

## Marine-related proposals 2007-2010

An Analysis and Inventory across FP7



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## Marine-related proposals 2007-2010

including proposals with potential applications in the maritime sector

Edited by Charlotte Jagot in cooperation with Hanz Jellasics and Jacques Fuchs

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#### 1. PREFACE

Seas and oceans have a huge impact on our daily lives, providing an essential part of our wealth and well-being. They are not only a critical source of food, energy and resources, but also provide the majority of Europe's trade routes. Sea-related industries and services generate about 5% of Europe's gross domestic product. The value of living by the sea, while intangible, is high to many of us. Europe's coastlines are a favoured site for recreation and residence, and almost 50% of the European population live less than 50 km from the coast. Yet overfishing, pollution from industry and transport, discharge of nutrients, together with the impact of climate change are dramatically affecting the marine environment, putting it at risk of severe damages.

Science and technology have a vital role to play in the preservation of the marine environment as well as in realising the great economic potential of our seas and oceans. From the "Galway Declaration" in 2004 to the "Aberdeen Declaration" in 2007 and the "Ostend Declaration" in 2010, the European scientific community has provided excellent contributions for the development of a dynamic and sustainable European maritime policy and European Research Area (ERA). The "European Strategy for Marine and Maritime research" (COM (2008) 534), 4 adopted in 2008, is an essential pillar of the EU<sup>5</sup> integrated maritime policy and provides a reference framework for marine and maritime research at European level.

The Strategy recognises that better dissemination about marine-related research initiatives funded at EU level is of paramount importance to help develop synergies and cross-fertilisation of knowledge between sectors and disciplines. It can result in a greater acknowledgement and awareness of the benefits arising from the different research initiatives and contribute to avoid potential duplication of efforts.

Information on marine-related projects across the 7th Framework Programme for research (FP7) is particularly important at a time when our European research landscape shifts towards a "challenge-based approach" and seeks to have a wider scope than traditional sector-oriented research. This approach is at the heart of the recent Joint Programming Initiatives which target key challenges for society which could only be tackled and solved if several Member States coordinate and pool their research efforts. One of the most recent initiatives focuses on "Healthy and Productive Seas and Oceans" (JPI OCEANS)<sup>6</sup> and specifically looks at research challenges that lie at the interface of many sectors. This challenge-based approach is further developed in the "Horizon 2020" proposal that aims at facilitating multidisciplinary research and innovation by bringing together resources and knowledge across different fields, technologies and disciplines. Another FP7 key initiative worth mentioning in this context is the launch of "The Ocean of

http://ec.europa.eu/research/press/2007/maritime-briefing/pdf/24-galway-declaration\_en.pdf

http://ec.europa.eu/maritimeaffairs/declaration\_en.html

http://www.eurocean2010.eu/declaration

<sup>4</sup> COM (2008) 534: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0534:FIN:EN:PDF

<sup>&</sup>lt;sup>5</sup> EU: European Union

<sup>6</sup> http://www.jpi-oceans.eu

COM (2011) 808: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0808:FIN:en:PDF

Tomorrow" (FP7-OCEAN) cross-thematic calls since they also very much pave the way towards the new approach under "Horizon 2020".

In the context of the "European Strategy for Marine and Maritime Research", the second edition of this study is an attempt to present a consolidated quantitative and qualitative analysis as well as an inventory of marine-related proposals selected under the 7th Framework Programme for research for the period 2007-2010. Over the past years, data has been compiled, checked and analysed in order to provide the stakeholders with a thorough and reliable overview of marine-related proposals across four FP7 specific programmes: "COOPERATION", "IDEAS", PEOPLE and "CAPACITIES".

In presenting this analysis, the Commission responds to the need expressed by the scientific community during the consultation on the Green Paper "on a future maritime policy for the European Union" to ensure regular exchange of information on marine and maritime research addressed in the different specific programmes of the 7<sup>th</sup> Framework Programme for research.

Conclusions of the "Seminar on marine sciences and technologies in FP7" – Brussels – 16th January 2007: http://ec.europa.eu/maritimeaffairs/pdf/brochure\_ft7.pdf

#### 2. RATIONALE OF THE ANALYSIS

## You want to know more about marine related research within FP7 – Why will this study be relevant to you?

This analysis seeks to shed light on the variety of marine-related activities funded across the 7<sup>th</sup> Framework Programme for research and development (FP7) whether they have a direct link to the marine environment or just have potential applications for the maritime economy. It gives an overview of all marine-related research projects over the years 2007-2010. It presents a simple statistical analysis of such related projects within the first four years of FP7 in terms of number of proposals and EU contribution. As such, it completes the edition published in 2010 which was focusing on the 2007-2008 calls for proposals. This study will allow all interested parties (citizens, researchers, enterprises, NGOs) finding relevant information about every theme or type of activity existing within FP7: either on research infrastructures, grants for young researchers or collective projects with the participation of SMEs. It also provides useful background information for researchers and research organisations involved in marine sciences and technologies or in maritime activities as it sheds light on existing initiatives and could help identifying complementarities, new partners, and avoid potential duplication of efforts. Finally, the objective of this analysis is also to encourage researchers and other interested parties looking beyond their traditional field (environment, transport, fisheries, aquaculture, energy...) in order to embrace more holistic, forward-looking and innovative approaches.

#### Understanding our approach - How did we proceed?

The analysis relies on individual screening of proposals' abstracts and titles within 217 calls (2007-2010) for identification of marine/maritime components among submitted and selected proposals within the four specific programmes: "COOPERATION" (115 calls), "IDEAS" (9 calls), "PEOPLE" (38) and "CAPACITIES" (55). Identification of marine-related proposals is based on screening of individual proposals using a list of simple keywords. Details of the methodology applied for this analysis are provided in the annex.

For practical purposes, the term "marine-related proposals" will be used in this analysis to qualify all proposals when they have a marine (exploitation of the living and non living resources from the seas) or coastal nature (including estuaries) or when they are related to maritime activities (transport, shipbuilding, naval operations, renewable energies, border security...). Proposals with an indirect link to the marine environment or maritime activities (materials, engineering, earth sciences, underwater technologies...) have also been included when they have potential applications for the maritime economy or when they can contribute to the preservation of the marine environment. Proposals related to aquaculture activities in a broad sense have been taken on board. These include freshwater and marine aquaculture, as well as all fish species

In line with the broad objectives of the Integrated Maritime Policy COM (2007) 574 final "An Integrated Maritime Policy for the European Union": http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0575:FIN:EN:PDF

when they are used as part of the food production cycle (including seafood, fish nutrition and fish as feed). Algae aquaculture for energy production is also included. Fish used as research model organisms for experimentation purposes have not been considered.

The approach adopted in this analysis is purposely very broad and therefore comprises an inherent error margin which is to be acknowledged from the outset. Despite its intrinsic flaws, this analysis gives for the first time a thorough overview of all activities funded across FP7 which are relevant to interested parties involved in marine sciences and technologies or in maritime activities at large.

#### 3. EXECUTIVE SUMMARY

### Snapshot of marine-related research within the 7<sup>th</sup> Framework Programme for Research – Where do we start?

Through its successive Framework Programmes for research, the European Union has constantly increased its support for research activities across the whole range of marine sciences and technologies: ecosystems, sustainable transport and energy, space, biotechnology and food quality and safety, to name some of the most important. Within the  $6^{\text{th}}$  Framework Programme for research and development (FP6), more than 600 million  $\in$  have been awarded to research projects in the maritime sector  $^{10}$ .

Similarly to the 6<sup>th</sup> Framework Programme for research, there is no dedicated thematic area for marine- related research within FP7. However, marine sciences and technology have been recognised among "the priority scientific areas which cut across themes"<sup>11</sup> in the 7<sup>th</sup> Framework Programme. As the oceans ignore physical borders, cover about 70% of the earth's surface and

play a significant role in regulating the Earth's climate, to name just a few characteristics, it is not surprising that a great variety of research activities and technologies are relevant to the marine environment or the maritime economy. In fact, marine sciences and technology in a very broad sense are integrated into all themes of the "COOPERATION" specific programme and especially into: Transport (including Aeronautics), Food, Agriculture, Fisheries and Biotechnology (KBBE); Environment (including Climate Change) and Energy. Beyond this thematic approach, coordination of cross-cutting marine-related activities is also taking place in FP7 with the aim of fostering cross-fertilisation between scientific fields, disciplines and sectors.12 In fact, marinerelated proposals are to be found in many other sections and specific programmes of the 7th Framework Programme and it is the ambition of this analysis to identify, analyse and



For an analysis of marine related projects funded within FP6, please see: "Marine related research and the future of the maritime policy", p18-19 & p46-56: http://ec.europa.eu/research/transport/pdf/maris\_v10basse\_en.pdf

Decision No 1982/2006/EC of the European Parliament and of the Council of 18 December 2006 concerning the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013)

See for example the call for proposals on the cross-thematic initiative "The Ocean of Tomorrow" in 2009 and 2010

increase awareness of such diverse initiatives funded under FP7 for 2007-2010. This analysis will consider FP7 as a whole <sup>13</sup>, taking into account the activities of the 4 main specific programmes: "COOPERATION" (SP1) for large thematic collaborative research projects; "IDEAS" (SP2) for the support to excellent "frontier research" <sup>14</sup>; "PEOPLE" (SP3) for the support to the training and career development of researchers, and finally "CAPACITIES" (SP4) to foster the improvement of the research capacities and environment across Europe (i.e. infrastructures, research for the benefit of SMEs, international cooperation…).

#### What do we consider as marine-related research proposals within this study?

For practical purposes, the term "marinerelated proposals" will be used in this analysis to qualify all proposals when they have a marine (exploitation of the living and non living resources from the seas, including marine and freshwater aquaculture activities) or coastal nature (including estuaries), or when they are related to maritime activities or the marine environment. Proposals with potential applications for the maritime economy or which can contribute to the preservation of the marine environment have also been included. Therefore the degree of marine "component" can vary between proposals and is, to some extent, subject to interpretation. Some proposals are 100% marine-related some are partially or even marginally related to the sea. This is part and parcel of the approach which aims to make all readers aware of the cross-cutting nature of marine sciences and technologies as well as of the variety of applications relevant to the maritime economy.



The Joint Research Centre and EURATOM specific programmes excluded

ERC (European Research Council) grants aim to support "frontier research", in other words the pursuit of questions at or beyond the frontiers of knowledge, without regard for established disciplinary boundaries: http://erc.europa.eu/

#### Basic statistical information - What did we find out?

#### · Submitted proposals

The analysis of 217 calls for proposals over 2007-2010<sup>15</sup> reveals that **about 4.4%** (3384 proposals) of all proposals submitted (77589), can be identified as marine-related proposals or relevant to this analysis because they bear potential applications in the maritime sector. The approach of this analysis is very broad since one of the objectives is to raise the awareness of all interested parties on the variety of activities relevant to the oceans and seas either from an environmental or an economic perspective.

#### · Proposals selected for funding

An estimated amount of 1.4 billion € has been dedicated to fund 644 marine-related proposals. It accounts for about 6.4% of the financial contribution awarded by the European Union to all proposals selected within FP7 in 2007-2010 and 5% in terms of the number of proposals.



It should be kept in mind that the purpose of

the statistical data presented here is to give a thorough overview of marine related projects within FP7, including projects which are indirectly linked to the marine environment or have potential applications for the maritime economy. The EU contribution amount mentioned for proposals selected for funding is based on the sum of the EU contribution of individual proposals. In other words, even though only part of the EU contribution may directly relate to marine activities, the whole EU contribution of the proposal has always been taken into account. Therefore financial information provided in this analysis is not proportional to the marine-related content of the project. All budget estimates are purely indicative and are mentioned only for information purposes.

The list of calls analysed is available in annex

#### • Breakdown of findings per specific programme

The table below summarises these findings across the 4 specific programmes analysed.

	Nb of marine related proposals submitted	Nb of marine-related proposals selected for funding	EU contribution in M€ of marine related proposals selected for funding¹6
COOPERATION - SP1	1315	258	1015
IDEAS - SP2	603		65
PEOPLE - SP3	990	255	89
CAPACITIES - SP4	476	95	208
Total	3384	644	1377
Ratio marine/total	4.4%	5%	6.4%

#### Preliminary information about Participation – Who is involved?

First analysis of participation indicates that the **644** marine-related proposals selected gather a total of 5188 participants from **93** countries around the world. Most active countries in terms of **participation** in these projects are the **United Kingdom, Germany, France, Italy and Spain** with participation in 770, 496 and 482, 412 and 393 proposals respectively. Other most involved countries are **Norway, The Netherlands and Belgium** with participation in 346, 310, 196 proposals respectively. Not surprisingly, these countries are also the most involved in assuming the responsibility of **coordination** of marine-related research proposals. Indeed, 148 coordinators come from the United Kingdom, 92 from France, 75 from Spain and 51 from Germany. For the other most involved countries, the breakdown is the following: 46 coordinators from Italy and Norway and 34 from the Netherlands. In total, coordinators of marine related proposals selected for funding come from **28** countries (including associated countries such as Norway, Switzerland and Israel).

 $<sup>^{\</sup>rm 16}$   $\,$  All figures have been rounded to the next highest value

Part I – Analysis of marine-related proposals across the 4 specific programmes of FP7: ("Cooperation", "Ideas", "People" & "Capacities")

This section (part I) gives a general overview of marine related proposals across all relevant specific programmes: "COOPERATION" (SP1), "IDEAS" (SP2), "PEOPLE" (SP3) and "CAPACITIES" (SP4). You will find in part II the inventory of all marine-related proposals included in this study. Details on the methodology as well as the list of calls for proposals and the keywords used for the screening of proposals are presented in annex.

The CORDA database is being constantly updated; therefore the picture of FP7 statistics is continuously changing. Given the time frame of the whole procedure (from submission to signature of the grant agreement) and the consequent limited availability of data on grant agreements signed during the most recent year at the moment of data extraction, it is considered more informative to examine the cumulative situation over 2007-2010 instead of statistics on a yearly basis.

## 1. Number of calls including marine-related proposals (2007-2010)

The analysis reviewed 217 calls closing before 08/12/2010 in the four specific programmes (EURATOM and JRC excluded). While the number of calls analysed in 2007 and 2008 was quite stable with an average of 52 calls each year, the number of calls in 2009 was slightly lower while it was higher in 2010. For example, there was no call for proposals on Sustainable Surface Transport (SST) in 2009. It is worth mentioning since the "Transport" theme, and especially the Sustainable Surface Transport sub-theme was the one with the greatest number of marine-related proposals selected under COOPERATION. Such yearly variations are somewhat compensated when considering the cumulative situation over 2007-2010. In addition to the number of calls published, the number of topics opened per activity, as well as their characteristics (e.g. bottom-up approach<sup>17</sup>), also plays a role in determining the final number of proposals selected.

## 2. Proposals submitted per Specific Programme (2007-2010)

The analysis reveals that **about 4.4% of all proposals** submitted to FP7 in 2007-2010 can be identified as marine-related proposals, i.e. with a more or less strong link with the marine environment or maritime activities, including potential industrial applications in the maritime sectors.

<sup>&</sup>lt;sup>17</sup> For example under the area "INFRA-2008-1.1.1 Bottom-up approach: Integrating Activities in all scientific and technological fields", the EUROFLEETS project was funded.

Proposals have been mainly submitted to the "COOPERATION" programme (39%) and then to the "PEOPLE" programme (29%). Figure n°1 presents the breakdown between the 4 specific programmes.

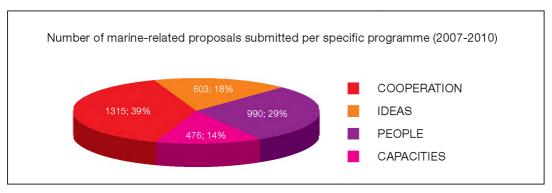


Figure n° 1: Number and percentage of marine-related proposals submitted per specific programme over 2007-2010

## 3. Marine related proposals selected for funding within FP7 (2007-2010)

In total, over 2007-2010, an estimated financial contribution of **1.4 billion** € has been awarded to **644** marine-related projects, corresponding to **5%** <sup>18</sup> of all proposals selected and accounting to **6.4%** in terms of EU contribution. Figure n°2 shows that proposals have been mainly selected under the "COOPERATION" programme (40%) and the "PEOPLE" programme (40%).

The scope of activities funded under the 4 specific programmes is wider than traditional research projects. Under the "PEOPLE" specific programme for example, some actions target awareness-raising, communication and dissemination activities towards the general public. For example, the "Researchers' night" objective is to bring researchers closer to the public<sup>19</sup>. It is also the case for certain type of activities funded under "CAPACITIES" such as the award of research prizes<sup>20</sup>, activities aiming at strengthening the research capacities of regional research clusters ("Regions of knowledge" projects) or of laboratories located in outermost regions (i.e. "Research potential" projects). All these activities have been included within this study when they bear a marine dimension even though it may be limited.

Figure n°2 shows the number of marine-related proposals selected for funding per specific programme and figure n°3 presents the financial contribution allocated to the selected proposals per specific programme.

A total of 12748 signed grant agreements are part of this analysis amongst the 217 calls analysed

<sup>&</sup>lt;sup>19</sup> See for example "2007UWM" Researchers' Night project

<sup>&</sup>lt;sup>20</sup> The European Science Awards, i.e. EPICA project

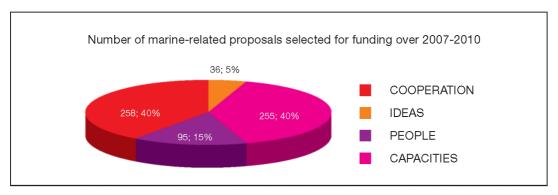


Figure n°2: Number and percentage of marine-related proposals selected for funding per specific programme over 2007-2010

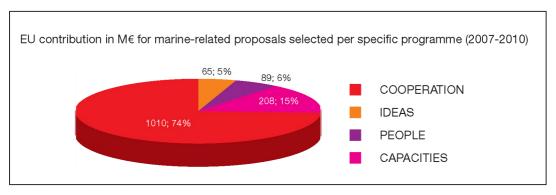


Figure n°3: EU contribution in M€ and percentage for marine-related proposals selected for funding per specific programme over 2007-2010

The results reflect, at a glance, the specificities of the type of activities funded within FP7. This is especially noteworthy for "COOPERATION", "IDEAS" and "PEOPLE". The financial contribution awarded to "COOPERATION" marine-related proposals is high as they account for 74% in terms of EU contribution and 40% in terms of proposals. This is consistent with the type of projects funded under this specific programme. Indeed, most projects consist of collaborative research projects with a relatively high number of participants (13 participants in average in marine-related proposals). The "CAPACITIES" specific programme is the second largest source of funding for marine-related proposals. The financial amount awarded to the 95 proposals accounts for 15% (208 M€) of the overall EU contribution awarded to marine-related proposals. This significant amount can be partly explained by the size and scope of research infrastructure (including e-infrastructures) projects funded under CAPACITIES.

The financial contribution awarded to marine-related ERC grants is in comparison quite substantial. Indeed, the 36 grants account for about 5% of all marine-related proposals in terms of EU contribution. The financial contribution awarded to "PEOPLE" activities is on the contrary relatively small (6%) given the high number of proposals selected (255). This is logical when considering that the "PEOPLE" specific programme involves a large number of individual grants (International incoming fellowship, intra-European fellowship, international outgoing fellowship...).

#### Summary

The table below summarises these findings across the 4 specific programmes.

	Nb of marine related proposals submitted	Nb of marine-related proposals selected for funding	EU contribution in M€ of marine related proposals selected for funding <sup>21</sup>
COOPERATION - SP1	1315	258	1015
IDEAS - SP2	603		65
PEOPLE - SP3	990	255	89
CAPACITIES - SP4	476	95	208
Total	3384	644	1377
Ratio marine/total	4.4%	5%	6.4%

#### 4. Findings per specific programme

#### • "COOPERATION" (SP1)

With two-third of the budget (32.4 billion €), the "COOPERATION" specific programme is the core of FP7 and supports a whole range of research activities in 10 thematic areas corresponding to major fields of knowledge and technology where transnational cooperation can address major European challenges in the social, environmental or industrial field.

The following shortcuts will be used within this analysis to designate the 10 themes of the "COOPERATION" specific programme.

