



Grant Agreement number: 213144

Project acronym: CORALFISH

Project title: Assessment of the interaction between corals, fish and fisheries, in order to develop monitoring and predictive modeling tools for ecosystem base management in the deep waters of Europe and beyond.

Funding Scheme: FP7 Large-scale integrating project. Theme 6: Environment; Activity 6.2 Sustainable Management of Resources.

Period covered: June 1st, 2008 to 28th February, 2013.

Name, title and organisation of the scientific representative of the project's coordinator:

Dr Anthony J Grehan,
Senior Research Fellow,
Earth & Ocean Sciences,
NUI, Galway, Ireland

Tel: + 353 91 493235

Fax: + 353 91 494533

E-mail: anthony.grehan@nuigalway.ie

Project website address: www.eu-fp7-coralfish.net



TABLE OF CONTENTS

1: FINAL PUBLISHABLE SUMMARY REPORT	3
1.1. EXECUTIVE SUMMARY	3
1.2. SUMMARY DESCRIPTION OF PROJECT CONTEXT AND OBJECTIVES.....	4
1.3. MAIN SCIENCE AND TECHNOLOGY RESULTS AND FOREGROUNDS	6
1.3.1. <i>The development of essential methodologies and indicators for baseline and subsequent monitoring of closed areas.....</i>	<i>6</i>
1.3.2. <i>The use of genetic fingerprinting to assess the potential erosion of genetic fitness of corals due to long- term exposure to fishing impacts.....</i>	<i>10</i>
1.3.3. <i>The better understanding of coral habitat fish-carrying capacity through the integration of fish data into coral ecosystem models.</i>	<i>12</i>
1.3.4. <i>The production of habitat suitability maps both regionally and for OSPAR Region V to identify areas likely to contain vulnerable marine habitat.....</i>	<i>12</i>
1.3.5. <i>The evaluation of the distribution of deep-water bottom fishing effort to identify areas of potential interaction and impact upon coral habitat.....</i>	<i>14</i>
1.3.6. <i>The construction of bio-economic models to assess the impact on fisheries of various management measures adopted to protect coral habitat.....</i>	<i>15</i>
1.4. POTENTIAL IMPACT AND MAIN DISSEMINATION ACTIVITIES AND EXPLOITATION OF RESULTS	16
1.4.1. <i>Science-policy interactions: Common Fisheries Policy.....</i>	<i>18</i>
1.4.2. <i>Science-policy interactions: Other Policy Instruments</i>	<i>20</i>
1.4.3. <i>Concluding Remarks</i>	<i>21</i>
1.5. WEBSITE AND CONTACT DETAILS.....	22
2. USE AND DISSEMINATION OF FOREGROUND	22

1: Final Publishable summary report

1.1 Executive Summary

The principal goal of the CoralFISH project was to address the global challenge laid down by the United Nations in 2006 (UN General Assembly Resolution (61/105)) calling upon fisheries management organisations worldwide to assess the impact of bottom fishing on vulnerable marine ecosystems and identify and map vulnerable ecosystems through improved scientific research and data collection as a basis for their protection.

In Europe, the main vulnerable marine ecosystems found in offshore waters are cold-water coral and sponge habitats. CoralFISH set out to provide the science, tools and methods necessary to support ecosystem based management of deep-sea resources through the study of the interaction between one of these vulnerable marine ecosystem examples - cold-water corals, and the fish and fisheries found in their vicinity. Cold-water coral (CWC) habitats include stony coral reefs and soft coral gardens, and are typified by corals that live in cold oceanic water, inhabit hard substrates and feed on zooplankton or particulate organic matter. They harbour a diversity of associated species that rival that of tropical coral reefs, and form habitats that may be important for commercial fish but are fragile and easily succumb to impacts from fishing.

CoralFISH assembled a unique consortium representing 17 institutes/SMEs from 11 countries, that cut across traditional boundaries by teaming natural scientists with fisheries biologists as well as a member of the fishing industry. The highly multi-disciplinary project was pan-European in scope, with regional study areas widely dispersed around Europe including some ultra peripheral areas. The project was field intensive and data was collected from an impressive 27 research expeditions across all the study areas.

The sustainable exploitation and management of marine resources and marine environmental protection (including the designation of offshore and high-seas Marine Protected Areas) require not only data and an understanding of how ecosystems function and interact, but also an ability to model, forecast and predict (EC Atlantic Action Plan, 2013). CoralFISH research has addressed all these key issues in the deep-sea and in so doing has developed standard methodologies and tools to produce the first comprehensive catalogue and sea floor maps of European coral habitats; improved our understanding of coral ecosystem functioning including the role of fish; and developed decision support tools for policymakers and planners engaged in spatial planning in offshore and High Seas areas, including the analysis of gene flow to address marine protected area network connectivity and the development of models to predict coral habitat distribution at global, regional and local levels in areas where data are lacking. CoralFISH with its major research focus in the Atlantic will add value to future planned initiatives as part of the European Commissions Maritime Strategy and Action Plan for the Atlantic. Similarly, in the Mediterranean, CoralFISH research will input into the UNEP-MAP-RAC/SPA Strategic Action Programme for the Conservation of Biological Diversity in the Mediterranean Region, particularly with regards the development of MPAs beyond national jurisdiction or in areas where the limits of national sovereignty or jurisdiction have yet to be defined.

1.2. Summary description of project context and objectives

The principal goal of the CoralFISH project was to address the global challenge laid down by the United Nations in 2006 (UN General Assembly Resolution (61/105)) calling upon fisheries management organisations worldwide to assess the impact of bottom fishing on vulnerable marine ecosystems, identify and map vulnerable ecosystems through improved scientific research and data collection, and close such areas to bottom fishing unless conservation and management measures were established to prevent their degradation.

