per country.

For these graphs, only the Activity Areas with number of projects higher than 35 were selected: a) Global Change and Ecosystems; b) Sustainable Surface Transport; c) Research for Policy Support; and d) Marie Curie Actions. Only the countries responsible for coordination of projects are represented.

Source: EurOcean Last updated: 16 October 2006

Germany is the leading country regarding to the amount of money coordinated in maritime transport research (Sustainable Surface Transport, Figure 5 b), coordinating 46 708 890 € (which corresponds to nine projects coordinated by this country).

⁸ For further information on this project, please visit <http://www.fp6.eurocean.org/>

INTERSHIP⁸ was awarded the highest amount of funding registered so far by EurOcean, 19 000 000 €. This project is under the activity area “Sustainable Surface Transport” and is coordinated by Norway.

Regarding Research for Policy Support (Figure 5 c), United Kingdom leads the rank according to the number of projects coordinated, coordinating seven projects, as well as to the amount of money coordinated, a total of 9 191 623 € (Figure 5 c).

United Kingdom coordinates the highest number of Marie Curie Actions (11 Actions) comparatively to the other countries involved in these actions. Nevertheless, the amount of money coordinated does not correspond to the total number of projects. France leads the rank regarding the funding coordinated in Marie Curie Actions, being responsible for 4 507 647,00 €, coordinating three projects (Figure 5 d).

2.2 Evolution of the Budget Allocated to Marine Projects from 1987 to 2006

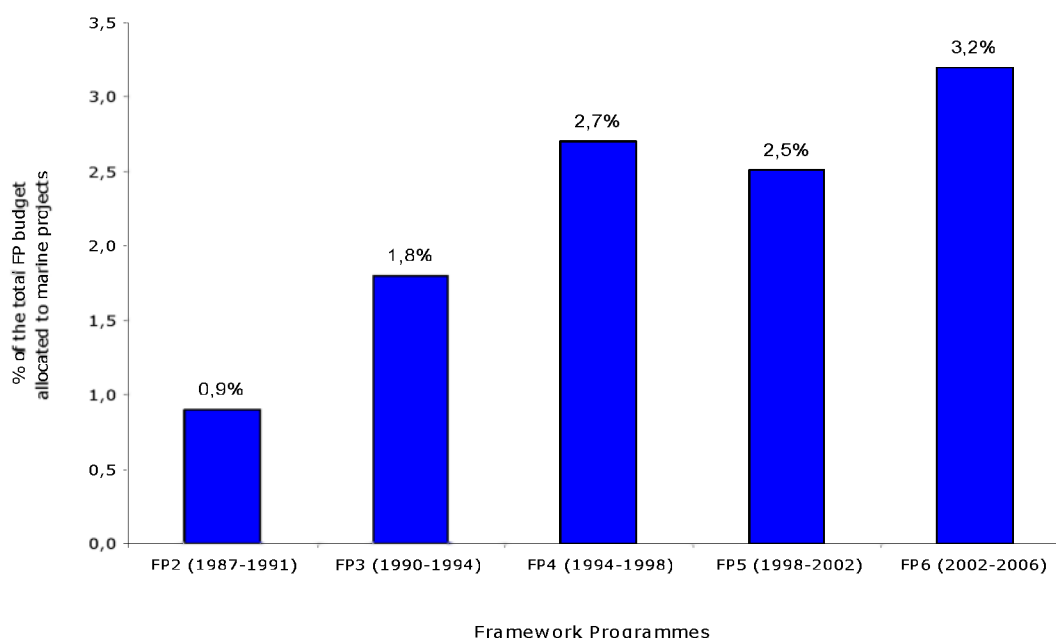


Figure 6 - Percentage of the total FP budget allocated to marine projects through the different Framework Programmes (FP2 to FP6).

Specific Marine Programmes in the FP's: FP2 – MAST I; FP3 – MAST II; FP4 – MAST III and FAIR. No specific programmes: FP5 and FP6.

Source: EurOcean *Last update:* 16 October 2006

The increasing budget allocated to dedicated marine RTD programmes (MAST and FAIR) from 1987 to 1998 has been an efficient way to initiate a trend aiming at building up a European marine research area. When these dedicated marine programmes (MAST and FAIR) disappeared after FP4, there was only a minor reduction in terms of percentage of total funding allocated to FP5 marine projects and then it increased again in FP6 where the marine research projects listed by EurOcean represents 3,2% (572 695 056 €) of the FP6 budget (17 883 000 000 €) (Figure 6).

3. Conclusion

This statistical analysis of the FP marine projects demonstrates the overall positive results for the marine RTD community from FP2 to FP6 and this has to be considered as a major achievement regarding the Research Framework Programmes of the EC.

Clearly the participation of marine RTD stakeholders in FP7, which started in January 2007 for a duration of seven years, should continue to expand since the 3,2% allocated to marine research in FP6 still represents a small percentage in comparison with other RTD domains in a scope of a future maritime policy to support an ocean-based economy.

The necessity to develop management mechanisms for facilitating multilateral cooperation on marine RTD should be considered as priority. Such tools should facilitate the dissemination of the results of the EC funded projects, and should allow to monitor the real impact of the EC funding and to promote maritime competitiveness in the framework of a European Maritime Policy.