- 1. HEALTH: Theme 1: "Health"
- 2. KBBE: Theme 2: "Knowledge Based Bio-Economy" (food, agriculture and fisheries and biotechnology)
- 3. ICT: Theme 3: "Information and Communication Technologies"
- 4. NMP: Theme 4: Nanosciences, nanotechnologies, Materials and new Production technologies
- 5. ENERGY: Theme 5 "Energy"
- 6. ENV: Theme 6 "Environment" (including climate change)
- 7. TPT: Theme 7 "Transport" (including aeronautics)
- 8. SSH: Theme 8"Socio-economic Sciences and Humanities"
- SEC: Theme 9 "Security"
- 10. SPA: Theme 10 "Space"

<sup>&</sup>lt;sup>21</sup> All figures have been rounded to the next highest value

For the purpose of this analysis, an additional category has been created: "ERA-NET" in order to better distinguish this type of activities related to the coordination of national research programmes from regular collaborative research projects.

Within the 115 "COOPERATION" calls analysed, **258** marine-related proposals have been selected for funding in 2007-2010 across the 10 thematic priorities. In terms of financial contribution, this means that about **1015 M€** have been awarded to proposals relating to the maritime sector. It accounts for about **6.5%** of all proposals selected within "COOPERATION" and **7%** in terms of EU financial contribution. With 258 proposals selected out of 1315, the success rate of marine-related proposals amounts to **19.6%** which is slightly higher than the average success rate of proposals submitted to this specific programme (18.2%)<sup>22</sup>. See table below:

Figure n° 4 shows the breakdown of marine-related proposals selected for funding within "COOPERATION" and figure n° 5 presents the financial contribution awarded to these proposals per theme.

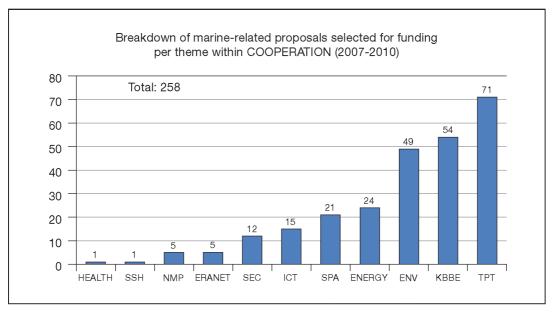


Figure n° 4: Breakdown of marine-related proposals selected for funding per theme within "COOPERATION" over 2007-2010

Fourth FP7 Monitoring report – Monitoring report 2010 p.97: http://ec.europa.eu/research/evaluations/pdf/archive/fp7\_monitoring\_reports/fourth\_fp7\_monitoring\_report.pdf#view=fit&pagemode=none

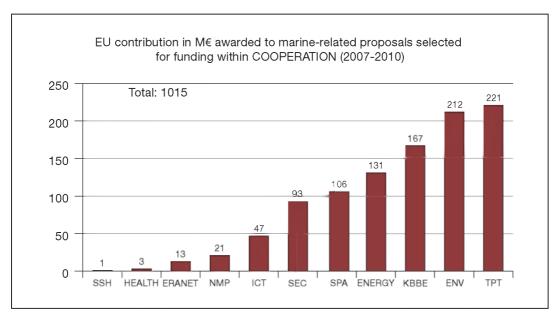


Figure n° 5: EU contribution in M€ for marine-related proposals selected for funding per theme of "COOPERATION" over 2007-2010

The results show that the 258 marine related proposals selected for funding in 2007-2010 within "COOPERATION" covers all themes of the specific programme. Most proposals are to be found within the "Transport (including Aeronautics)" theme, the "KBBE" theme, "Environment (including climate change)", and "Energy" themes. To these projects, should be added 5 ERANETs which have been selected under KBBE, ENV and TPT for a total EU contribution of 13 M€. They are presented as a separate item in the graphs above since they refer to a particular kind of activity i.e. the coordination of national research programmes. In practice, two ERA-NETs relate to KBBE in the field of agricultural research in the Mediterranean region (ARIMNet) and in the field of animal health (EMIDA). The "BONUS +" and "SEAS-ERA"<sup>23</sup> projects relate to the "Environment" priority. The former has now turned into an article 185 initiative<sup>24</sup> while SEAS-ERA is still on-going and its main objective is to provide previous marine and maritime ERA-NETs with an overarching and more integrative structure.

Altogether, the four thematic priorities and the 5 ERANETs<sup>25</sup> gather 78.7% (203 proposals) of all marine-related proposals selected within "COOPERATION" and about 73.3% in terms of EU contribution (744 M€).

<sup>23</sup> http://www.seas-era.eu

<sup>&</sup>lt;sup>24</sup> BONUS -169: http://www.bonusportal.org/

Including the 5 ERA-NETS: ARIMNET (KBBE), EMIDA (KBBE), BONUS+ (ENV), SEASERA (ENV) and MARTEC II (TPT)

Most marine-related proposals belong to the "Transport" theme with 71 projects focusing mainly on maritime transport (greening of transport, competitiveness, safety & security) but also on other aspects such as GALILEO<sup>26</sup>. Within the "KBBE" theme, 54 proposals have been selected for funding mainly on fisheries, aquaculture, marine biotechnologies and (sea) food safety & quality. Forty-nine proposals have also been selected for funding within the "Environment (including climate change)" theme especially dealing with the management of marine ecosystems, climate change, pollution and earth observation. A high number of proposals were also selected within the "Energy" theme. The 24 marine-related proposals deal mainly with renewable electricity generation (ocean, wind and wave), carbon capture and storage or renewable fuel production.

A novelty in 2009 regarding marine-related research was the launch of "The Ocean of Tomorrow" cross-thematic calls for proposals²7. This new initiative was part of the "EU Strategy for marine and maritime research" COM 2008 (534) with the objective of fostering multi-disciplinary approaches and integration between various scientific disciplines and economic sectors on key crosscutting marine-related research challenges. Such projects bring together scientists, technology providers, industrial partners (including SMEs) and relevant end-users to collectively address key societal or technological challenges that cut across several "COOPERATION" thematic priorities. The objective of the FP7-OCEAN-2010 call was to help understanding how arctic and marine ecosystems respond to a combination of natural and human-induced factors and to study the impact of sub-seabed storage on the marine environment. "The Ocean of Tomorrow" projects selected in this call²³ show that the 7th Framework Programme for research can address global issues in an interdisciplinary way. The projects selected were funded by 5 themes of FP7: Food, Agriculture, Fisheries, and Biotechnology, Energy, Environment, Transport and Socio-economic Sciences and Humanities for a total of € 34 million. "The Ocean of Tomorrow" calls are now part and parcel of the European marine research landscape.

In addition to these more traditional areas, twenty-one proposals were selected within the "Space" theme with a significant budget (106 M€ of EU financial contribution), in order to develop the marine component of the "Global Monitoring for Environment and Security" (GMES) initiative. Fifteen proposals were selected within the "Information and Communications Technologies" (ICT) theme. They mainly address research in the field of robotics and underwater technologies. The quite high number of proposals selected within the "Security" (12) theme is noteworthy. Proposals selected address mainly maritime security or sea-border surveillance research activities. As regards to the NMP theme, all 5 proposals were funded during the first two years of FP7 (2007-2008).

LS4P (http://www.ls4p.com) for improving the skills of sailing professionals, COSUDEC (http://www.teamsurv.eu ) for coastal surveying of depths or COSMEMOS on meteo-marine modelling (http://www.cosmemos.eu)

http://ec.europa.eu/research/bioeconomy/fish/research/ocean/index\_en.htm

<sup>28</sup> ACCESS, VECTORS and ECO2

COOPERATION	Nb proposals submitted	Proposals selected for funding		
COOPERATION		Nb	EU contribution (M€)	
Total marine and non marine proposals	24753	3926	13.743	
Marine proposals	1315	258	1.015	
Ratio marine/total	5.3%	6.5%	7.4%	
Rate of success (marine submitted/ marine selected)		19.6%		

See list of marine-related proposals in Part II: Inventory of marine-related projects funded under the 2007-2010 calls for proposals (p. 37)

#### • "IDEAS" (SP2)

The "IDEAS" specific programme (7.5 billion€ over 2007-2013) is a novelty of FP7. It addresses "frontier research" and is aimed at enhancing the dynamism, creativity and excellence of independent teams of researchers. Solely based on the criteria of scientific excellence, research projects may be carried out in any area of science & technology, including engineering, socioeconomic sciences and the humanities. Unlike the "COOPERATION" programme, there is no obligation for cross-border partnerships. Projects are implemented by independent teams around a "principal investigator" (PI) located in the European Union or Associated countries.

The programme is implemented via the European Research Council<sup>30</sup> (ERC) and comprises two different schemes: "ERC starting independent researcher grants" ("ERC Starting Grants") and "ERC advanced investigator grants" ("ERC Advanced Grants").

- Starting grants provide attractive support to the careers of excellent researchers who are at the stage of starting or consolidating their own independent research team or, depending on the field, their independent research programme (2-10 years after PhD).
- Advanced grants encourage and support excellent and innovative investigator-driven research
  projects initiated by leading advanced research leaders (at least 10 years of significant research
  achievements).

Every year the ERC launches calls for proposals covering all scientific fields: "Life Sciences" (LS), "Social Sciences and Humanities" (SH), and "Physical Science and Engineering" (PE). The evaluation involves at least 25 peer review panels covering all fields of science, engineering and scholarship.

Over the nine calls for proposals analysed within the "IDEAS" specific programme, 36 marine-related proposals have been selected for funding in both types of grants (Starting grants and Advanced grants). An EU contribution of about 65M€ has been earmarked to marine-related proposals over 2007-2010 representing **1.8%** of the overall EU contribution under "IDEAS" and

http://cordis.europa.eu/fp7/ideas/home\_en.html

<sup>30</sup> http://erc.europa.eu/index.cfm

covering about **1.6%** of all proposals selected. Figure n° 6 shows the breakdown of marine-related proposals selected per funding scheme both in numbers and EU contribution.

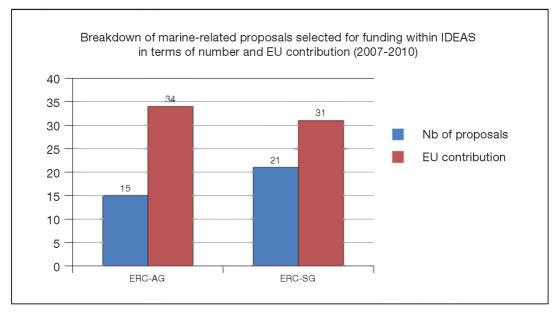


Figure n° 6: Breakdown of marine-related proposals selected per funding scheme both in terms of number and EU contribution (M€) over 2007-2010

Twenty-one successful marine-related proposals have been selected within the "starting grant" scheme while fifteen have been selected within the "advanced grant" scheme. Figure n° 7 shows the breakdown of all ERC marine-related proposals per scientific field.

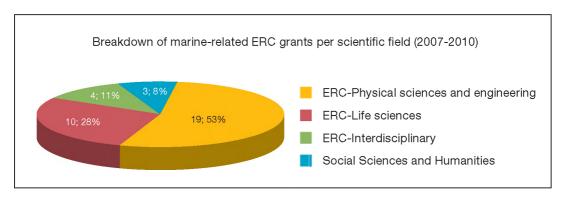


Figure n° 7: Breakdown of ERC marine-related proposals selected per scientific field over 2007-2010

Although the proposals selected cover the three main scientific fields: "Physical sciences and engineering" (PE), "Life sciences" (LS) and "Social sciences and Humanities" (SH), the vast majority of proposals has been selected within the "Physical sciences and engineering" panel

(19 proposals). Four interdisciplinary proposals have also been selected. <sup>31</sup> The average EU contribution is estimated to be 1 500 000€ for a starting grant and about 2 000 000€ for an advanced grant.

With 36 proposals selected out of 603, the success rate of marine-related proposals is about 6% which is well below the average success rate of proposals (14%) within "IDEAS" over 2007-2010<sup>32</sup>.

IDEAS	Nb proposals submitted	Proposals selected for funding		
IDEAS		Nb	EU contribution (M€)	
Total marine and non marine proposals	24409	2265	3582	
Marine proposals	603	36	65	
Ratio marine/total	2.5%	1.6%	1.8%	
Rate of success (marine submitted/ marine selected)		6%		

See list of marine-related proposals in Part II: Inventory of marine-related projects funded under the 2007-2010 calls for proposals (p. 37)

#### • "PEOPLE" (SP3)

The "PEOPLE" specific programme supports activities under 5 main headings to promote the mobility and training of researchers throughout their career<sup>33</sup>:

- Initial training of researchers ("PEOPLE 1") mostly aims to improve young researchers' career perspectives in both public and private sectors, by broadening their scientific and generic skills (i.e.: Initial training network scheme ITN).
- Life-long training and career development ("PEOPLE 2") supports experienced researchers to acquire new skills or competences (i.e.: "Marie-Curie Intra-European Fellowship" scheme-IEF, Marie-Curie Co-funding of Regional, National and International programmes COFUND) or to prepare their return to long-term employment after a mobility period (i.e. "Marie-Curie European Reintegration Grant" scheme ERG, Marie-Curie International Reintegration Grant scheme IRG).
- Industry-academia pathways and partnerships ("PEOPLE 3") aims to stimulate intersectoral mobility and increase knowledge sharing through joint research partnerships between organisations from academia and industry, in particular SMEs (i.e. Industry Academia Pathways and Partnership scheme IAPP).

<sup>31</sup> BIOCARB, CORALWARM and EarlyWarning

Fourth FP7 Monitoring report – Monitoring report 2010 p.97: http://ec.europa.eu/research/evaluations/pdf/archive/fp7\_monitoring\_reports/fourth\_fp7\_monitoring\_report.pdf#view=fit&pagemode=none

<sup>33</sup> For details see on CORDIS: http://cordis.europa.eu/fp7/people/home\_en.html

- International dimension-World fellowships ("PEOPLE 4"): activities supported under this
  heading contribute to the life-long training and career development of EU-researchers. It
  also aims to attract research talents from outside Europe and to foster collaboration with
  research actors at international level (i.e. International Research Staff Exchanges Scheme –
  IRSES, International Outgoing Fellowship scheme IOF, International Incoming Fellowship
  scheme IIF).
- Specific actions ("PEOPLE 5") aim at removing obstacles to mobility and enhancing the career perspectives of researchers in Europe. It also supports activities to increase communication with the public (i.e. Researchers' Night).

65M€ has been earmarked to marine-related proposals over 2007-2010 representing **1.8%** of the overall EU contribution under "IDEAS" and covering about **1.6%** of all proposals selected.

Over the 38 calls for proposals analysed within "PEOPLE", **255** marine-related proposals have been selected for funding encompassing all activities but one ("COFUND"). An EU contribution of about 89 M€ has been awarded to marine-related proposals over 2007-2010 representing **4.2%** of the overall EU contribution under "PEOPLE" and covering about **4.7%** of all proposals selected.



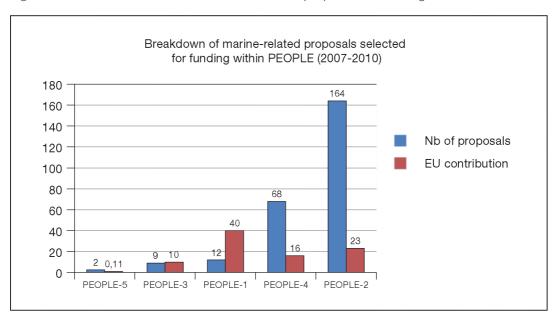


Figure n° 8: Breakdown of marine-related proposals selected for funding within "PEOPLE" both in terms of number and EU contribution (M€) over 2007-2010

The results show that marine-related proposals have been selected under all 5 "PEOPLE" headings and in the majority of schemes.

Grants dealing with life-long training and career development (i.e. PEOPLE 2) generated high interest. The "Intra European Fellowship" scheme in particular is very popular with 104 marine-related proposals selected for funding. The "European Reintegration Grants" (ERG) and the "International Reintegration Grants" (IRG) with 30 and 29 proposals respectively are also well represented. Compared to the number of projects, the total EU contribution for this activity is very low with an average of 140 000€ per grant.

Activities with an international dimension (i.e. PEOPLE 4) are also very popular with a total of 68 marine-related proposals selected for funding. For example, 36 marine-related proposals have been selected within the "International Outgoing Fellowship" scheme (IOF). Twenty one proposals have been selected under the "International Incoming fellowship" scheme while 11 marine-related proposals have been selected under the "International Research Staff Exchange Scheme" (IRSES).

These results are particularly interesting because they show what scientists regard as particularly relevant for their career development: acquisition of new competences and skills with IEF, international experience with IOF and return to research employment after a training period (ERG and IRG). Activities focusing on the early stage career of researchers (PEOPLE 1) and on the cooperation between research and industry (PEOPLE 3) were also quite successful with respectively 12 and 9 marine-related proposals. Those 21 proposals concentrate about 56% of the total EU contribution (50 M€) awarded to marine related proposals within PEOPLE. The relatively small amount allocated to the other activities is logical since they mainly cover individual grants (IEF, IOF, IIF, IRG, and ERG) or awards (Researchers' nights).

The keen interest in the "PEOPLE" programme is not surprising since it is a well-known and popular scheme which proved its success in FP6. Moreover it offers a great variety of opportunities through its bottom-up and flexible approach. It is especially well fitted to researchers working in such diverse fields as those covered by marine sciences and technologies.

With a success rate of 25.7% over 2007-2010, the "PEOPLE" programme is the most successful programme for marine-related proposals within FP7 as shown in the table below. The success rate for marine-related proposals is however slightly lower than the average success rate (28.6%) within the entire "PEOPLE" programme.<sup>34</sup>

Fourth FP7 Monitoring report – Monitoring report 2010 p.97: http://ec.europa.eu/research/evaluations/pdf/archive/fp7\_monitoring\_reports/fourth\_fp7\_monitoring\_report.pdf#view=fit&pagemode=none

PEOPLE	Nb proposals	Proposals selected for funding		
PEOPLE	submitted	Nb	EU contribution (M€)	
Total marine and non marine proposals	21.021	5.831	2.097	
Marine proposals	990	255	89	
Ratio marine/total	4.7%	4.4%	4.2%	
Rate of success (marine submitted/ marine selected)		25.7%		

See list of marine-related proposals in: Part II: Inventory of marine-related projects funded under the 2007-2010 calls for proposals (p. 37).

#### "CAPACITIES" (SP4)

The "CAPACITIES" specific programme<sup>35</sup> with a budget of 4.097 billion € over 2007-2013 aims to enhance research and innovation capacities throughout Europe and ensure their optimal use to support the quality and competitiveness of the European research area. It operates in 7 areas:

- International cooperation (INCO): this initiative aims to implement horizontal support
  actions in the field of international cooperation. It supports the coordination of national
  policies and activities of EU Member States and Associated Countries on international S&T
  cooperation, bi-regional coordination of S&T cooperation as well as bilateral coordination for
  the enhancement and development of S&T.
- Research Infrastructures (INFRA): developing world-class research infrastructures is one of the key initiatives and an essential element to the reinforcement of the European research area. This scheme supports different kinds of actions. First, it aims to upgrade and optimise the use and access to existing research infrastructures ("integrating activities") but also to support the initiation phase (design studies and construction) of new research infrastructures of pan-European interest. This heading also supports ICT-based infrastructures (computational systems, databases...).
- Research for the benefit of Small and Medium-sized Enterprises (SME): This initiative
  supports SMEs or SME associations in need of outsourcing research to research performers
  (i.e.: universities research centres). The "Research for SMEs" action (SME-1) targets mainly
  low to medium technology SMEs with little or no research capability. The "Research for SME
  associations" action (SME-2) targets associations acting on behalf of their SME members
  to identify and address common technical problems or promote the effective dissemination
  and take-up of results.

http://cordis.europa.eu/fp7/capacities/home\_en.html

- Regions of knowledge (REGIONS): this action aims to strengthen the research potential of European regions, in particular by encouraging and supporting the development, across Europe, of regional 'research-driven clusters', associating universities, research centres, enterprises and regional authorities.
- Research potential of Convergence Regions (REGPOT): This action supports the achievement of the full research potential of the enlarged European research area; it seeks to unlock the potential of research groups in the convergence and outermost regions of the EU.
- Science in society (SiS): The aim is to stimulate the harmonious integration of scientific and technological endeavour and associated research policies into European society. It encourages Europe-wide reflection and debate on science and technology and their relation with society and culture.

The specific programme "CAPACITIES" also funds 'Policy coherence' activities under the Support to the coherent development of research policies heading.

Among the "CAPACITIES" calls analysed, **95** marine-related proposals have been selected within all activities of this specific programme. One proposal was even funded under "International cooperation".<sup>36</sup> An EU contribution of about **208 M€** has been awarded to marine-related proposals representing **8.2%** of the overall EU contribution under "CAPACITIES" and covering about **7.4%** of all proposals selected. Figure n°9 shows the breakdown of marine related proposals selected for funding within "CAPACITIES".

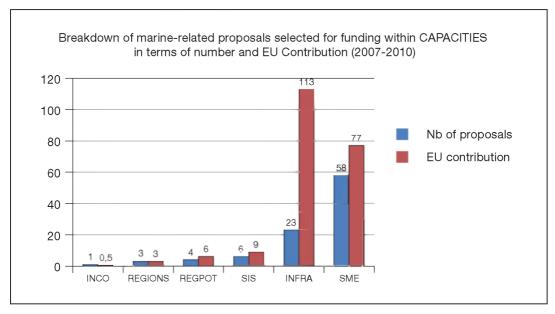


Figure n° 9: Breakdown of marine-related proposals selected for funding within "CAPACITIES" in terms of number and EU contribution (M€) over 2007-2010

<sup>&</sup>lt;sup>36</sup> INCAM: Improving National Assessment and Monitoring Capacities for Integrated Environmental and Coastal ecosystem Management (Lebanon)

Most proposals have been selected for funding under the SME (58) and Infrastructures (23) headings. However, a reasonable number of proposals have also been selected under less well-known activities. Six proposals have been selected within "Science in Society" (SIS), another four proposals have been selected for funding under the "Research potential of Convergence Regions"<sup>37</sup> heading (REGPOT) as well as three under the "Region for Knowledge"<sup>38</sup> (REGIONS) heading. In terms of scientific fields, the analysis reveals that aquaculture and fisheries, transport and energy are the most well represented sectors for SME projects. Indeed, 27 proposals out of 58 are related to aquaculture and fisheries. The average EU contribution for an SME marine-related project is 1 300 000€. Proposals related to research infrastructures are mainly funded within the environmental and earth sciences fields. ICT based infrastructures (4) are also well represented. The variety of proposals selected for funding and the good proportion of marine-related ones within the "CAPACITIES" specific programme enhances the cross-cutting nature of marine sciences.

With 95 proposals selected out of 476, the success rate of marine-related proposals amounts to 20%. It is slightly higher than the average success rate of proposals within this specific programme (19.1%)<sup>39</sup> as shown in the table below.

CAPACITIES	Nb proposals submitted	Proposals selected for funding		
CAPACITIES		Nb	EU contribution (M€)	
Total Marine and non marine proposals	7.406	1.279	2.516	
Marine proposals	476	95	208	
Ratio marine/total	6.4%	7.4%	8.2%	
Rate of success (Marine/Marine)		20%		

See list of marine-related proposals in: Part II: Inventory of marine-related projects funded under the 2007-2010 calls for proposals (p. 37).

<sup>37</sup> MARBIGEN: http://www.marbigen.org/

EMSAC : http://www.emsacnet.eu/

Fourth FP7 Monitoring report – Monitoring report 2010 p.97: http://ec.europa.eu/research/evaluations/pdf/archive/fp7\_monitoring\_reports/fourth\_fp7\_monitoring\_report.pdf#view=fit&pagemode=none

#### 5. Analysis of participation

First analysis of participation indicates that the **644** marine-related proposals selected for funding involve a total of **5188** participants from **93** countries.

#### · Breakdown of participations per country

Figure n°10 shows the top 20 countries in terms of participations in marine and maritime proposals selected for funding over 2007-2010.

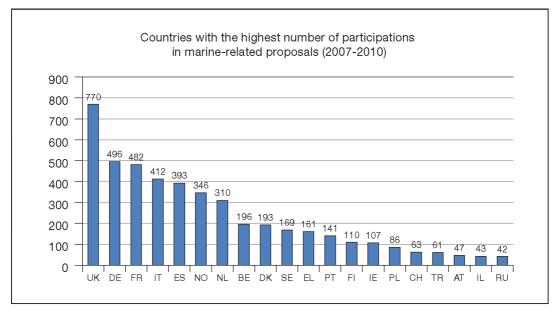


Figure n°10: Countries with the highest number of participations in marine-related proposals selected for funding over 2007-2010

The 10 most active countries in terms of participation are the United Kingdom, Germany, France, Italy, Spain, Norway, the Netherlands, Belgium, Denmark, and Sweden. Seven countries (UK, Germany, France, Italy, Spain, Norway and the Netherlands) gather 62% (3209 participants) of all participants in marine-related proposals selected for funding. Associated countries and international partners perform also quite well. Indeed, Norway is very well positioned with 346 participations, while Switzerland, Turkey and Israel gather respectively 63, 61 and 43 participations. The Russian Federation is ranked 20<sup>th</sup> in terms of participation in marine-related proposals.

#### • Breakdown of countries with the highest number of coordinators

In total, coordinators of marine-related proposals come from **28** countries (including associated countries such as Norway, Switzerland and Israel). Figure n°11 shows the top 20 countries in terms of coordination in marine and maritime proposals selected for funding over 2007-2010.

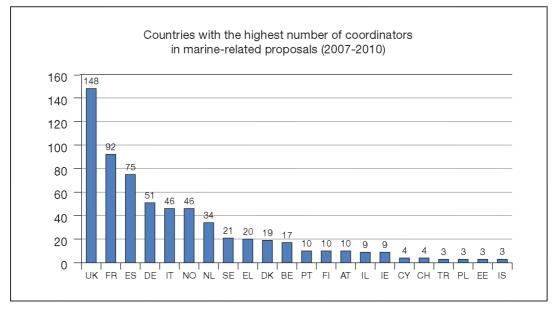


Figure n°11: Breakdown of countries with the highest number of coordinators in marine-related proposals selected for funding over 2007-2010

The result show that the most active countries over 2007-2010 have been the United Kingdom, France, Spain, Germany, Italy, Norway and the Netherlands. Some associated countries also perform very well in terms of coordination such as Norway (46) or Israel (9). Poland and Estonia are the only post-2004 Member States that are in the top 22 countries in terms of coordination. They both have 3 coordinators in marine-related proposals and are *ex-aequo* with Turkey. Slovenia, the Czech Republic, Bulgaria and Malta follow with one coordinator each.

#### · Countries with the highest number of participation per specific programme

Figure n°12 shows the top 10 countries involved in marine-related proposals per specific programme.

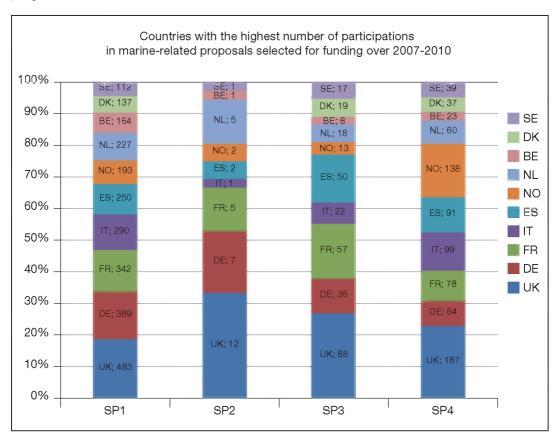


Figure n°12: Breakdown of countries with the highest number of participation in marine-related proposals selected for funding per specific programme over 2007-2010

The results confirm the high number of participations of the United Kingdom, Germany and France within marine-related proposals selected for funding in 2007-2010 across the 4 specific programmes. It also shed lights on the significant discrepancies between countries in terms of participation to the individual specific programmes. It is especially striking within "CAPACITIES" (SP4) when looking at Norway and Italy which rank 2nd and 3rd whereas France and Germany only rank  $5^{\text{th}}$  and  $6^{\text{th}}$ .

#### • Countries with the highest number of coordinators per specific programme

Figure n°13 shows the top 10 countries involved in assuming the responsibility of **coordination** of marine-related research proposals per specific programme.

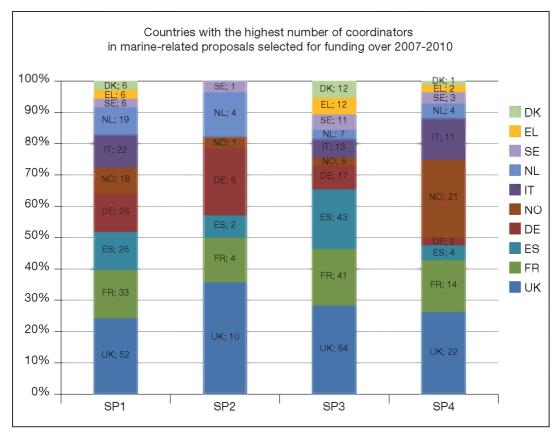


Figure n°13: Breakdown of countries with the highest number of coordinators in marine-related proposals per specific Programme over 2007-2010

The results confirm that the United Kingdom (148), France (92), Spain (75) and Germany (51) are the most active countries in terms of coordination of marine-related proposals selected for funding. The United Kingdom counts the highest number of coordinators in marine-related proposals under each specific programme. In particular, the number of ERC grants coordinated by the United Kingdom is particularly high. It accounts for about 28% of all marine-related ERC proposals. Other countries hosting principal investigators of marine-related ERC grants and not shown in the figure above are Israel (3), Austria (3) and Switzerland (1).

Spain ranks second for "PEOPLE" (SP3) with 43 coordinators. France ranks second for "COOPERATION" (SP1), but only third for "PEOPLE", CAPACITIES (SP4) and IDEAS (SP2). Norway ranks second for "CAPACITIES" with 21 coordinators. Germany ranks third for "COOPERATION" (SP1) ex aequo with Spain, second for "IDEAS", fourth for "PEOPLE" (SP3) with 17 coordinators. However, it ranks particularly low for "CAPACITIES" with only 2 coordinators, ex aequo with Cyprus and Greece.

#### 6. Conclusions

The results of this consolidated analysis of marine-related proposals over 2007-2010 show that a considerable number of projects are being funded across the 4 specific programmes of FP7, although the marine dimension in each project can vary. The scope<sup>40</sup> of activities and interested parties involved is very wide and marine-related projects are to be found in every part of and in every area supported by FP7. It ranges from grants to support the initial training of researchers e.g. on the physiopathology of decompression diseases linked to diving activities<sup>41</sup> to projects involving SMEs e.g. on deploying a light-weight anchor by helicopter to prevent tankers in distress from beaching or colliding offshore devices.<sup>42</sup> It also reveals that a whole spectrum of stakeholders from marine and maritime sectors – researchers, marine biologists and geologists, science museums, SMEs, technology-providers, regional authorities – are fruitfully working together on marine-related research projects using science and technology to find ways to both mitigate natural and man-made pressures on the oceans while fostering sustainable development of economic activities.

Even more importantly, there has been a shift in recent years towards the acknowledgment that marine and maritime research is more than a collection of separate research issues taking place in different thematic areas or pillars of FP7. All maritime activities whether they refer to energy, food, transport, shipbuilding, biological and mineral resources are inter-related by the specificity of the marine environment, by the technological challenges that are common to all activities taking place at sea and by the combined impact that they have on the marine environment. Ninety-three countries from the EU and international partners are involved in these 644 marine-related funded proposals emphasising the very transnational nature of marine sciences and technology.

The "European Strategy for marine and maritime research" COM (2008) 534, and especially initiatives such as "The Ocean of Tomorrow" calls, have played a key role to foster such crosscutting approaches. Commissioner Geoghegan-Quinn stated in 2010: "Just as oceans ignore borders, marine sciences and technologies are by their nature cross-cutting and involve many disciplines. There is no other way but to look beyond traditional sector-specific research to foster sustainable growth of maritime activities" This trend is also mirrored in the Joint Programming Initiative on "Healthy and Productive Seas and Oceans" which specifically focuses on interfaces between different sectors and research disciplines. This shift is also reflected in the "Horizon 2020" proposal that will aim at facilitating multidisciplinary research and innovation by bringing together resources and knowledge across different fields, technologies and disciplines.

The lack of a mechanism for efficient and systematic monitoring and identification of marinerelated proposals in FP7 databases is problematic since it favours duplication of efforts, prevents synergies from emerging and makes access to relevant information on marine-related

<sup>&</sup>lt;sup>40</sup> See inventory of marine-related projects

<sup>&</sup>lt;sup>41</sup> PHYPODE: http://www.phypode.org/

SHIP ARRESTOR: http://shiparrestor.com/

<sup>43</sup> See Speech of Commissioner Geoghegan-Quinn at "The Ocean of Tomorrow 2011 Infoday": http://europa.eu/rapid/ pressReleasesAction.do?reference=SPEECH/10/415&type=HTML

research excessively time-consuming. With the compilation and analysis of data across FP7, this consolidated study is an attempt to address this issue and to help interested parties access information with a view to facilitating cross-fertilisation of knowledge between marine-related sectors and disciplines. This study is therefore complementary to other initiatives<sup>44</sup> aiming at identifying marine-related projects (i.e. EUROCEAN or CORDIS). The statistical and data analysis parts are particularly valuable since they give unique elements of benchmarking.

The EurOcean portal for example has developed a database of marine-related projects funded by the different programmes of the EU: http://www.eurocean.org/ . Since the first edition of this study, several other initiatives have emerged to increase knowledge of research funded at EU level such as the MarineTT project on knowledge transfer (http://www.marinett.eu/) or very recently the STAGES project whose aim is to identify relevant research to support the Marine Strategy Framework Directive

# Part II – Inventory of FP7 marine-related projects funded under the 2007-2010 calls for proposals



# 1. "COOPERATION" (SP1)

#### 1.1. Theme 1: Health

# 1.1.1. Activity: HEALTH-1 Biotechnology, generic tools and medical technologies for human health

201871	FAST	TOWARDS SAFE AND EFFECTIVE IMMUNOTHERAPY OF PERSISTENT LIFE-THREATENING FOOD ALLERGIES	CP-FP
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### 1.2. Theme 2: Food, Agriculture and Fisheries, and Biotechnology (KBBE)

# 1.2.1. Activity: KBBE-1 Sustainable production and management of biological resources from land, forest, and aquatic environment

245238	Aquainnova	Supporting governance and multi-stakeholder participation in aquaculture research and innovation	CSA-SA
244999	AQUAMED	The future of research on aquaculture in the Mediterranean Region	CSA-CA
245020	ASEM- AQUACULTURE-09	ASEM Aquaculture Platform	CSA-CA
226526	BEcoTePs	The Bio-Economy Technology Platforms join forces to address synergies and gaps between their Strategic Research Agendas	CSA-SA
266157	BIVALIFE	Controlling infectious diseases in oysters and mussels in Europe	CP-FP
227138	BrightAnimal	Multidisciplinary Approach to Practical and Acceptable Precision Livestock Farming for SMEs in Europe and world-wide	CSA-CA
245178	COEXIST	Interaction in coastal waters: A roadmap to sustainable integration of aquaculture and fisheries	CP-FP
265957	COPEWELL	Coping ability of farmed fish – towards a deeper understanding of fish welfare	CP-IP
265648	CREAM	Coordinating research in support to application of EAF (Ecosystem Approach to Fisheries) and management advice in the Mediterranean and Black Seas	CSA-CA
227390	DEEPFISHMAN	Management and monitoring of deep-sea fisheries and stocks	CP-FP
265401	EcoFishMan	Ecosystem-based Responsive Fisheries Management in Europe	CP-FP
244706	ECOKNOWS	Effective use of ecosystem and biological knowledge in fisheries	CP-FP
244966	FACTS	Forage Fish Interactions	CP-FP
212399	FishPopTrace	Fish Population Structure and Traceability	CP-FP

212969	JAKFISH	Judgement and Knowledge in Fisheries including Stakeholders	CP-FP
222719	LIFECYCLE	Building a biological knowledge-base on fish lifecycles for competitive, sustainable European aquaculture	CP-IP
210496	MADE	Mitigating ADverse Ecological impacts of open ocean fisheries	CP-FP
212881	MEFEPO	Making the European Fisheries Ecosystem Operational	CP-FP
226465	PEGASUS	Public Perception of Genetically modified Animals – Science, Utility and Society	CSA-SA
226885	Prevent Escape	Assessing the causes and developing measures to prevent the escape of fish from sea-cage aquaculture	CP-FP
245257	PRO-EEL	Reproduction of European Eel: Towards a Self- sustained Aquaculture	CP-FP
227197	PROMICROBE	Microbes as positive actors for more sustainable aquaculture	CP-FP
245119	REPROSEED	REsearch to improve PROduction of SEED of established and emerging bivalve species in European hatcheries	CP-FP
213143	SARNISSA	Sustainable Aquaculture Research Networks in Sub Saharan Africa	CSA-CA
212797	SELFDOTT	From capture based to SELF-sustained aquaculture and Domestication Of bluefin tuna, Thunnus thynnus	CP-FP
265919	STAR-IDAZ	Global Strategic Alliances for the Coordination of Research on the Major Infectious Diseases of Animals and Zoonoses	CSA-CA
212617	TAPSIM	Trade, Agricultural Policies and Structural Changes in India's Agrifood System; Implications for National and Global Markets	CP-FP
212188	TXOTX	Technical eXperts Overseeing Third country eXpertise	CSA-CA
266445	VECTORS	Vectors of Change in Oceans and Seas Marine Life, Impact on Economic Sectors – OCEAN 2010	CP-IP
222633	WildTech	Novel Technologies for Surveillance of Emerging and Re-emerging Infections of Wildlife	CP-IP

# 1.2.2. Activity: KBBE-2 Fork to farm: Food (including seafood), health and well being

245025	AFTER	African Food Tradition Revisited by Research	CP-SICA
222738	BASELINE	Selection and improving of fit-for-purpose sampling procedures for specific foods and	CP-IP
207948	COLORSPORE	New Sources of Natural, Gastric Stable, Food Additives, Colourants and Novel Functional Foods	CP-FP
211326	CONFFIDENCE	CONtaminants in Food and Feed: Inexpensive DEtection for Control of Exposure.	CP-IP
211820	GMSAFOOD	Biomarkers for post market monitoring of short and long-term effects of genetically modified organisms (GMOs) on animal and human health	CP-FP

212544	NAFISPACK	Natural Antimicrobials For Innovative and Safe Packaging	CP-FP
245267	NAMASTE	New Advances in the integrated Management of food processing wAste in India and Europe: use of Sustainable Technologies for the Exploitation of byproducts into new foods and feeds	CP-FP
227525	PERFOOD	PERFluorinated Organics in Our Diet	CP-FP
222889	SEAT	Sustainable trade in ethical aquaculture	CP-SICA

# 1.2.3. Activity: KBBE-3 Life sciences, biotechnology and biochemistry for sustainable non-food products and processes

212654	AquaTerrE	Integrated European Network for biomass and waste reutilisation for Bioproducts	CSA-CA
265896	ВАММВО	Sustainable production of biologically active molecules of marine based origin	CP-FP
266401	GIAVAP	Genetic Improvement of Algae for Value Added Products	CP-IP
213068	LipoYeasts	Mobilising the enzymatic potential of hydrocarbonoclastic bacteria and the oleaginous yeast Yarrowia lipolytica to create a powerful cellular production platform for lipid-derived industrial materials	CP-FP
245226	MAGICPAH	Molecular Approaches and MetaGenomic Investigations for optimizing Clean-up of PAH contaminated sites	CP-FP
226977	MAMBA	Marine Metagenomics for New Biotechnological Applications	CP-FP
245137	MAREX	Exploring Marine Resources for Bioactive Compounds: From Discovery to Sustainable Production and Industrial Applications	CP-IP
265926	MARINE FUNGI	Natural products from marine fungi for the treatment of cancer	CP-FP
222625	METAEXPLORE	Metagenomics for bioexploration – Tools and application	CP-IP
266055	MG4U	Marine Genomics for Users	CSA-CA
222628	PolyModE	Novel Polysaccharide Modifying Enzymes to Optimise the Potential of Hydrocolloids for Food and Medical Applications	CP-IP
265721	RADAR	Rationally Designed Aquatic Receptors integrated in label-free biosensor platforms for remote surveillance of toxins and pollutants	CP-FP
266033	SPECIAL	Sponge Enzymes and Cells for Innovative AppLications	CP-FP
245070	SUNBIOPATH	Towards a better sunlight to biomass conversion efficiency in microalgae	CP-FP
266473	ULIXES	Unravelling and exploiting Mediterranean Sea microbial diversity and ecology for Xenobiotics' and pollutants' clean up	CP-FP

#### 1.2.4. ERANET

219262	ARIMNet	Coordination of Agricultural Research in the Mediterranean	CSA-CA
219235	EMIDA	Coordination of European Research on Emerging and Major Infectious Diseases of Livestock	CSA-CA

### 1.3. Theme 3: Information and Communication Technologies

# 1.3.1. Activity: ICT-2007.1 Pervasive and Trustworthy network and service infrastructures

225669	UAN	Underwater Acoustic Network	CP-FP-INFSO
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#### 1.3.2. Activity: ICT-2007.2 Cognitive systems, interaction, robotics

231378	Co3 AUVs	Cooperative Cognitive Control for Autonomous Underwater Vehicles	CP-FP-INFSO
231495	FILOSE	Artificial Fish Locomotion and Sensing	CP-FP-INFSO
231646	SHOAL	Search and monitoring of Harmful contaminants, Other pollutants And Leaks in vessels in port using a swarm of robotic fish	CP-FP-INFSO
248497	TRIDENT	Marine Robots and Dexterous Manipulation for Enabling Autonomous Underwater Multipurpose Intervention Missions	CP-FP-INFSO

#### 1.3.3. Activity: ICT-2007.3 Components, systems, engineering

224548	Aeolus	Distributed Control of Large-Scale Offshore Wind Farms project proposal	CP-FP-INFSO
223844	CON4COORD	Control for coordination of distributed systems	CP-FP-INFSO
223866	FeeedNetBack	Feedback design for wireless networked systems	CP-FP-INFSO
224306	LabOnFoil	Laboratory Skin Patches and SmartCards based on foils and compatible with a smartphone	CP-IP

#### 1.3.4. Activity: ICT-2007.4 Digital libraries and content

257024	Fish4Knowledge	Supporting humans in knowledge gathering and question answering w.r.t. marine and environmental monitoring through analysis of multiple video streams	CP-FP-INFSO
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# 1.3.5. Activity: ICT-2007.6 ICT for mobility, environmental sustainability and energy efficiency

270382	CoCoRo	Collective Cognitive Robots	CP-FP-INFSO
249024	NETMAR	Open service network for marine environmental data	CP-FP-INFSO

#### 1.3.6. Activity: ICT-2007.8 Future and emerging technologies

231845	ANGELS	ANGuliform robot with ELectric Sense	CP-FP-INFSO
225967	NextMuSE	Next generation Multi-mechanics Simulation Environment (NextMuSE)	CP-FP-INFSO
231608	OCTOPUS	Novel Design Principles and Technologies for a New Generation of High Dexterity Soft-bodied Robots Inspired by the Morphology and Behaviour of the Octopus	CP-IP

# 1.4. Theme 4: Nanosciences, Nanotechnologies, Materials and New Production Technologies (NMP)

# 1.4.1. Activity: NMP-2 Materials

214148	NanCore	Microcellular nanocomposite for substitution of Balsa wood and PVC core material	CP-IP
229220	POLYFIRE	Processing and Upscaling of Fire-Resistant Nano-Filled Thermosetting Polyester Resin	CP-FP

#### 1.4.2. Activity: NMP-4 Integration of technologies for industrial applications

214261	MUST	MULTI-LEVEL PROTECTION OF MATERIALS FOR VEHICLES BY "SMART" NANOCONTAINERS	CP-IP
214467	NATEX	Aligned Natural Fibres and Textiles for Use in Structural Composite Applications	CP-TP
229334	Safe@Sea	Protective clothing for improved safety and performance in the fisheries	CP-TP

#### 1.5. Theme 5: Energy

#### 1.5.1. Activity: ENERGY-2 Renewable electricity generation

213633	CORES	Components for Ocean Renewable Energy Systems	CP-FP
213380	EquiMar	Equitable Testing and Evaluation of Marine Energy Extraction Devices in terms of Performance, Cost and Environmental Impact.	CP-FP
256812	HiPRwind	High Power, high Reliability offshore wind technology	CP
241402	MARINA Platform	Marine Renewable Integrated Application Platform	CP
213824	MED-CSD	Combined solar power and desalination plants: technico-economic potential in Mediterranean Partner countries	CSA-SA
219048	NORSEWIND	Northern Seas Wind Index Database	CP
241421	ORECCA	Off-shore Renewable Energy Conversion platforms – Coordination Action	CSA-CA

239533	Pulse Tidal	PS1000 – full scale demonstration	CP
212966	RELIAWIND	Reliability focused research on optimizing Wind Energy systems design, operation and maintenance: Tools, proof of concepts, guidelines & methodologies for a new	CP-IP
239376	STANDPOINT	Standardisation of Point Absorber Wave Energy Convertors by Demonstration	СР
239496	SURGE	Simple Underwater Generation of Renewable Energy	CP
268171	TOP Wind	Technology platform Operational Programme Wind	CSA-SA
239368	WavePort	Demonstration & Deployment of a Commercial Scale Wave Energy Converter with an innovative Real Time Wave by Wave Tuning System	CP
239304	Wingy-Pro	Increasing efficiency of wind power plants for the production of energy	СР

#### 1.5.2. Activity: ENERGY-3 Renewable fuel production

268208	ALL-GAS	Industrial scale demonstration of sustainable algae cultures for biofuel production	CP
268211	BIOFAT	BIOfuel From Algae Technologies	СР
268164	InteSusAl	Demonstration of integrated and sustainable enclosed raceway and photobioreactor microalgae cultivation with biodiesel production and validation.	CP

#### 1.5.3. Activity: ENERGY-4 Renewables for heating and cooling

218938	MEDIRAS	MEmbrane Distillation in Remote AreaS	CP
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# 1.5.4. Activity: ENERGY-5 CO2 capture and storage technologies for zero emission power generation

241381	COCATE	Large-scale CCS Transportation infrastructure in Europe	CP
240837	RISCS	Research into Impacts and Safety in CO2 Storage (RISCS)	CP
256705	SiteChar	Characterisation of European CO2 storage	CP

# 1.5.5. Activity: ENERGY-7 Smart energy networks

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	249812	TWENTIES	Transmission system operation with large penetration of Wind and other renewable Electricity sources in Networks by means of innovative Tools and Integrated Energy Solutions.	СР

### 1.5.6. Activity: ENERGY-8 Energy efficiency and savings

219008	ENERFISH	Integrated Renewable Energy Solutions for Seafood Processing Stations	СР
227407	Thermonano	LOW-TEMPERATURE HEAT EXCHANGERS BASED ON THERMALLY-CONDUCTING POLYMER NANOCOMPOSITES	CP

# 1.6. Theme 6: Environment (including Climate Change)

### 1.6.1. Activity: ENV.1 Climate change, pollution, and risks

226248	ATP	Arctic Tipping Points	CP-IP
264879	CARBOCHANGE	Changes in carbon uptake and emissions by oceans in a changing climate	CP-IP
244132	CLAMER	Climate Change and Marine Ecosystem Research Results	CSA-SA
282672	EMBRACE	Earth system Model Bias Reduction and assessing Abrupt Climate change	CP-IP
211384	EPOCA	European Project on Ocean Acidification	CP-IP
226375	ice2sea	lce2sea – estimating the future contribution of continental ice to sea-level rise	CP-IP
265103	MedSeA	MEDiterranean Sea Acidification under changing climate	CP-FP
202798	MICORE	Morphological Impacts and COastal Risks induced by Extreme storm events	CP-FP
212643	THOR	Thermohaline Overturning – at Risk?	CP-IP

### 1.6.2. Activity: ENV.2. Sustainable management of resources

282748	ARCH	Architecture and roadmap to manage multiple pressures on lagoons	CP-FP
211700	CAREX	Coordination Action for Research Activities on Life in Extreme Environments	CSA-CA
211288	CASPINFO	CASPIAN ENVIRONMENTAL AND INDUSTRIAL DATA & INFORMATION SERVICE	CSA-SA
213144	CoralFISH	Assessment of the interaction between corals, fish and fisheries, in order to develop monitoring and predictive modelling tools for ecosystem based management in the deep waters of Europe and beyond	CP-IP
244099	DS3F	The Deep Sea & Sub-Seafloor Frontier	CSA-CA
265847	ECO2	Sub-seabed CO2 Storage: Impact on Marine Ecosystems (ECO2) – OCEAN 2010	CP-IP
212133	EELIAD	European Eels in the Atlantic: Assessment of Their Decline	CP-FP
264933	EURO-BASIN	European Union Basin-scale Analysis, Synthesis and Integration (EURO-BASIN)	CP-IP

265099	EuroMarine	Integration of European marine research networks of excellence – Euromarine	CSA-CA
244161	FORCE	Future of Reefs in a Changing Environment (FORCE): An ecosystem approach to managing Caribbean coral reefs in the face of climate change	CP-SICA
265294	GreenSeas	Development of global plankton data base and model system for eco-climate early warning	CP-SICA
226354	HERMIONE	Hotspot Ecosystem Research and Man's Impact on European seas	CP-IP
265299	KNEU	Developing a Knowledge Network for EUropean expertise on biodiversity and ecosystem services to inform policy making economic sectors	CSA-CA
226675	KnowSeas	Knowledge-based Sustainable Management for Europe's Seas	CP-IP
283157	LAGOONS	Integrated water resources and coastal zone management in European lagoons in the context of climate change	CP-FP
244060	MARCOM+	Towards an Integrated Marine and Maritime Science Community	CSA-SA
212085	MEECE	Marine Ecosystem Evolution in a Changing Environment	CP-IP
226661	MESMA	Monitoring and Evaluation of Spatially Managed Areas (MESMA)	CP-IP
244273	ODEMM	Options for Delivering Ecosystem-Based Marine Management	CP-IP
244170	PEGASO	People for Ecosystem Based Governance in Assessing Sustainable Development of Ocean and Coast	CP-SICA
212529	SALSEA-Merge	Advancing understanding of Atlantic Salmon at Sea: Merging Genetics and Ecology to resolve Stock-specific Migration and Distribution patterns	CP-FP
244251	SECOA	SOLUTIONS for ENVIRONMENTAL CONTRASTS in COASTAL AREAS	CP-SICA
226273	WISER	Water bodies in Europe: Integrative Systems to assess Ecological status and Recovery	CP-IP

# 1.6.3. Activity: ENV.3. Environmental technologies

201724	MIDTAL	MICROARRAYS FOR THE DETECTION OF TOXIC ALGAE	CP-FP
226880	PROTOOL	PRODUCTIVITY TOOLS: Automated Tools to Measure Primary Productivity in European Seas. A New Autonomous Monitoring Tool to Measure the Primary Production of Major European Seas	CP-FP
244104	THESEUS	Innovative coastal technologies for safer European coasts in a changing climate	CP-IP
226225	WreckProtect	Strategies for the protection of shipwrecks in the Baltic Sea against forthcoming attack by wood degrading marine borers. A synthesis and information project based on the effects of climatic changes.	CSA-CA

# 1.6.4. Activity: ENV.4. Earth observation and assessment tools for sustainable development

212887	ACOBAR	Acoustic Technology for observing the interior of the Arctic Ocean	CP-FP
226456	AWARE	How to achieve sustainable water ecosystems management connecting research, people and policy makers in Europe	CSA-CA
212196	cocos	Coordination Action Carbon Observation System	CSA-CA
282845	COMET-LA	COmmunity-based Management of EnvironmenTal challenges in Latin America	BSG-CSO
226364	EnerGEO	Energy Observation for monitoring and assessment of the environmental impact of energy use	CP-IP
202955	EuroSITES	Integration and enhancement of key existing European deep-ocean observatories	CP-FP
283080	GEOCARBON	Operational Global Carbon Observing System	CP-SICA
265098	GfG2	GNSS for Global Environmental Earth Observation (GEEO) and GEOSS	CSA-CA
265113	GMOS	Global Mercury Observation System	CP-SICA
226213	HYPOX	In situ monitoring of oxygen depletion in hypoxic ecosystems of coastal and open seas, and land-locked water bodies	CP-FP
282977	MEDINA	Marine Ecosystem Dynamics and Indicators for North Africa	CP-SICA

#### 1.6.5. Activity: ENV.5. Horizontal activities

226919	ComEnvir	Communicating environmental impacts on water quality, availability and use	CSA-SA
244164	MarineTT	European Marine Research Knowledge Transfer and Uptake of Results	CSA-SA

#### 1.6.6. **ERANET**

217246	BONUS+	Multilateral call for research projects within the Joint Baltic Sea Research Programme BONUS+	CSA-ERA- PLUS
249552	SEAS ERA	Towards integrated European marine research strategy and programmes	CSA-CA

# 1.7. Theme 7: Transport (including Aeronautics)

# 1.7.1. Activity: GALILEO Support to the European global satellite navigation system (Galileo) and EGNOS

287207	ADVANSYS	Design of Advanced Antenna and Multi-Sensor Hybrid Receiver for Machine Control in Harsh Environment	СР
287162	COSMEMOS	COoperative Satellite navigation for MEteo-marine MOdelling and Services	CP

247998	CoSuDEC	Coastal Surveying of Depths with EGNOS to Enhance Charts	СР
247983	LS4P	LIVESAILING FOR PROFESSIONALS	CP
247795	SafePort	Safe Port Operations using EGNOS SoL Services	CP
228193	SARBACAN	SAR BeAcon development with CANada	CP

# 1.7.2. Activity: SST Sustainable surface transport (rail, road and waterborne)

265863	ACCESS	Arctic Climate Change, Economy and Society - OCEAN 2010	CP-IP
234096	ARGOMARINE	Automatic Oil-Spill Recognition and Geopositioning integrated in a Marine Monitoring Network	CP-FP
234167	ARIADNA	Maritime Assisted Volumetric Navigation System	CP-FP
217818	AZIPILOT	Intuitive operation and pilot training when using marine azimuthing control devices	CSA-CA
234124	BB GREEN	Battery powered Boats, providing Greening, Resistance reduction, Electric, Efficient and Novelty	CP-FP
233980	BESST	Breakthrough in European Ship and Shipbuilding Technologies	CP-IP
234252	CASMARE	Coordination Action to maintain and further develop a Sustainable MAritime Research in Europe	CSA-CA
233969	CO-PATCH	COMPOSITE PATCH REPAIR FOR MARINE AND CIVIL ENGINEERING INFRASTRUCTURE APPLICATIONS	CP-FP
218637	CORFAT	Cost effective corrosion and fatigue monitoring for transport products	CP-FP
284745	DEECON	Innovative After-Treatment System for Marine Diesel Engine Emission Control	CP-FP
218695	DIVEST	Dismantling of Vessels with Enhanced Safety and Technology	CP-FP
266268	ECO-REFITEC	Eco innovative refitting technologies and processes for shipbuilding industry promoted by European Repair Shipyards.	CP-FP
233758	e-Freight	European e-freight capabilities for co-modal transport	CP
265851	eMar	e-Maritime Strategic Framework and Simulation based Validation	CP
234359	EMAR2RES	Support Action to initiate cooperation between the Communities of European MARine and MARitime REsearch and Science	CSA-SA
233925	EU-CARGOXPRESS	Greening of surface transport through an innovative and competitive CARGO-VESSEL Concept connecting marine and fluvial intermodal ports.	CP-FP
266054	EuroVIP	Virtual Integrated Partnering (VIP) for SME service, technology and information providers in the European maritime sector	CSA-CA
218536	EXCITING	Exact Geometry Simulation for Optimized Design of Vehicles and Vessels	CP-FP
234175	EXTREME SEAS	Design for Ship Safety in Extreme Seas	CP-FP

218761	FIREPROOF	Probabilistic Framework for Onboard Fire-Safety	CP-FP
218532	FLOODSTAND	Flooding Simulation and Control for Large Passenger Ships	CP-FP
285552	FOUL-X-SPEL	Environmentally Friendly Antifouling Technology to Optimise the Energy Efficiency of Ships	CP-FP
233876	GOALDS	GOAL Based Damage Stability	CP-FP
285687	Green EFFORTS	Green Environmentally friendly Efficiency in Ports and terminals	CP-FP
284905	GRIP	Green Retrofitting through Improved Propulsion	CP-FP
265861	HELIOS	High Pressure Electronically controlled gas injection for marine two-stroke diesel	CP-FP
217878	HERCULES-B	HIGHER-EFFICIENCY ENGINE WITH ULTRA – LOW EMISSIONS FOR SHIPS	CP-IP
284354	HERCULES-C	HIGHER EFFICIENCY, REDUCED EMISSIONS, INCREASED RELIABILITY AND LIFETIME, ENGINES FOR SHIPS	CP-IP
234000	HORIZON	Research into effects on cognitive performance of maritime watch-keepers under different watch patterns, workloads & conditions, with reality usage of ships bridge, engine & cargo control simulators	CP-FP
234209	HoverSpill	MultiEnvironment Air Cushion Oil Spill Fast Response & Post Emergency Remediation System	CP-FP
233718	HYMAR	High efficiency hybrid drive trains for small and medium sized marine craft	CP-FP
234104	IceWin	Innovative Icebreaking Concepts for Winter Navigation	CP-FP
234076	INNOSUTRA	Innovation Processes in Surface Transport (INNOSUTRA)	CSA-CA
266082	INOMANS2HIP	INOvative Energy MANagement System for Cargo SHIP	CP-FP
218588	INTEGRITY	INTERMODAL GLOBAL DOOR-TO-DOOR CONTAINER SUPPLY CHAIN VISIBILITY	CP-IP
218691	KitVes	Airfoil-based solution for Vessel on-board energy production destined to traction and auxiliary services	CP-FP
265966	KNow-ME	THE EUROPEAN ACADEMIC AND INDUSTRY NETWORK FOR INNOVATIVE MARITIME TRAINING, EDUCATION AND R&D	СР
218522	MARPOS	MARitime POlicy Support	CSA-SA
233715	MINOAS	Marine INspection rObotic Assistant System	CP-FP
234372	Navtronic	Navigational system for efficient maritime transport	CP-FP
218599	POSEIDON	Power Optimised Ship for Environment with Electric Innovative Designs ON board	CP-IP
234258	PRESS4TRANSPORT	Virtual Press Office to improve EU Sustainable Surface Transport research media visibility on a national and regional level	CSA-SA
218590	PROMARC	PROmoting MArine Research Careers	CSA-SA
218621	PROPS	Promotional Platform for Short Sea Shipping and Intermodality	CSA-CA

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Green Retrofitting of Existing Ships	CP-FP
RETROFITting ships with new technologies for improved overall environmental	CP-FP
Risk-Based Expert System for Through – Life Ship Structural Inspection and Maintenance and New-Build Ship Structural Design	CP-FP
Ship Evacuation Data and Scenarios	CP-FP
SAFETY OF WINTER NAVIGATION IN DYNAMIC ICE	CP-FP
Ships oriented Innovative soLutions to rEduce Noise & Vibrations	CP-FP
Sustainable Knowledge Platform for the European Maritime and Logistics Industry	CSA-CA
Strategic Research For Innovative Marine Propulsion Concepts	CP-IP
Surfacing System for Ship Recovery	CP-FP
Targeted Advanced Research for Global Efficiency of Transportation Shipping	CP-FP
Setting-up of effective Technological Clinics to address real knowledge needs of Surface Transport industry	CSA-SA
TEchnologies and scenarios For Low Emissions Shipping	CP-FP
Development and proof of new approaches for through- life asset management based on next generation of materials and production technology	CP-FP
Trans-Rail Integrated Goods European-Express Routes Demonstrators	СР
Transport Fire Safety Engineering in the European Union	CP-FP
TRIple Energy Saving by Use of CRP, CLT and PODded Propulsion	CP-FP
Tools for Ultra Large Container Ships	CP-FP
Ultra Slow Ships	CP-FP
VISIONS-OLYMPICS. The next generation products and procedures for Vessels and Floating Structures	CSA-SA
	improved overall environmental  Risk-Based Expert System for Through – Life Ship Structural Inspection and Maintenance and New-Build Ship Structural Design  Ship Evacuation Data and Scenarios  SAFETY OF WINTER NAVIGATION IN DYNAMIC ICE Ships oriented Innovative soLutions to rEduce Noise & Vibrations  Sustainable Knowledge Platform for the European Maritime and Logistics Industry  Strategic Research For Innovative Marine Propulsion Concepts  Surfacing System for Ship Recovery  Targeted Advanced Research for Global Efficiency of Transportation Shipping  Setting-up of effective Technological Clinics to address real knowledge needs of Surface Transport industry  TEchnologies and scenarios For Low Emissions Shipping  Development and proof of new approaches for through- life asset management based on next generation of materials and production technology  Trans-Rail Integrated Goods European-Express Routes Demonstrators  Transport Fire Safety Engineering in the European Union  TRIple Energy Saving by Use of CRP, CLT and PODded Propulsion  Tools for Ultra Large Container Ships  Ultra Slow Ships  VISIONS-OLYMPICS. The next generation products

# 1.7.3. Activity: TPT-TPT HORIZONTAL ACTIVITIES for implementation of the TRANSPORT PROGRAMME

233828	GHG-TransPoRD	Reducing greenhouse-gas emissions of transport beyond 2020: linking R&D, transport policies and reduction targets	CSA-SA
233846	INTERCONNECT	INTERCONNECTION BETWEEN SHORT AND LONG- DISTANCE TRANSPORT NETWORKS	CP-FP

#### 1.7.4. ERANET

266111 MARTEC II	ERA-NET MARitime TEChnologies II	CSA-CA
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#### 1.8. Theme 8: Socio-economic sciences and Humanities

#### 1.8.1. Activity: SSH-4 Europe in the world

225382 E	EU4SEAS	The EU and sub-regional multilateralism in Europe's sea basins: neighbourhood, enlargement and multilateral cooperation.	CP-FP
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#### 1.9. Theme 9: Security

#### 1.9.1. Activity: SEC-1 Increasing the Security of citizens

242295	IMCOSEC	Integrated approach to IMprove the supply chain for COntainer transport and integrated SECurity simultaneously	CSA-SA
218148	UNCOSS	UNDERWATER COASTAL SEA SURVEYOR	CP

#### 1.9.2. Activity: SEC-2 Increasing the Security of infrastructures and utilities

2	218245	SECTRONIC	Security System for Maritime Infrastructures, Ports and Coastal zones	CP
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### 1.9.3. Activity: SEC-3 Intelligent surveillance and border security

218290	AMASS	Autonomous maritime surveillance system	CP
261795	CASSANDRA	Common assessment and analysis of risk in global supply chains	СР
261679	CONTAIN	Container Security Advanced Information Networking	CP
217991	EFFISEC	Efficient Integrated Security Checkpoints	CP
242340	12C	Integrated System for Interoperable sensors & Information sources for Common abnormal vessel behaviour detection & Collaborative identification of threat	СР
261748	PERSEUS	Protection of European seas and borders through the intelligent use of surveillance	CP
242112	SUPPORT	Security UPgrade for PORTs	CP
217931	WIMAAS	WIDE MARITIME AREA AIRBORNE SURVEILLANCE	CP

#### 1.9.4. Activity: SEC-7 Security Research coordination and structuring

218045	OPERAMAR	An InteroOPERAble Approach to the European Union MARitime Security Management	CSA-CA
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# 1.10. Theme 10: Space

# 1.10.1. Activity: SPA-1 Space-based applications at the service of the European Society

241759	AQUAMAR	Marine Water Quality Information Services – AquaMar	CP
261860	ASIMUTH	Applied simulations and Integrated modeling for the understanding of toxic and harmful algal blooms	СР
242316	CARBONES	30-year re-analysis of CARBON fluxES and pools over Europe and the Globe	CP
263295	CoBiOS	Coastal Biomass Observatory Services	CP
263079	DOLPHIN	Development of Pre-operational Services for Highly Innovative Maritime Surveillance Capabilities	СР
242284	FIELD_AC	Fluxes, Interactions and Environment at the Land- Ocean Boundary. Downscaling, Assimilation and Coupling	CP
242446	MONARCH-A	High latitude Climate Change Monitoring	CP
218812	MyOcean	Development and pre-operational validation of upgraded GMES Marine Core Services and capabilities	CP
283367	MYOCEAN2	Prototype Operational Continuity for the GMES Ocean Monitoring and Forecasting	CP-CSA
284455	MyWave	MyWave: A pan-European concerted and integrated approach to operational wave modelling and forecasting – a complement to GMES MyOcean services	CP-FP
263468	NEREIDS	New Service Capabilities for Integrated and Advanced Maritime Surveillance	СР
283291	OPEC	OPerational ECology: Ecosystem forecast products to enhance marine GMES	CP-FP
263400	OPERR	Operational Pan-European Rive Runoff	CSA-SA
282723	OSS2015	Ocean Strategic Services beyond 2015	CP-FP
283580	SANGOMA	Stochastic Assimilation for the Next Generation Ocean Model Applications	CP-FP
263246	SeaU	Multisensor Satellite Technologies for Oil Pollution Monitoring and Source	СР
262922	SIDARUS	Sea Ice Downstream Services for Arctic and Antarctic Users and Stakeholders	CP
263268	SIMTISYS	Simulator for Moving Target Indicator System	CP
242332	SubCoast	A collaborative project aimed at developing a GMES- service for monitoring and forecasting subsidence hazards in coastal areas around Europe	CP

# 1.10.2. Activity: SPA-3 Cross-cutting activities

242379	EAMNet	Europe Africa Marine Network	CSA-CA
263165	MAIRES	Monitoring Arctic Land and Sea Ice using Russian and European Satellites	CP-SICA

# 2. "IDEAS" (SP2)

# 2.1. Theme: ERC - European research council

### 2.1.1. Activity: ERC-AG Advanced Grants

246749	BIOCARB	Carbonate Biomineralization in the Marine Environment: Paleo-climate proxies and the origin of vital effects	ERC-AG
268476	BIOSILICA	From gene to biomineral: Biosynthesis and application of sponge biosilica	ERC-AG
249930	CoralWarm	Corals and global warming: The Mediterranean versus the Red Sea	ERC-AG
247153	DARCLIFE	Deep subsurface Archaea: carbon cycle, life strategies, and role in sedimentary ecosystems	ERC-AG
269586	DISPERSE	Dynamic Landscapes, Coastal Environments and Human Dispersals	ERC-AG
268732	EarlyWarning	Generic Early Warning Signals for Critical Transitions	ERC-AG
227348	EMIS	An Intense Summer Monsoon in a Cool World, Climate and East Asian Monsoon during Interglacials with a special emphasis on the Interglacials 500,000 years ago and before	ERC-AG
226837	Globalseis	NEW GOALS AND DIRECTIONS FOR OBSERVATIONAL GLOBAL SEISMOLOGY	ERC-AG
268595	MEDEA	Microbial Ecology of the DEep Atlantic pelagic realm	ERC-AG
250254	MINOS	Microbial Network Organisation	ERC-AG
267931	NEWLOG	New Directions Linking Ocean Geochemistry, Biomineralization and Palaeoclimate	ERC-AG
267116	NWFV	Nonlinear studies of water flows with vorticity	ERC-AG
228149	OUTREACH	Overlooked Unresolved Toxic Organic Pollutants: Resolution, Identification, Measurement and Toxicity:OUTREACH	ERC-AG
226600	PACEMAKER	Past Continental Climate Change: Temperatures from marine and lacustrine archives	ERC-AG
247220	seachange	Sea-level change due to climate change	ERC-AG

### 2.1.2. Activity: ERC-SG Starting Grants

258734	AMOProx	Quantifying Aerobic Methane Oxidation in the Ocean: Calibration and palaeo application of a novel proxy	ERC-SG
278705	CACH	Reconstructing abrupt Changes in Chemistry and Circulation of the Equatorial Atlantic Ocean: Implications for global Climate and deep-water Habitats	ERC-SG

258482	CODEMAP	COmplex Deep-sea Environments: Mapping habitat heterogeneity As Proxy for biodiversity	ERC-SG
259627	DINOPRO	From Protist to Proxy:Dinoflagellates as signal carriers for climate and carbon cycling during past and present extreme climate transitions	ERC-SG
203364	Elnox	Elemental nitrogen oxidation – A new bacterial process in the nitrogen cycle	ERC-SG
260266	Evochange	Complex adaptation in photosynthetic microbes evolving in response to global	ERC-SG
200915	GRACE	Genetic Record of Atmospheric Carbon dioxidE (GRACE)	ERC-SG
260564	HOR.MOON	Moonlight-dependent Hormones Orchestrating Lunar Reproductive Periodicity and Regeneration	ERC-SG
203441	ICEPROXY	Novel Lipid Biomarkers from Polar Ice: Climatic and Ecological Applications.	ERC-SG
280991	INFOTROPHIC	Algal Bloom Dynamics: From Cellular Mechanisms to Trophic Level Interactions	ERC-SG
201067	INTERGENADAPT	The interaction and the genetic basis of naturally versus sexually selected traits in the adaptive radiations of cichlid fishes	ERC-SG
240009	IOWAGA	Interdisciplinary Ocean Wave for Geophysical and other applications	ERC-SG
202903	Microflex	Microbiology of Dehalococcoides-like Chloroflexi	ERC-SG
240222	PACE	Precedents for Algal Adaptation to Atmospheric CO2: New indicators for eukaryotic algal response to the last 60 million years of CO2 variation	ERC-SG
278364	PHOXY	Phosphorus dynamics in low-oxygen marine systems: quantifying the nutrient-climate connection in Earth's past, present and future	ERC-SG
205150	PhytoChange	New approaches to assess the responses of phytoplankton to Global Change	ERC-SG
203406	PIMCYV	Physiological Interactions between Marine Cyanobacteria and their Viruses	ERC-SG
260821	PROTOBRAIN	Sensory-motor circuits in marine zooplankton and early evolution of the nervous system	ERC-SG
206148	SeaLinks	Bridging continents across the sea: Multi-disciplinary perspectives on the emergence of long-distance maritime contacts in prehistory	ERC-SG
283950	SES-LINK	The nature of social-ecological linkages and their implication for the resilience of human-environment systems	ERC-SG
280469	TEBLYM	Teleost B lymphocytes, the equivalent of mammalian B1 innate lymphocytes?	ERC-SG

# 3. "PEOPLE" (SP3)

#### 3.1. Theme: Marie-Curie Actions

### 3.1.1. Activity: PEOPLE-1 Initial training of researchers

215157	CalMarO	Calcification by Marine Organisms	MC-ITN
215174	COSI	Chloroplast Signals	MC-ITN
238512	GATEWAYS	Multi-level assessment of ocean-climate dynamics: a gateway to interdisciplinary training and analysis	MC-ITN
238366	GREENCYCLESII	Anticipating climate change and biospheric feedbacks within the Earth system to 2200	MC-ITN
214505	NEMO	Training network on protective immune modulation in warm water fish by feeding	MC-ITN
215503	NSINK	Training in sources, sinks and impacts of atmospheric nitrogen deposition in the Arctic	MC-ITN
264816	PHYPODE	Physiopathology of decompression: risk factors for the formation of intravascular bubbles during decompression	MC-ITN
238550	SAPRO	Sustainable Approaches to Reduce Oomycete (Saprolegnia) Infections in Aquaculture	MC-ITN
237997	SEACOAT	Surface Engineering for Antifouling – Coordinated Advanced Training	MC-ITN
237868	SENSEnet	International sensor development network	MC-ITN
237922	THROUGHFLOW	Cenozoic evolution of the Indonesian Throughflow and the origins of Indo-Pacific marine biodiversity: Mapping the biotic response to environmental change	MC-ITN
215414	WAVETRAIN 2	Initial Training Network for Wave Energy Research Professionals	MC-ITN

### 3.1.2. Activity: PEOPLE-2 Life-long training and career development

268256	3DUNDERWORLD	RAPID SCANNING AND AUTOMATIC 3D RECONSTRUCTION OF UNDERWATER SITES	MC-IRG
234782	3DZZI	Three-dimensional structure of stratified turbulence	MC-IEF
276447	ABFT SNP	Isolation and characterization of single nucleotide polymorpisms (SNPs) in Atlantic bluefin tuna (Thunnus thynnus)	MC-IEF
219976	AHICA	Autotrophic-Heterotrophic Interactions in Cyanobacterial Aggregates	MC-IEF
251832	AIM-HI	Acoustic Imaging of Macrophytes and Habitat Investigation (AIM-HI)	MC-IEF
224776	AIRSEA	Air-Sea Fluxes of Climatically Relevant Gases in the Marine Atmospheric Boundary	MC-IRG
276032	ALBASPECIALISATI	The causes, consequences and conservation implications of individual specialisation in seabirds	MC-IEF

220732	ALGBACT	Interactions between marine algae and bacteria	MC-IEF
252821	ALGFUEL	Biodiesel production from microalgae	MC-IEF
276915	Alien Species	Biological Invasions in Marine Ecosystems – the Role of Phenotypic Plasticity	MC-ERG
219707	AlienFish&ClimC	Modelling of non-native fish species responses to climate change	MC-IEF
253942	AMPT	Ancient Maritime Pitch and Tar: a multi-disciplinary study of sources, technology and preservation	MC-IEF
251821	AquaBac	The use of potentially protective bacteria in aquaculture against fish pathogenic Flavobacterium spp.	MC-IEF
255396	AQUALIGHT	New methods of aquatic hyperspectral light field analysis for concurrent characterisation of physical and bio-optical processes at small scales	MC-IEF
220680	ARCADIA	Archaeal activity dynamics in marine snow vs. ambient water in coastal European Sea	MC-IEF
239175	ARISTEUS	Environmental VARIableS RegulaTing DivErsity and FaUnal DistributionS in Canyon and Lower Slope Ecosystems of the Western Mediterranean	MC-ERG
237847	BIGCOW	BloGeochemistry in a high CO2 World (BIGCOW): lessons from the Ocean Anoxic Events	MC-IEF
253724	BIOCORE	Risks of global warming: the case of coral reef ecosystems in developing countries	MC-IEF
268412	BIODIV-LOG	A global approach towards linking climate and marine biodiversity to ecosystem functioning	MC-ERG
219592	biofilm dispersal	Microbial persuasion: cross-species triggering of biofilm dispersal as a competitive strategy in marine Bacilli	MC-IEF
233625	BioPACA	Biomonitoring of anthropogenic pollutants in coastal areas	MC-ERG
239540	BioSeaFood	Bioactive compounds from seafood byproducts	MC-IRG
219399	BOUSS	Theory and Numerical Analysis for Boussinesq systems with applications in coastal hydrodynamics	MC-IEF
252159	Bryozoa	Ecological genetics of Bryozoa-Myxozoa host-parasite interactions	MC-IEF
251897	CAENEUS	Crenarchaeota ecology and nutrient utilization in the subsurface ocean (CAENEUS)	MC-IEF
252702	CAGE	Submarine Canyons: Applying Geomorphometry to understand their Evolution	MC-IEF
220916	CARBPOL	Investigating the role of the carbon cycle on the environmental fate of semivolatile organic pollutants	MC-IEF
239420	Carnivorous Zoo	Carnivorous zooplankton – their role in Swedish marine food webs	MC-ERG
274841	СВОР	Cell Wall Biology in Oomycete Pathogenicity	MC-IEF
269477	CFD-OctoProp	Computational Fluid Dynamics Aided Design of the Propulsion and Locomotion Systems of a Bioinspired Robot Octopus	MC-ERG
221121	CHEMOARCH	Identity and biogeochemical role of chemoautotrophic prokaryotes in aquatic	MC-IEF

236678	CLIMICE	Late Holocene climate and sea ice variability in the southwestern Labrador Sea	MC-IEF
239465	CO2 Gulf of Trieste	Carbon dioxide variability in the Gulf of Trieste (GOT) in the Northern Adriatic Sea	MC-IRG
220929	COBIAGENE	Investigating fatty acid metabolism for sustainable farming of cobia Rachycentron canadum L., a promising candidate for diversifying European aquaculture	MC-IEF
220104	COMBINE	COccolithophores Morphology, Blogeography, geNetic and Ecology database	MC-IEF
255216	CONMAR	Cognitive Robotics: Cooperative Control and Navigation of Multiple Marine Robots for Assisted Human Diving Operations	MC-IEF
219552	COPEPOD MATING	Optimal mating strategies in pelagic copepods: ecological and evolutionary meaning	MC-IEF
231109	CoralChange	Factors controlling carbonate production and destruction of cold-water coral reefs of the NE Atlantic	MC-IRG
248252	CoralChange	Effects of global warming and alien species invasions on high diverse communities of NW Mediterranean Sea.	MC-ERG
273967	CoralClimRespons	Revealing the response of the coral and its endosymbiotic algae to climate changes by molecular techniques.	MC-IEF
221072	corgard	Mediterranean red coral management and conservation	MC-IEF
221243	COSEATIBO	Co-evolution and implications of vector adaptation: A case study on seabird ticks and Borrelia.	MC-IEF
267081	CREM	Coral Reefscape Ecology and Mapping	MC-IRG
236694	DAPOP	Deposition of Atmospheric Particles on the Ocean : a Process study	MC-IEF
220941	DeepOceanGlaci	Using deep-sea corals to test the role of the deep Southern Ocean in ocean circulation and the regulation of atmospheric carbon dioxide	MC-IEF
268253	Deep-sea corals	Deep-Sea Coral Geochemistry and Climate: a Focus on the History of the Southern	MC-IRG
252436	DEFOrm	Detachment Faults in Ophiolites	MC-IEF
268115	DEMARN	Designation and Management of Marine Reserve Networks	MC-IRG
230865	DIMBA	Disease and immunity in marine brown algae	MC-ERG
268269	DIOMFISH	Design and Implementation of Optimal Management Systems for European Fisheries	MC-IRG
219820	Distortion	Predicting and managing weld induced distortion in thin-walled, steel structures	MC-IEF
275702	DODE	Deep Ocean Dispersal and Evolution	MC-IEF
274308	EARL	The effect of emergent compounds and climate change in aquatic organisms with different early life history strategies	MC-IEF

208841	EcoDOM	Advancing Understanding of Carbon Cycling and Coloured Dissolved Organic Matter Dynamics in European Wetlands & Coastal Ecosystems through integration of observations and novel modelling approaches	MC-IRG
235835	ECOLIVA	Sustainable ecosystem services and livelihoods through aquaculture development	MC-IEF
235380	ECTOTOX	A toxico-genomic study of the model brown alga Ectocarpus siliculosus	MC-IEF
235791	EFH-GIS	The identification and mapping of Essential Fish Habitats using Geographic Information Systems (EFH-GIS)	MC-IEF
237449	EMBiCC	Early Mesozoic Biodiversity and Climate Change: marine ecosystem response to global warming and carbon dioxide rise	MC-IEF
276475	EMCAPE	Evaluating Aerobic Microbial Methane Cycling under Archaean-Proterozoic Environmental Conditions	MC-IEF
210405	ENCHEM	Environmental chemistry and metal cycling in the Baltic Sea	MC-ERG
273361	ESCALATE	Evaluating Social Capital Effects on PoLicy Adaptation to Climate change in Coastal Zones of England	MC-IEF
224819	ESTSpline	Educational, Scientific, and Technological Aspects of Splines	MC-ERG
210085	EVERANS	Evaluation of the Efficiency of Artificial Reefs by Advanced Numerical Simulations – Towards Environmentally Friendly Coastal Protection	MC-ERG
235962	EVOLBIRD	Demographic strategies under climate variation: a study on Arctic and Antarctic	MC-IEF
236549	EVOLHAKE	Ecological and evolutionary dynamics of juvenescent marine populations: a comparative study of the European hake in the Atlantic and the Mediterranean	MC-IEF
253584	EXPLOIT-CSIA	Exploiting the potential use of compound specific isotope analysis (CSIA) in marine environment	MC-IEF
219667	FISHINUTRIGEN	Fish intestinal nutrigenomics in response to fish oil replacement in Atlantic salmon	MC-IEF
273391	FISHVAC	Improving vaccination of carp against spring viraemia of carp virus (SVCV)	MC-IEF
239536	FLOCON	Flow Control: Reduced Order Modelling, Nonlinear Analysis and Control Design	MC-IRG
237100	FORAM-C	Linking foraminiferal diets and shell chemistry: an experimental approach to improving paleoceanography proxies	MC-IEF
268331	FUNDIVERSITY	Functional redundancy of marine bacteria in biogeochemical cycles	MC-ERG
274184	GASTRONEUROPE	Gastrointestinal and neuropeptides regulating food intake in fish in response to dietary lipid composition	MC-ERG
247528	GoC-integrated	Integrated statistical approach to the Gulf of Cádiz marine system	MC-ERG

223799	GST	Global Seismic Tomography	MC-IRG
253117	HafniumWeather	Constraining the controls on the incongruent release of hafnium: implications for long-term chemical weathering rates and long-term CO2	MC-IEF
234987	HERA	Heterotrophic Activity and Ecology of abundant versus RAre marine bacterial	MC-IEF
221696	Houses fate	Appendicularian houses fate and role in carbon sedimentation and nutrition of zooplankton	MC-IEF
252478	HUMANSATSEA	Integrating the human element into law of the sea: the quest for a comprehensive legal regime and adequate implementation tools at the international and EC level	MC-IEF
272437	ICFLOAT	Coupled fluid-solid numerical modelling for deep-water and far-offshore floating wind turbines using an adaptive finite element method	MC-IEF
208801	IDA	Intraspecific Diversity and Adaptability of Fucus vesiculosus at range limits	MC-IRG
237426	INMEDIATO	Influence of the Mediterranean Outflow on the Atlantic Ocean Climate: the role of local scale processes	MC-IEF
219675	Internal exposure	Internal exposure – in tissue equilibrium sampling to bridge the missing link between bioavailability and bioaccumulation	MC-IEF
276969	InvaBioEcoF	BIODIVERSITY AND ECOSYSTEM FUNCTIONING: individual-based modelling to understand and predict the consequences of biological invasions	MC-ERG
256570	invasive fish	The effects of invasive fish on native species	MC-IRG
272072	IronAlgae	Iron uptake in Chromera velia and other marine microalgae	MC-ERG
221635	IronGeoBioVent	Iron geobiology at deep-ocean hydrothermal vents	MC-IEF
253182	IsoBAB	Isotope constraints on the contribution of metal-rich magmatic fluids to back-arc seafloor hydrothermal systems	MC-IEF
247837	ISOMAR	Sources and Biogeochemical Cycling of Iron Isotopes in Marine Environments	MC-IRG
210011	Joint-Assimilation	Joint assimilation of satellite aerosol, cloud, and precipitation observations in numerical models to support climate and hydrologic applications	MC-IRG
276812	LAC	Liquid-aperture Coulter counter for sizing oceanic particles and phytoplankton	MC-IRG
221073	LAND CRAB	Transition from sea to land: Olfactory function and adaptations in terrestrial	MC-IEF
273851	LARVDEVOPTI	Larval quality in oyster hatcheries: Effects of ocean acidification, temperature change and food availability on reproductive success and survival of the European flat oyster	MC-IEF
273061	LIAK&CC	IMPACT OF CLIMATE CHANGE ON WINTERING ARCTIC SEABIRDS – AN INTER-POPULATION STUDY ON LITTLE AUKS	MC-IEF

237517	LIDPOP	Linking inducible chemical defences and phytoplankton population dynamics	MC-IEF
274433	LINKWEATHERING	How does weathering link to atmospheric carbon dioxide – evidence from past extreme climate events	MC-IEF
276916	LONGFA	Biosynthesis of very long-chain fatty acids in fish: Molecular and biochemical basis and implications in aquaculture	MC-ERG
249147	LRSB	Levant rocky-shore biodiversity: testing ecological impacts of climate change and bioinvasions on a unique ecosystem	MC-IRG
224890	LusoAquaBarcode	Implementing DNA barcoding into aquatic biodiversity research in Portugal and priming new macrobenthos monitoring tools	MC-ERG
207632	MAREA	Structure and dynamics of marine rocky benthic communities: Reactions and perspectives facing the global change	MC-ERG
250388	mARibact	Occurrence, distribution and cost of antibiotic resistance in marine sediment bacteria	MC-ERG
207232	MARINECFD	Development of CFD Tools for Large Marine Diesel Engine Applications	MC-IRG
220270	Maritime	Conflict Management, Cross-border relations and the Struggle for maritime Hegemony in the North Atlantic (XVIth-XVIIth centuries)	MC-IEF
230972	Maritime system	Territorial dynamics of the world maritime system	MC-ERG
219818	MarUrbe	Sustainable Urban Development: solutions to promote the biological and conservation value of marine urban structures.	MC-IEF
235365	MASTDIEV	Diversity patterns across lineages and evolutionary hierarchies in marine unicellular eukaryotes	MC-IEF
235634	MATE	MATERNAL EFFECTS: FROM ENVIRONMENT THROUGH TO THE MOLECULAR AND INDIVIDUAL LEVEL, AND BACK TO POPULATION ECOLOGY	MC-IEF
251809	MATERGLOBE	POPULATION DYNAMICS OF MEDITERRANEAN WATERBIRDS AND THEIR DEMOGRAPHIC AND BEHAVIOURAL RESPONSES TO GLOBAL CHANGE	MC-IEF
220299	MECCA	Mediterranean Coral Calcification in response to global change	MC-IEF
239141	MED-AIRSEA-FLUX	Air-Sea Exchanges and Fluxes in the Mediterranean Sea Region from Satellites, In Situ Data and Models	MC-IRG
273643	METOIL	METABOLOMICS OF TIDAL ORGANISMS TO INDICATE OIL POLLUTION	MC-IEF
272134	MILLEVARIABILI	Origin and character of MILLEnnial-scale climate VARIABILIty in the North Atlantic during different climate boundary conditions of the Pleistocene	MC-ERG
273840	miRTrout	MicroRNA and metabolic programming in rainbow trout	MC-IEF
254260	Molyaloc	Behavior of molybdenum and its isotopes during alteration of the oceanic crust	MC-IEF

273466	Moly-OAEs	Global redox state of the ocean during Cretaceous oceanic anoxic events: new insights from molybdenum isotopes	MC-IEF
239229	MotileCellBiophy	Biophysical Aspects of Actin-Based Motility- An Integrative Whole-Cell Analysis	MC-IRG
220063	MPACONTOP	Marine protected areas for the conservation of marine top predators	MC-IEF
272772	Myxozoa Evo Devo	Evolution and development in Myxozoa; body-plan simplification associated with endoparasitism	MC-IEF
239313	NANOLUM	Luminescently doped nanoparticles. Strategies for improving sensitivity in luminescence assays and implementation in microarray formats.	MC-ERG
220905	NATARISE	Natural and Artificially Influenced Swash-Groundwater Interactions Experiments	MC-IEF
236311	NEOTETHYS	The Late Eocene climatic transition from greenhouse to icehouse conditions in the Neo-Tethys	MC-IEF
219218	NESTS	Net sEaward Sand Transport during major Storms	MC-IEF
228583	NeuroInf	Neuroendocrine-immune interaction during inflammation – a phylogenetic study	MC-ERG
224898	NEUTEL-APC	High-energy cosmic neutrinos astronomy using a Mediterranean undersea telescope	MC-ERG
235005	NITRICOS	Nitrogen removal in coastal sediments: molecular microbial ecology of nitrate reducing bacteria	MC-ERG
220894	NITROFORAM	The New Players in the Marine Nitrogen Cycle: Benthic Foraminifera	MC-IEF
239261	Paleo Cretan Basin	An integrated paleoceanographic-sedimentological study of the Cretan Sea, South Aegean Sea	MC-IRG
219522	Phy2Coast	Regional phytoplankton ecophysiology products for coastal waters from local and satellite measurements	MC-IEF
235623	PICOPAR	Assessing the role of parasitism in the regulation of picophytoplankton communities in open ocean environments	MC-IEF
254619	PICOPOP	Inferring adaptation, population size and lifecycle, from population genomics in a marine picoplanktonic species : Ostreococcus tauri (Chlorophyta)	MC-IEF
254300	PLUMES	Impact of subglacial meltwater plumes on sediment dispersal, ocean circulation, ecosystems and climate change	MC-IEF
253322	POLMOSAIC	Advanced Underwater Image Mosaicing through Imaging Polarimetry	MC-IEF
252888	Reef fish diversity	Diversity and community assembly in Caribbean reef fish	MC-IEF
219971	REPRO-SWIM	Swimming for reproduction (REPRO-SWIM): Identification of swimming induced metabolic and hormonal switches that trigger reproduction	MC-IEF
251747	RESET-ECO	Long Term Research on Sea Turtle Ecology and Conservation	MC-ERG

249194	RESPPIS	Relationships between Energetic Status and Population Parameters in Seals.	MC-IRG
272571	SEA2GRID	Grid connection of Wave Energy Converters: investigation on storage requirements and solutions	MC-IEF
236295	SEAFUTURE	SEABIRDS, TUNA, CLIMATE CHANGE – FUNCTIONAL RELATIONSHIPS IN THE TROPICAL INDIAN OCEAN AND SUSTAINALBE USE OF ITS RESOURCES	MC-IEF
237181	SEFCUMPAQ	A NOVEL BIOPROCESS COUPLING WASTEWATER TREATMENT WITH ELECTRICITY PRODUCTION TO REMEDIATE METAL POLLUTED AQUATIC ENVIRONMENTS	MC-IEF
272260	SEISSEA	Seismic Inversion and Stochastic Spectral Analysis of Thermohaline Staircases in the Tyrrhenian Sea	MC-IEF
246680	SepiaCartilage	Molecular characterization of cartilage development in the cephalopod mollusk Sepia officinalis	MC-ERG
268335	SFHaBiLF	Suction feeding hydrodynamics and biomechanics in larval fishes	MC-IRG
252750	SHARKEVOL	Novelties and phylogeny in the evolutionary radiation of modern sharks and rays	MC-IEF
252095	SIMPLE	Spatially-Implicit Modelling of Plankton Ecosystems	MC-IEF
220200	SMARTFISH	Study of specific cell mediated immunity and vaccine optimization against bacterial and viral infections in trout (Oncorhynchus mykiss)	MC-IEF
274356	SoCoRm	Social complexity in Resource Management	MC-IEF
272282	SOMA	Shearwaters' Olfaction: a comparative study of sensory ecology in the Mediterranean Sea and Atlantic Ocean	MC-IEF
249714	SOURCE	Tracing Amazon soil organic carbon input from land to the ocean	MC-ERG
252738	STORMITURTLE	Ecological correlates of storage and migration strategies in a capital-breeding oceanic 'jellyvore' multiyear migrant turtle	MC-IEF
255135	Substrate use	Linking substrate consumption to consumer identity in carbon-cycling microbes inhabiting anoxic marine sediments	MC-IEF
276778	Surf3DSLAM	Probabilistic 3D surface matching for bathymetry based Simultaneous Localization and Mapping of underwater vehicles	MC-ERG
277038	SYMASC	Bacterial Symbiosis in Ascidians	MC-IRG
275790	SYNRESH	Synchronous Regime Shifts Across European Seas	MC-IEF
209938	Tambo	Societies of South Peru in the Context of Climatic and Environmental Change, Late Pleistocene to Modern Age – Rio Tambo Projekt	MC-IRG
254297	TEMSPATH	Impact of temperature on the vulnerability of Mediterranean seagrasses to phatogens	MC-IEF
221017	The weakest links	How climate change affect the "weakest links" of animal tolerance?	MC-IEF
252774	TransMasp	Transboundary Maritime Spatial Planning	MC-IEF

276917	Trophic efficiency	Effects of plankton community structure on energy pathways and trophic efficiency	MC-IRG
219188	TSUMOSLIDE	submarine landSLIDEs and TSUnami MOdeling on the margins of the Mediterranean Sea	MC-IEF
230828	UNPACK CLIMATE	UNraveling PAst Climate as a Key to understanding future CLIMATE	MC-IRG
205675	USEABLE	Understanding Seagrass Effects on Biodiversity Levels	MC-ERG
249183	VIRUSIGNALLING	The role of cell signalling and infochemicals in marine Algal-Virus interactions	MC-IRG
274090	VISE	Vertebrate isotopes and the environment	MC-IEF
272722	VORTEXETER	Vortices and waves: dynamics, stability and mixing	MC-IEF
220607	WEDDEL	Wind-driven upwelling and eddy transports in the Southern Ocean – a model intercomparison in three dimensions	MC-IEF

# 3.1.3. Activity: PEOPLE-3 Industry-academia partnerships and pathways

286354	ALGAECOM	Exploitation of microalgae diversity for the development of novel high added-value cosmeceuticals	MC-IAPP
217873	BLUE4GLUE	Reinforcing capacity towards industrially relevant research on bio-inspired materials and delivery mechanisms	MC-IAPP
286413	CARBONCOMP	High-throughput development of carbon-polymer nanocomposites for marine	MC-IAPP
286301	COMPASS	Scientific Approach to Commercial Product Development and Assessment for the Maritime Industry	MC-IAPP
286059	CoreShell	Marine nanobiotechnology: Manganese oxide- containing core-shell materials formed by proteins from marine organisms for biomedical and environmental applications	MC-IAPP
230598	MABFUEL	Marine Algae as Biomass for Biofuels	MC-IAPP
285856	Omega3max	Maximizing marine omega-3 retention in farmed fish: sustainable production of healthy food.	MC-IAPP
230775	PROKrill	Product Research and Optimization of Krill	MC-IAPP
251589	SAIL	ICT System addressed to integrated logistic management and decision support for intermodal port and dry port facilities	MC-IAPP

# 3.1.4. Activity: PEOPLE-4 The international dimension

253970	AcidiBacLight	Impacts of Ocean Acidification on Bacterioplankton Functioning: Effects on Proteorhodopsin-containing Marine Bacteria	MC-IOF
237297	Acoustic Rainfall	Acoustic Monitoring of Marine Rainfall	MC-IIF
221117	ALGETOX	Chemistry and Chemical Biology of Lipophilic Algal Toxins	MC-IIF

235142	AMICAL	Effect of ocean Acidification on Marine Invertebrates CALcification in sensitive	MC-IOF
276164	ANTSAN	Analysis of the neural transcriptome of the sea anemone Nematostella vectensis.	MC-IIF
269175	AQUAPHAGE	Network for the development of phage therapy in aquaculture	MC-IRSES
274660	Bacterial Stress	STUDIES ON THE BACTERIAL STRESS RESPONSE AND STRESS-INDUCED CROSS-RESISTANCE	MC-IIF
221686	BADEPAS	Behavior and distribution of emerging pollutants in aquatic systems	MC-IOF
235381	Benthic Ciliates	The Biodiversity, Systematics and Guide to the Identification of Marine Benthic Ciliates	MC-IIF
221065	BioConnectEnce	Biodiversity and connectivity in the resilience of coastal marine communities	MC-IIF
269294	BIOVADIA	Biodiversity and Valorisation of blue Diatoms	MC-IRSES
220485	Carbon Export	New approaches for understanding oceanic carbon uptake	MC-IIF
276145	Cetacean-Stressors	The independent and interactive effects of multiple stressors on reproduction and development in cetaceans	MC-IOF
236457	CFD-DEM	NUMERICAL SIMULATION OF SEDIMENT ENTRAINMENT	MC-IIF
251801	CHAOS	CLIMATE CHANGE AND SPECIES INVASIONS IN AQUATIC SYSTEMS: A COMPARATIVE PERSPECTIVE	MC-IOF
230837	COMPASS	Comparative Assessment of Coastal Vulnerability to Sea-Level Rise at Continental	MC-IRSES
253407	CONCEAL	Chronic Ocean Noise: Cetacean Ecology and Acoustic habitat Loss	MC-IIF
247514	CREC	Coastal Research Network On Environmental Changes	MC-IRSES
254389	DeRogue Waves	Deterministic Forecasting of Rogue Waves in the Ocean	MC-IIF
221050	EcoEco Monitoring	Optimal monitoring of socio-economic and ecological systems for robust natural resource management	MC-IIF
219265	ECOFUN	Analysis of biodiversity changes on structural and functional properties of marine ecosystems under cumulative human stressors	MC-IOF
275681	EGOMARS	EGOMARS: Land-Ocean Connectivity – from Hydrological to Ecological Understanding of Groundwater in the Coastal Zone	MC-IIF
220532	ESCOR	Environmental stresses in a scleractinian coral- dinoflagellate symbiosis: a genomics approach.	MC-IOF
220172	FeBOL	Iron binding organic ligands	MC-IOF
236316	FISHECO	Fish community structure and ecosystem properties in a global change context	MC-IOF
275851	FORSEANAM	The forcing of sea level rise in the Arctic, the North Atlantic and the Mediterranean Sea	MC-IOF
221812	FUNSEX-DEPHYND	The functional significance of sex and death in phytoplankton differentiation	MC-IIF

247559	GENERA	Use of genomic and proteomic tools for the development of contaminant specific biomarkers for the environmental risk assessment of aquatic ecosystems.	MC-IRSES
275289	GENMARPHYTO	FUNCTIONAL GENOMICS STUDIES IN MARINE PRIMARY PRODUCTIVITY: ENVIRONMENTAL AND POLUTION EFFECTS ON PHYTOPLANKTON	MC-IOF
219811	GenS	Genomic Approach to Study the Role of Bacterioplankton in the Sulfur Cycle	MC-IOF
235581	Glucose use in fish	Carbohydrate utilization by the working muscle of rainbow trout	MC-IIF
221753	GRAVIMASS	Retrieval of global surface mass variations from space measurements	MC-IOF
269202	HEMOW	Health Monitoring of Offshore Wind Farms	MC-IRSES
251720	INBUCOC	Interacting Buoyant Coastal Currents	MC-IIF
230803	IRC-IMTA	An International Research Consortium for promoting and developing Integrated Multi-Trophic Aquaculture	MC-IRSES
250605	Lagapoce	Lagrangian approach to understand upper ocean processes	MC-IOF
221581	Malina	Impact of climate change on light-related carbon fluxes in the Arctic Ocean	MC-IOF
246987	MarBioTec*EU-CN*	European-Chinese Research Staff Exchange Cluster on Marine Biotechnology	MC-IRSES
236079	MarinEcosyStabil	Complexity, stability and chaos in marine model ecosystems for present day and global warming conditions	MC-IOF
254634	MarlnvasPhylogen	The role of phylogenetic relatedness in invasion success: A multidisciplinary study of marine biological invasions	MC-IOF
253251	MARMEDIV	Marine meiofauna diversity explored using environmental DNA sequencing	MC-IIF
220129	MARPAH	Marine Micro-Algae as Global Reservoir of Polycyclic Aromatic Hydrocarbon Degraders	MC-IOF
219607	MEDAT-ARCHIVES	MEDITERRANEAN CLIMATE EVOLUTION AND CONNECTION WITH THE ATLANTIC OCEAN: INFERENCES FROM HIGH-RESOLUTION MARINE ARCHIVES	MC-IOF
237561	MERCTIC	Mercury biogeochemistry in the high Arctic	MC-IIF
221059	MESOMED	Marine Environment and Sustainable-fisheries: Observation-Model in the Northern West Mediterranean Sea	MC-IIF
234409	MicroTRANCE	Microbiological Transformation of Anthropogenic Nitrogen in Coastal Environments	MC-IOF
252260	МОНАВ	Multidisciplinary modelling approaches to understand harmful algal blooms dynamics	MC-IOF
221407	MYCO-REG	Global regulation in Mycobacterium: Role of Lsr2	MC-IIF

236962	NACSA	North Atlantic Climatic Sedimentary Archives. Provenance and Transport Controls.	MC-IOF
230855	OAEx	Ocean Acoustic Exploration	MC-IRSES
271936	OCEANSEIS	Oceanic exploration with seismic reflection data	MC-IOF
219429	offshore FSI	FLUID-STRUCTURE INTERACTIONS IN OFFSHORE ENGINEERING	MC-IOF
272869	OXIREHAB	Oxidative and Inflammatory Response of Oysters to Harmful Algal Bloom Species	MC-IOF
235626	PALEOCARB	Role of the marine carbon cycle in the climate system	MC-IOF
274766	Para-PeSt	The role of host personality and stress responses in parasite dynamics	MC-IIF
230847	PASSA	Partnerships for Sustainable Shrimp Aquaculture	MC-IRSES
272280	Permian-Triassic	Investigating the effects of past global ocean acidification on marine ecosystems: A novel multiproxy approach	MC-IOF
219625	PLUTOTRACE	Plutonium bio-signature as tracer of climate changes in ocean transport	MC-IOF
253376	Polar Bear	POLAR BEAR RESPONSE TO GLOBAL WARMING: Insights from shotgun sequencing of the Polar Bear Genome	MC-IOF
237034	POLARCLIMSTRESS	Climate change, energetic constraints and susceptibility to environmental stressors in Antarctic seabirds: integrating stress physiology and population heterogeneity	MC-IOF
220798	PSICoPopS	Post-settlement events influence on coral population structure: A multi-scale analysis along a latitudinal gradient	MC-IOF
221840	SeagrassTIME	Trophic Cascades in Marine Ecosystems	MC-IOF
247468	Sim.COAST	Numerical Simulation Tools for Protection of Coasts against Flooding and Erosion	MC-IRSES
251250	Snakes at sea	Evolutionary transition to marine life: novel insight from sea snakes	MC-IOF
235418	SOLAIROS	Solubility of Aerosol Iron in Open-ocean Seawater	MC-IOF
221167	SOMFlood	Compositional Changes of Sedimentary Organic Matter from a 100-year Flood Deposit: Insights into Event-Driven Processes in the Coastal Ocean	MC-IOF
236323	SOUNDMAR	Sound use for orientation by marine fauna, an ecosystem approach considering anthropogenic noise.	MC-IOF
276297	TBAAMarE	Trait-based approaches across marine ecosystems	MC-IIF

# 3.1.5. Activity: PEOPLE-5 Specific actions

200214	2007UWM	Let's discover 2007 underwater mysteries	CSA-SA
228596	RECARE	Researchers in Cyprus Care About the Environment	CSA-SA

# 4. "CAPACITIES" (SP4)

### 4.1. Theme: International Cooperation (INCO)

# 4.1.1. Activity: INCO-6 Reinforcing cooperation with Europe's neighbours in the context of the ERA

265419 INCAM	Improving National Assessment and Monitoring Capacities for Integrated Environmental and Coastal ecosystem Management	CSA-SA
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### 4.2. Theme: Research Infrastructures (INFRA)

### 4.2.1. Activity: INFRA-1 Support to existing research infrastructures

262336	AQUAEXCEL	AQUAculture infrastructures for EXCELLence in European Fish research	CP-CSA- INFRA
227799	ASSEMBLE	Association of European Marine Biological Laboratories	CP-CSA- INFRA
212488	D4Science	Distributed colLaboratories Infrastructure on Grid ENabled Technology 4 Science	CP-CSA- INFRA
239019	D4Science-II	Data Infrastructure Ecosystem for Science	CP-CSA- INFRA
228344	EUROFLEETS	TOWARDS AN ALLIANCE OF EUROPEAN RESEARCH FLEETS	CP-CSA- INFRA
238952	Geo-Seas	Pan-European infrastructure for management of marine and ocean geological and geophysical data	CP-CSA- INFRA
283644	iMarine	Data e-Infrastructure Initiative for Fisheries Management and Conservation of Marine Living Resources	CP-CSA- INFRA
284274	InGOS	Integrated non-CO2 Greenhouse gas Observation System	CP-CSA- INFRA
262584	JERICO	TOWARDS A JOINT EUROPEAN RESEARCH INFRASTRUCTURE NETWORK FOR COASTAL OBSERVATORIES	CP-CSA- INFRA
262552	MaRINET	MaRINE Renewables Infrastrcuture Network for Emerging Energy Technologies	CP-CSA- INFRA
228224	MESOAQUA	Network of leading MESOcosm facilities to advance the studies of future AQUAtic ecosystems from the Arctic to the Mediterranean	CP-CSA- INFRA
283607	SeaDataNet II	SeaDataNet II: Pan-European infrastructure for ocean and marine data management	CP-CSA- INFRA
226592	UP-GRADE BS-SCENE	UP-GRADE BLACK SEA SCIENTIFIC NETWORK	CP-CSA- INFRA

#### 4.2.2. Activity: INFRA-2 Support to new research infrastructures

262280	EMBRC	EMBRC preparatory phase	CP-CSA- INFRA
211816	EMSO	European Multidisciplinary Seafloor Observation	CP-CSA- INFRA
211796	ERICON-AB	The European Polar Research Icebreaker Consortium AURORA BOREALIS	CP-CSA- INFRA
211597	EURO ARGO	Global Ocean Observing Infrastructure	CP-CSA- INFRA
284321	GROOM	Gliders for Research, Ocean Observation and Management	CP
212525	KM3NeT-PP	Preparatory Phase for a Deep Sea Facility in the Mediterranean for Neutrino Astronomy and Associated Sciences	CP-CSA- INFRA
211372	LIFEWATCH	Life Watch	CP-CSA- INFRA
261747	SIOS-PP	Svalbard Integrated Arctic Earth Observing System – Preparatory Phase	CP-CSA- INFRA

# 4.2.3. Activity: INFRA-3 Support for policy development and programme implementation, including support to emerging needs

284391	SIDERI	Strengthening International Dimension of Euro-Argo Research Infrastructure	CSA-CA
228130	STACHEM	SCIENCE AND TECHNOLOGY FOR ARCHAEOLOGY AND CULTURAL HERITAGE IN THE EASTERN MEDITERRANEAN	CSA-SA

# 4.3. Theme: Research for the benefit of SMEs (SME)

# 4.3.1. Activity: SME-1 Research for SMEs

222458	ADAPOND	Development of an automatic process of in-house collection, storage and application of adaptive bacteria culture for fish farms.	BSG-SME
262315	AQUAGEN	Development of cost-effective, water based power take-off system for marine energy applications	BSG-SME
262612	ATLANTIS	Aquatic Technology Linked to A Novel Treatment of Invasive Species	BSG-SME
262225	AutoDrop	Development of a novel autonomous vehicle significantly reducing costs related to subsea sensors deployment and recovery	BSG-SME
262649	BEADS	Bio-engineered micro Encapsulation of Active agents Delivered to Shellfish	BSG-SME
232116	BioFoulControl	Development of innovative and sustainable technology for control of marine biofouling on heat exchangers of vessels with ozone technology	BSG-SME

286885	ВОМА	Boat Management	BSG-SME
285878	CART	Cooperative Autonomous Robotic Towing system	BSG-SME
262256	CLEANHATCH	Development and implementation of an innovative cleaning technology for marine and freshwater larval hatchery tanks in recirculating aquaculture systems	BSG-SME
232513	ClosedFishCage	Development of an innovative, cost-effective environmetally friendly closed cage for sea-based fish farming	BSG-SME
262183	DeammRecirc	The development of a deammonification treatment to remove nitrogen from recirculated water used in aquaculture	BSG-SME
262160	Digital Ocean	INTEGRATED MULTIMEDIA MIXED REALITY SYSTEM, OF REAL TIME VIRTUAL DIVING, BY WEB TELEOPERATED UNDERWATER DATA COLLECTING ROBOTS, DIFFUSED ON-LINE AND THROUGH A NETWORK OF SUBMERSIBLE SIMULATION DEVICES	BSG-SME
286828	DOCKINGASSIST	IMPROVED PORT EFFICIENCY AND SAFETY USING A NOVEL WIRELESS NETWORK AND DIFFERENTIAL GLOBAL NAVIGATION SATELLITE SYSTEM PROVIDING ENHANCED VESSEL NAVIGATION	BSG-SME
262190	EcoSeaSafe	Development of a sustainable and cost effective ballast water treatment technology with reverse pulsed DC electric field that excludes formation of oxidising free radicals	BSG-SME
262155	eFISHent	Improvement of feeds and feeding efficiency for seabass in cage farms in the Mediterranean.	BSG-SME
222492	ENRICH	ENRICHMENT OF AQUACULTURE IMPLANTS BY INTRODUCTION OF NEW MARINE SPECIES FROM THE WILD TO BREEDING.	BSG-SME
286143	feed&treat	Optimizing water quality and treatment efficency in recirculating aquaculture systems for salmon smolt production through better adjustment of fish feed and water treatment devices.	BSG-SME
262323	FishScan	Development of novel system for continuous remote monitoring of weight, growth, and size distribution of fish in aquaculture enclosures	BSG-SME
262549	IATS	Development of an innovative, completely automated antifouling test system for professional examinations of marine coatings	BSG-SME
222362	LobsterPlant	Development of automated technology for large scale land based production of lobster juveniles and lobster to market size, including development of robotic feeding and imaging control system	BSG-SME
286200	MAXIMUS	INNOVATIVE REARING AND STUNNING OF FARMED TURBOT TO MEET FUTURE CHALLENGES REGARDING QUALITY OF PRODUCTION AND ANIMAL WELFARE	BSG-SME
232052	MicroCleanMud	Microwave Cleaning of Drilling Mud and Oil Containing Hazardous Waste	BSG-SME

286976	Moorlnspect	DEVELOPMENT OF AN ADVANCED MEDIUM RANGE ULTRASONIC TECHNIQUE FOR MOORING CHAINS INSPECTION IN WATER	BSG-SME
222083	MOSES	Innovative continuum Multiplex Optical Sensors hull stress monitoring system, supporting shipping safety and Enhancing the control capability over structural Ship	BSG-SME
286840	Operation SWAT	High algal recovery using a Salsnes Water to Algae Treatment (SWAT) filter technology	BSG-SME
222145	OptiTEMPtank	Development of an Integrated System for Cost Effective Temperature Control in Aquaculture Tanks	BSG-SME
232070	OptoCO2Fish	Development of an Opto-chemical Carbon Dioxide Sensor for Aquaculture and Oceanography Applications	BSG-SME
286220	OSLO	Ocean Surface Layer Observations	BSG-SME
232305	PROSPAWN	IMPLEMENTATION OF NATURAL SPAWNING FOR MARINE FISH SPECIES IN CULTURE – IMPROVING THE QUALITY OF OFF-SPRING AND ANIMAL WELFARE	BSG-SME
262523	REPROSEL	REPROduction protocols and molecular tools for mass spawning and communal rearing based SELective breeding schemes applied to multiple-spawning marine fish	BSG-SME
286603	RingMan	Offshore Wind Turbine Towers – A Quicker, Cheaper Flange Supply Route	BSG-SME
262646	SalinityScan	Development of system for semi-continuous monitoring of salinity in well streams to remove volume measurement errors and detect water breakthrough	BSG-SME
222115	SALMOTRIP	Feasibility study of triploid salmon production	BSG-SME
262591	SEAKERS	SEA Kinetic Energy Recovery System	BSG-SME
232522	SENSBIOSYN	Biosensors and Sensors for the industrial biosynthesis process of widely used commercial antioxidants: nutraceuticals as additives for food and aquaculture promoting public health and safety.	BSG-SME
222043	SETTLE	Bivalve conditioning and settlement – keys to competitive hatchery production	BSG-SME
232273	ShellPlant	Development of a novel production system for intensive and cost effective bivalve	BSG-SME
262150	SignaStir	Development of an in-process quality assurance system for friction stir welding	BSG-SME
222575	ShipArrestor	Development of a combined sea anchor and connector to be deployed by helicopter in order to prevent sea vessels in drift from grounding or colliding with offshore	BSG-SME
232099	SNAPPER	The development of a novel rare-earth magnet based wave power conversion system – Snapper	BSG-SME
286013	SOLALGEN	Hybrid Algae Cultivation System Based on Conditioned Environment with Efficient Light Collection and Distribution System	BSG-SME

222174	SubCTest	Development of novel Non Destructive Testing (NDT) techniques and autonomous robots to be deployed by Remote Operating Vehicles (ROVs) for the sub-sea inspection of offshore structure welds.	BSG-SME
222156	SUDEVAB	Sustainable Development of European SMEs engaged in Abalone Aquaculture	BSG-SME
232518	TidalSense	Development of a condition monitoring system for tidal stream generator structures	BSG-SME
286572	UV-Mon	An Integrated and Modular Bio-Monitoring Ballast Water Treatment System based on Advanced UV Plasma Technology Delivering Maximum Performance and Lowest System Lifetime Cost	BSG-SME
283284	X-Scan	Laser-guided inspection robot for the Non-Destructive Testing of thin steel gauge welds in the shipping industry	BSG-SME

# 4.3.2. Activity: SME-2 Research for SME associations

286887	ALGADISK	Novel algae-based solution for CO2 capture and biomass production	BSG-SME-AG
286995	AQUAlity	Multi-sensor automated water quality monitoring and control system for continuous use in recirculation aquaculture systems	BSG-SME-AG
243752	BioAlgaeSorb	Enabling European SMEs to remediate wastes, reduce GHG emissions and produce biofuels via microalgae cultivation	BSG-SME-AG
218414	ISOTRACK	ISO Shipping Container Tracking and Monitoring System	BSG-SME-AG
243452	MusselsAlive	Development of best practice and new technology for grading, handling, transportation, conditioning and storage of mussels for SMEs in the European mussel.	BSG-SME-AG
286903	NEPHROPS	Development of new techniques in hatchery rearing, fishery enhancement and aquaculture for Nephrops	BSG-SME-AG
243583	OYSTERECOVER	Establishing the scientific bases and technical procedures and standards to recover the European flat oyster production through strategies to tackle the main constraint, bonamiosis.	BSG-SME-AG
218432	Ship Inspector	DETECTION OF SAFETY CRITICAL CRACKS AND CORROSION IN SHIPS USING NOVEL SENSORS AND SYSTEMS BASED ON ULTRASONIC LINEAR PHASED ARRAY TECHNOLOGY	BSG-SME-AG
218366	SMARTCATCH	The Development of a Novel Remote Stress Sensing System to Increase Safety, Efficiency and Reduce Environmental Effects in Fishing and Mooring applications	BSG-SME-AG
243689	TeamSafety	The development project for an innovative 3D virtual team-training maritime safety simulation platform to meet the latest EU safety requirements for sea and seafarers' emergency response training wi	BSG-SME-AG
286141	WHITEFISH	Automated and differentiated calculation of sustainability for cod and haddock	BSG-SME-AG

#### 4.3.3. Activity: SME-3 Coordination and Support Activities

286989	TidalSense Demo	Demonstration of a condition Monitoring System for Tidal Stream Generators.	CP
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### 4.4. Theme: Regions of Knowledge (REGIONS)

# 4.4.1. Activity: REGIONS-1 Transnational cooperation between regional research-driven clusters

245404	EMSAC	European Marine Science Applications Consortium CSA-	
229947	INRES	INsular regions cooperation for maximising the environmental and economic benefits from the research in Renewable Energy Sources	CSA-SA
204961	STARNETregio	STARing a trans-regional network of REGIOnal research-driven marine clusters	CSA-SA

# 4.5. Theme: Research Potential (REGPOT)

### 4.5.1. Activity: REGPOT Research Potential

264089	MARBIGEN	Supporting research potential for MARine Blodiversity and GENomics in the Eastern Mediterranean	CSA-SA
264057	MARINELIVE	Marine Electrical Initiative	CSA-SA

# 4.5.2. Activity: REGPOT-1 Unlocking and developing the research potential of research entities established in the EU's convergence regions and outermost regions

229968 RUN Sea Science	Improvement of the Tropical Sea Sciences Research Potential in Western Indian Ocean, and of the Technology Capacities in La Reunion Island	CSA-SA
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#### 4.5.3. Activity: REGPOT-3 Brokerage facility for partners search

205135 ROSA	Reinforcement of sustainable aquaculture	CSA-SA
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# 4.6. Theme: Science in Society (SiS)

# 4.6.1. Activity: SiS-1 A more dynamic governance of the science and society relationship

217639	GAP1	Bridging the gap between science and stakeholders: Phase I – Common Ground	CSA-SA
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266544	GAP2	Bridging the gap between science, stakeholders and policy makers Phase 2: Integration of evidence-based knowledge and its application to science and management of fisheries and the marine environment	CSA-SA
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# 4.6.2. Activity: SiS-3 Science and society communicate

217766	4SEAS	SYNERGIES BETWEEN SCIENCE AND SOCIETY FOR A SHARED APPROACH TO EUROPEAN SEAS	CSA-CA
218882	EPICA	European Project for Ice Coring in Antarctica	CSA-SA
230492	EUZooS-XXI	EU Zoos and Science in the 21st Century: engaging the public in nature conservation	CSA-CA
217651	hulda	Hulda, the European Arts and Sciences Sailing Festival	CSA-CA

# **ANNEX**

# 1. Methodology

The methodology applied for identifying and analysing FP7 marine related proposals selected for funding across the four specific programmes for calls published in 2007-2010 and closing before 31/12/2010 includes the following steps:

#### 1.1. Extraction of data

#### · Which data have been taken into account?

Information has been extracted from the RTD database "CORDA" as of 15th May 2010 for the years 2007-2008, 21st January 2012 for the year 2009 and 31st March 2012 for the year 2010. Therefore this analysis presents a picture of aggregated data, which is deemed more useful for this exercise. The data for 2007-2008 are the same as in the previous edition for purpose of comparison with the previous edition and because they can be considered as stable enough. However, it cannot be excluded that grant agreements, still under negotiation in 2010, have been signed.

All proposals have been taken into account to calculate the number of proposals submitted (including ineligible, withdrawn, duplicate). For calls with a two-stage evaluation process, all proposals submitted have been taken into account. For statistics on proposals selected for funding: only the projects with the MAINLIST status in CORDA and/or a signed Grant Agreement at the dates mentioned above have been counted.

It should be noted that the data used for 2007-2008<sup>45</sup> in this publication is the same data as in the previous edition<sup>46</sup>. It is also worth mentioning that for the 2009 and especially 2010 data, there is still a high number of proposals (especially for SP2 and SP3) with the status "RESERVE". In the same way, a number of proposals have a "MAINLIST" status but they are currently still under negotiation or the grant agreements have not yet been signed. The latter have not been considered in this analysis. It is important to keep in mind the preliminary nature of data included in this report as later updates are likely to affect the analysis. It also means that the number of marine-related proposals selected for funding is likely to grow in the coming months. The statistics for selected proposals are based on 12748 grant agreements signed at the dates stated above.

#### · What do the EU contribution figures refer to?

With a view to facilitate and improve the reliability of the data published in this analysis, the EU contribution is only presented for proposals selected for funding. The figures presented are **based** on the total EU contribution of each individual proposal. In other words, even though only

ERRATUM: There has been a mistake in the previous edition regarding the call FP7-SME-2008-2 which should not have been included since only the first stage ocurred in 2008. Proposals submitted to this call (245 among which 19 marine-related proposals) had been counted as part of the submitted proposals whereas it should have been excluded since the second stage closed in 2009. The impact of this mistake over the whole statistics remains very low since it accounts for a less than 1% error rate. This mistake has been corrected in this version.

http://ec.europa.eu/research/mmrs/documents/pdf/analysis\_inventory\_en.pdf

part of the EU contribution may directly relate to marine activities, the whole EU contribution of the proposal has always been taken into account. Therefore financial information provided in this analysis is not proportional to the actual marine-related content of the project. All budget estimates are purely indicative and are mentioned only for information purposes. When, for some reason (i.e.: grant agreement not signed), there is no information on the "CORDA database" about the final EU contribution, an extrapolation has been carried out on the basis either of the EC contribution requested by the project or the EU contribution recommended during the negotiation process.

### 1.2. Selection of calls for proposals

The analysis has been carried out on the results of 217 calls having closed before 08/12/2010 in the four<sup>47</sup> specific programmes: "COOPERATION" (115 calls), "IDEAS" (9 calls), "PEOPLE" (38 calls), "CAPACITIES" (55 calls). Only calls closing before 08/12/2010 have been considered, no matter the year mentioned in the call identifier<sup>48</sup>. Calls with the same identifier but with a two-stage evaluation procedure (FP7-ENERGY-2010-1), with different cut-off dates (FP7-PEOPLE-ERG-2008) or comprising sub-calls (ERC-2010-StG with ERC-2010-StG-20101014<sup>49</sup>) have been recorded only once under the list of calls. ERANETS calls falling under the "COOPERATION" (SP1) have been considered separately in order to distinguish them from the traditional thematic calls and identify them more clearly. Certain very specific calls have been systematically excluded from the analysis such as calls regarding joint technology initiatives ("ARTEMIS", "IMI","ENIAC", "Cleansky" etc.) or certain article 185 initiatives such as "AAL-2008-1".

# 1.3. Identification of marine related proposals

Identification of marine related proposals is based on screening of individual proposals (title and abstract) using a list of simple keywords. In this analysis, those proposals/projects have been considered as marine related when they have a marine (exploitation of the living and non-living resources from the seas) or coastal nature (including estuaries), when they are related to maritime activities (transport, shipbuilding, naval operations, renewable energies, border security...). Proposals with an indirect link to the marine environment or maritime activities (materials, engineering, earth sciences, underwater technologies...) have also been included when they have potential applications for the maritime economy or when they can contribute to the preservation of the marine environment. Projects relating to aquaculture activities include freshwater and marine aquaculture, as well as all fish species when they are used as part of the food production cycle (including seafood, fish nutrition and fish as feed). Marine and freshwater algae have also been considered. The following issues have been excluded from the analysis: freshwater ecology and fish used as research model organism (Zebrafish and Medaka).

EURATOM calls have not been considered in this analysis

Indeed certain calls for example with "2009" in their call identifier but closing in 2008 have been considered. See list of calls for details

<sup>49</sup> In accordance with information provided in the call fiche available on the Participant Portal: http://ec.europa.eu/research/participants/portal/page/fp7\_calls

#### 1.4. Validation

The validation of the lists of proposals submitted and selected for funding has been carried out through double checking to make sure that the identification done by the keywords was appropriate..

## 1.5. Classification of proposals per specific programme

As far as possible, the marine-related proposals selected for funding have been classified following the structure of each FP7 specific programme or:

- "COOPERATION" specific programme (SP1): Call deadline/Call identifier/Thematic priority/activity/sub-activity50/area
- "IDEAS" specific programme (SP2): Call deadline/Call identifier/Funding scheme: Starting grants (StG) or advanced grants (AdG)/ scientific panel classification (Physical Sciences & Engineering- PE, Life Sciences -LS, Social Sciences & Humanities SH).
- "PEOPLE" specific programme<sup>51</sup> (SP3): Call deadline/Call identifier/activity: "PEOPLE" 1<sup>52</sup>, "PEOPLE" 2 <sup>53</sup>, "PEOPLE" 3 <sup>54</sup>, "PEOPLE" 4<sup>55</sup>, "PEOPLE" 5 <sup>56</sup>/funding scheme (ITN, ERG, COFUND, IRG, IAPP, IEF, IOF, IIF, IRSES, Researchers' night).
- CAPACITIES specific programme (SP4): Call deadline/Call identifier/heading: "International Cooperation"-INCO, "Infrastructures"- INFRA, "Research for the benefit of SMEs"-SME, "Regions of Knowledge"-REGIONS, "Research potential and Convergence regions"-REGPOT, Science in Society-SiS and

## 1.6. Analysis and presentation of results

A simple statistical analysis has been carried out for each specific programme considering:

- Number of marine-related proposals submitted (all proposals including ineligible, withdrawn, duplicate)
- Number of marine-related proposals selected for funding
- EU contribution for marine-related proposals selected for funding in M€,
- Participants (total number, country, coordination).

<sup>&</sup>lt;sup>50</sup> The "Sub-activity" category for the COOPERATION specific programme, depending of each thematic priority, can also be synonymous of "area".

For certain actions supported under the "PEOPLE programme" such as the "European science awards", "ERA-MORE" and "NCP", calls for proposals have only been launched in 2007 but have been included in the analysis.

<sup>&</sup>lt;sup>52</sup> "Initial training of researchers"

<sup>&</sup>lt;sup>53</sup> "life-long training and career development"

<sup>4 &</sup>quot;Industry-Academia pathways and partnerships"

<sup>&</sup>lt;sup>55</sup> "International dimension – World fellowships"

<sup>56 &</sup>quot;Specific Actions"

# 2. List of calls per specific programme and theme (2007-2010)

SP1 - COOPERATION	
Call identifier	Call deadline
FP7-2007-COST	10.04.2007
FP7-2007-ERANET-4.2.2.2	01.07.2007
FP7-2009-BIOREFINERY_CSA	02.12.2008
FP7-2009-BIOREFINERY_CP	05.05.2009
FP7-2010-NMP-ICT-FoF	03.11.2009
FP7-AAT-2007-RTD-1	03.05.2007
FP7-AAT-2007-TREN-1	03.05.2007
FP7-AAT-2008-RTD-1	07.05.2008
FP7-AAT-2010-RTD-1	14.01.2010
FP7-AAT-2010-RTD-CHINA	14.01.2010
FP7-AAT-2010-RTD-RUSSIA	14.01.2010
FP7-AAT-2011-RTD-1	02.12.2010
FP7-AFRICA-2010	14.01.2010
FP7-ENERGY-2007-1-RTD	03.05.2007
FP7-ENERGY-2007-2-TREN	03.05.2007
FP7-ENERGY-2008-1(two-stage call)	26.02.2008
	03.06.2008
FP7-ENERGY-2008-FET (two-stage call)	26.02.2008
	03.06.2008
FP7-ENERGY-2008-RUSSIA	26.02.2008
FP7-ENERGY-2008-TREN-1	08.10.2008
FP7-ENERGY-2009-1 (two-stage call)	25.11.2008
	01.04.2009
FP7-ENERGY-2009-2	29.04.2009
FP7-ENERGY-2009-3	25.11.2008
FP7-ENERGY-2009-BRAZIL	13.07.2009
FP7-ENERGY-2010-1 (two-stage call)	15.10.2009
	11.03.2010
FP7-ENERGY-2010-2	04.03.2010
FP7-ENERGY-2010-INDIA	30.11.2009
FP7-ENERGY-2011-JAPAN	25.11.2010
FP7-ENERGY-NMP-2008-1 (two-stage call)	26.02.2008
	03.06.2008
FP7-ENV-2007-1	02.05.2007

FP7-ENV-2008-1	25.02.2008
FP7-ENV-2009-1	08.01.2009
FP7-ENV-2010	05.01.2010
FP7-ENV-2011	16.11.2010
FP7-ENV-2011-ECO-INNOVATION-OneStage	16.11.2010
FP7-ENV-NMP-2008-2	25.02.2008
FP7-ENV-NMP-2011	16.11.2010
FP7-ERANET-2007-RTD	31.07.2007
FP7-ERANET-2008-RTD	12.08.2008
FP7-ERANET-2009-RTD	21.04.2009
FP7-ERANET-2010-RTD	19.01.2010
FP7-ERARESORG-2007-1-RTD	31.05.2007
FP7-GALILEO-2007-GSA-1	29.02.2008
FP7-GALILEO-2008-GSA-1	31.03.2009
FP7-GALILEO-2011-ENTR-1	16.12.2010
FP7-GALILEO-2011-GSA-1-a	16.12.2010
FP7-HEALTH-2007-A	19.04.2007
FP7-HEALTH-2007-B	18.09.2007
FP7-HEALTH-2009-single-stage	03.12.2008
FP7-HEALTH-2010-single-stage	19.11.2009
FP7-HEALTH-2011-single-stage	10.11.2010
FP7-ICT-2007-1	08.05.2007
FP7-ICT-2007-2	09.10.2007
FP7-ICT-2007-3	08.04.2008
FP7-ICT-2007-C <sup>57</sup> (open call)	04.09.2007
	22.01.2008
FP7-ICT-2009-4	01.04.2009
FP7-ICT-2009-5	27.10.2009
FP7-ICT-2009-6	13.04.2010
FP7-ICT-2011-EU-Russia	12.11.2010
FP7-ICT-SEC-2007-1	29.11.2007
FP7-INFLUENZA-2010	29.10.2009
FP7-KBBE-2007-1	02.05.2007
FP7-KBBE-2007-2A(two-stage call)	11.09.2007
	19.02.2008
FP7-KBBE-2008-2B	26.02.2008
FP7-KBBE-2009-3	15.01.2009
FP7-KBBE-2010-4	14.01.2010
FP7-NMP-2007-CSA-1	05.06.2007

<sup>&</sup>lt;sup>67</sup> This call was an open call with continuous submission possible. The two dates indicated here are the ones for which marine-related proposals were received

FP7-NMP-2007-LARGE-1 (two-stage call)	04.05.2007
	04.10.2007
FP7-NMP-2007-SMALL-1 (two-stage call)	04.05.2007
	13.09.2007
FP7-NMP-2007-SME-1 (two-stage call)	04.05.2007
	04.10.2007
FP7-NMP-2008-CSA-2	24.04.2008
FP7-NMP-2008-EU-India-2	24.04.2008
FP7-NMP-2008-LARGE-2 (two-stage call)	06.03.2008
	23.09.2008
FP7-NMP-2008-SMALL-2 (two-stage call)	06.03.2008
	02.09.2008
FP7-NMP-2008-SME-2 (two-stage call)	06.03.2008
	23.09.2008
FP7-NMP-2009-CSA-3	31.03.2009
FP7-NMP-2009-EU-Russia	31.03.2009
FP7-NMP-2009-LARGE-3	17.02.2009
	22.07.2009
FP7-NMP-2009-Mapping	31.03.2009
FP7-NMP-2009-SMALL-3 (two-stage call)	17.02.2009
	22.07.2009
FP7-NMP-2009-SME-3 (two-stage call)	17.02.2009
	22.07.2009
FP7-NMP-2010-CSA-4	02.02.2010
FP7-NMP-2010-EU-Mexico	15.12.2009
FP7-NMP-2010-EU-USA	28.01.2010
FP7-NMP-2010-LARGE-4 (two-stage call)	08.12.2009
	18.05.2010
FP7-NMP-2010-SMALL-4 (two-stage call)	08.12.2009
	18.05.2010
FP7-NMP-2010-SME-4 (two-stage call)	08.12.2009
	18.05.2010
FP7-NMP-2011-EU-Japan	17.11.2010
FP7-NMP-ENERGY-2011	25.11.2010
FP7-NMP-ENV-2009	31.03.2009
FP7-OCEAN-2010	14.01.2010
FP7-SEC-2007-1	31.05.2007
FP7-SEC-2009-1	04.12.2008
FP7-SEC-2010-1	26.11.2009
FP7-SEC-2011-1	02.12.2010
FP7-SPACE-2007-1	19.06.2007

FP7-SPACE-2009-1	04.12.2008
FP7-SPACE-2010-1	08.12.2009
FP7-SPACE-2011-1	25.11.2010
FP7-SSH-2007-1 (two-stage call)	10.05.2007
	29.11.2007
FP7-SSH-2009-A	13.01.2009
FP7-SSH-2009-B	13.01.2009
FP7-SSH-2009-C	13.01.2009
FP7-SSH-2010-1	02.02.2010
FP7-SSH-2010-2	02.02.2010
FP7-SSH-2010-3	02.02.2010
FP7-SST-2007-RTD-1	03.05.2007
FP7-SST-2007-TREN-1 (with two cut-off dates)	05.06.2007
	28.06.2007
FP7-SST-2008-RTD-1	07.05.2008
FP7-SST-2008-TREN-1	07.05.2008
FP7-SST-2010-RTD-1	14.01.2010
FP7-SST-2011-RTD-1	02.12.2010
FP7-TPT-2008-RTD-1	07.05.2008
FP7-TPT-2010-RTD-1	14.01.2010
FP7-TPT-2011-RTD-1	02.12.2010
FP7-TRANSPORT-2010-TREN-1	14.01.2010

SP2 – IDEAS	
Call identifier	Call deadline
ERC-2007-StG (two-stage)	25.04.2007
	17.09.2007
ERC-2008-Support	06.03.2008
ERC-2008-AdG	22.04.2008
ERC-2009-SUPPORT	12.11.2008
ERC-2009-StG	10.12.2008
ERC-2009-AdG	06.05.2009
ERC-2010-StG (with three sub-calls)	28.10.2009
	18.11.2009
	08.12.2009
ERC-2010-AdG (with three sub-calls)	24.02.2010
	17.03.2010
	07.04.2010

ERC-2011-StG (with three sub-calls)	14.10.2010
	09.11.2010
	24.11.2010

SP3 - PEOPLE	
Call identifier	Call deadline
FP7-PEOPLE-2007-1-1-ITN (two-stage)	07.05.2007
	25.09.2007
FP7-PEOPLE-2007-2-1-IEF	14.08.2007
FP7-PEOPLE-2007-2-2-ERG (several cut-off dates)	25.04.2007
	17.10.2007
FP7-PEOPLE-2007-3-1-IAPP	31.05.2007
FP7-PEOPLE-2007-4-1-IOF	14.08.2007
FP7-PEOPLE-2007-4-2-IIF	14.08.2007
FP7-PEOPLE-2007-4-3-IRG (several cut-off dates)	25.04.2007
	17.10.2007
FP7-PEOPLE-2007-5-1-1-NIGHT	03.04.2007
FP7-PEOPLE-2007-5-2-AWARDS	26.04.2007
FP7-PEOPLE-2007-5-3-ERA-MORE	24.08.2007
FP7-PEOPLE-2007-5-4-NCP	24.08.2007
FP7-PEOPLE-2007-2-3-COFUND	13.03.2008
FP7-PEOPLE-COFUND-2008	19.02.2009
FP7-PEOPLE-ERG-2008 (several cut-off dates)	03.04.2008
	08.10.2008
FP7-PEOPLE-IAPP-2008	25.03.2008
FP7-PEOPLE-IEF-2008	19.08.2008
FP7-PEOPLE-IIF-2008	19.08.2008
FP7-PEOPLE-IOF-2008	19.08.2008
FP7-PEOPLE-IRG-2008 (several cut-off dates)	03.04.2008
	08.10.2008
FP7-PEOPLE-IRSES-2008	28.03.2008
FP7-PEOPLE-ITN-2008	02.09.2008
FP7-PEOPLE-NIGHT-2008	05.03.2008
FP7-PEOPLE-2009-IAPP	27.07.2009
FP7-PEOPLE-2009-IEF	18.08.2009
FP7-PEOPLE-2009-IIF	18.08.2009
FP7-PEOPLE-2009-IOF	18.08.2009
FP7-PEOPLE-2009-IRSES	27.03.2009

FP7-PEOPLE-2009-NIGHT	14.01.2009
FP7-PEOPLE-2009-RG (several cut-off dates)	02.04.2009
	08.10.2009
FP7-PEOPLE-2010-COFUND	18.02.2010
FP7-PEOPLE-2010-IEF	17.08.2010
FP7-PEOPLE-2010-IIF	17.08.2010
FP7-PEOPLE-2010-IOF	17.08.2010
FP7-PEOPLE-2010-IRSES	25.03.2010
FP7-PEOPLE-2010-ITN	22.12.2009
FP7-PEOPLE-2010-NIGHT	13.01.2010
FP7-PEOPLE-2010-RG (several cut-off dates)	09.03.2010
	07.09.2010
FP7-PEOPLE-2011-IAPP	07.12.2010

SP4 CAPACITIES	
Call identifier	Call deadline
FP7-INCO-2007-1	02.05.2007
FP7-INCO-2007-2	04.09.2007
FP7-INCO-2007-3	12.02.2008
FP7-INCO-2007-4	02.05.2007
FP7-INCO-2009-1	12.01.2009
FP7-INCO-2009-2	12.01.2009
FP7-INCO-2009-4	12.01.2009
FP7-INCO-2009-5	12.01.2009
FP7-INCO-2010-1	19.01.2010
FP7-INCO-2010-2	19.01.2010
FP7-INCO-2010-3	19.01.2010
FP7-INCO-2010-6	19.01.2010
FP7-INFRASTRUCTURES-2007-1	02.05.2007
FP7-INFRASTRUCTURES-2007-2	20.09.2007
FP7-INFRASTRUCTURES-2008-1	29.02.2008
FP7-INFRASTRUCTURES-2008-2	11.09.2008
FP7-INFRASTRUCTURES-2009-1	17.03.2009
FP7-INFRASTRUCTURES-2010-1	03.12.2009
FP7-INFRASTRUCTURES-2010-2	24.11.2009
FP7-INFRASTRUCTURES-2011-1	25.11.2010
FP7-INFRASTRUCTURES-2011-2	23.11.2010
FP7-REGIONS-2007-1	24.04.2007
FP7-REGIONS-2007-2	24.04.2007

FP7-REGIONS-2007-3	24.04.2007
FP7-REGIONS-2008-1	14.03.2008
FP7-REGIONS-2008-2	14.03.2008
FP7-REGIONS-2009-1	27.01.2009
FP7-REGIONS-2010-1	14.01.2010
FP7-REGIONS-2011-1	09.12.2010
FP7-REGPOT-2007-1	24.04.2007
FP7-REGPOT-2007-2	24.04.2007
FP7-REGPOT-2007-3	24.04.2007
FP7-REGPOT-2007-4	24.04.2007
FP7-REGPOT-2008-1	14.03.2008
FP7-REGPOT-2008-2	14.03.2008
FP7-REGPOT-2009-1	13.02.2009
FP7-REGPOT-2009-2	13.02.2009
FP7-REGPOT-2010-1	17.12.2009
FP7-REGPOT-2010-5	15.10.2009
FP7-REGPOT-2011-1	07.12.2010
FP7-SCIENCE-IN-SOCIETY-2007-1	23.05.2007
FP7-SCIENCE-IN-SOCIETY-2007-2	10.07.2007
FP7-SCIENCE-IN-SOCIETY-2008-1	18.03.2008
FP7-SCIENCE-IN-SOCIETY-2008-3	24.07.2008
FP7-SCIENCE-IN-SOCIETY-2009-1	13.01.2009
FP7-SCIENCE-IN-SOCIETY-2010-1	21.01.2010
FP7-SCIENCE-IN-SOCIETY-2010-CAREERS	21.01.2010
FP7-SCIENCE-IN-SOCIETY-2011-EVENTS	25.11.2010
FP7-SME-2007-2 (two-stage)	01.06.2007
	28.11.2007
FP7-SME-2008-1	11.04.2008
FP7-SME-2008-2 (two-stage)	28.05.2009
	18.12.2008
FP7-SME-2008-3	31.10.2008
FP7-SME-2009-1	27.01.2009
FP7-SME-2010-1	03.12.2009
FP7-SME-2011	08.12.2010

# 3. List of keywords for the identification of marine-related proposals (Title and abstract)<sup>58</sup>

*ALGA*
*AQUACULTURE*
*AQUATIC*
*ARCTIC*
*ATLANTIC*
*BALLAST*
*BALTIC*
*BENTHIC*
*BIVALVE*
*BLACK SEA*
*BOAT*
*BYCATCH*
*CARGO*
*COAST*
*COASTAL*
*CORAL*
*DEMERSAL*
*DESALINATION*
*DISCARD*
*DREDGING*
*EUTROPHICATION*
*FISH*
*HARBOUR*
*MARINE*
*MARITIM*
*MEDITERRANEAN*
*MUSSEL*
*NAUTIC*
*NAVAL*
*OCEAN*
*OFFSHORE*
*PELAGIC*
*PLANKTON*
*POLAR*
*PORT*

 $<sup>^{\</sup>mbox{\scriptsize 58}}$   $\,$  This list of keywords is subject to improvements for the next editions

*SALMON*
*SALTWATER*
*SEAFLOOR*
*SEAFOOD*
*SEAGOING*
*SEASHIPPING*
*SEAWATER*
*SHIP*
*SPAWN*
*TIDAL*
*TSUNAMI*
*UNDERWATER*
*UPWELLING*
*VESSEL*
*WATERBORNE*
*WATERWAY*
*WAVE*

#### **European Commission**

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The 7th framework programme for research (FP7) contributes actively to the implementation of the "European Strategy for Marine and Maritime Research" COM (2008) 534. One of its key objectives is to foster integration between marine and maritime research and encourage a cross-thematic approach to support the EU Integrated Maritime Policy.

This study is a follow-up of the first edition published in 2010. It presents basic consolidated statistical data and information from the 2007-2010 calls for proposals on marine-related proposals across all FP7 specific programmes.

The aim is not only to show the real cross-cutting nature of marine sciences and technologies but also to help stakeholders identifying and exploring the diversity of FP7 activities that have either a marine-related dimension or with potential applications for the maritime sector.

Studies and reports