In Europe, the main vulnerable marine ecosystems found in offshore waters are cold-water coral and sponge habitats. CoralFISH set out to provide the science, tools and methods necessary to support ecosystem based management of deep-sea resources through the study of the interaction between one of these vulnerable marine ecosystem examples - cold-water corals, and the fish and fisheries found in their vicinity. Cold-water coral (CWC) habitats include stony coral reefs and soft coral gardens, and are typified by corals that live in cold oceanic water, inhabit hard substrates and feed on zooplankton or particulate organic matter. They harbour a diversity of associated species that rival that of tropical coral reefs, and form habitats that may be important for commercial fish but are fragile and easily succumb to impacts from fishing.

The main objectives of CoralFISH were to:

- Develop essential methodologies and indicators for baseline and subsequent monitoring of closed areas,
- Use genetic fingerprinting to assess the potential erosion of genetic fitness of corals due to long- term exposure to fishing impacts,
- Better understand coral habitat fish-carrying capacity through the integration of fish data into coral ecosystem models,
- Produce habitat suitability maps both regionally and for OSPAR Region V (NE Atlantic) to identify areas likely to contain vulnerable marine habitat.
- Evaluate the distribution of deep-water bottom fishing effort to identify areas of potential interaction and impact upon coral habitat,
- Construct bio-economic models to assess the impact on fisheries of various management measures adopted to protect coral habitat.

CoralFISH assembled a unique consortium representing 17 institutes/SMEs from 11 countries, that cut across traditional boundaries by teaming natural scientists with fisheries biologists as well as a member of the fishing industry. The highly multi-disciplinary project was pan-European in scope, with regional study areas widely dispersed around Europe including some ultra peripheral areas. The study areas encompassed the 6 major eco-regions where cold-water corals occur in European waters (Figure 1) and as such provided the project with a full spectrum of the environmental settings where corals are found.

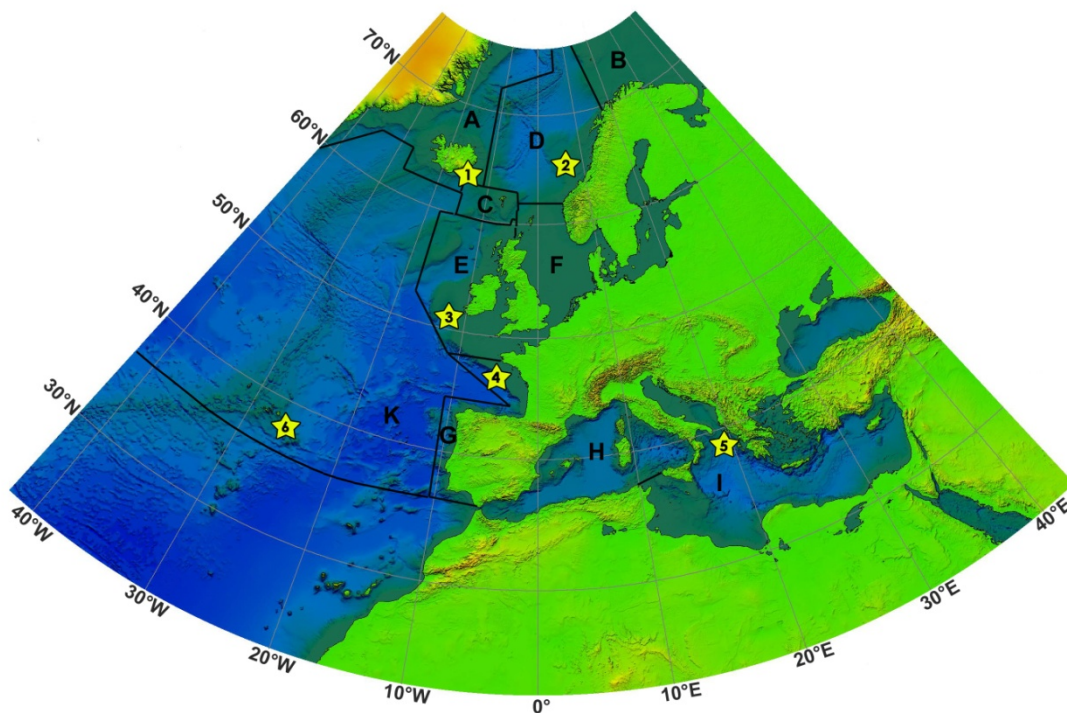


Figure 1. Schematic representation of the 6 regional study areas of the CoralFISH project. The 6 study areas are located; (1) offshore south Iceland (biogeographic region A); (2) offshore Norway (biogeographic region D); (3) offshore western Ireland (Porcupine Bank and Seabight, and Rockall Trough, within biogeographic region E); (4) offshore western France (Bay of Biscay, biogeographic region G); (5) offshore Italy and Greece in the Eastern Mediterranean sea (Northern Ionian sea, biogeographic region I) and (6) in the Azores archipelago (biogeographic region K).

1.3. Main science and technology results and foregrounds

CoralFISH completed an impressive 27 research expeditions across all study areas. New data acquisition focused on:

- i. Mapping of coral habitats in each of the six regional study areas,
- ii. Coordinated surveys to investigate the interaction of fish with coral habitat using the standard methodologies, i.e. acoustic fisheries survey, commercial long-lining and detailed *in situ* observation with Remotely Operated Vehicles, submersibles or towed video apparatus,
- iii. Detailed temporal observations of both fish and coral and their response to changing environmental conditions using 'state of the art' instrumented landers, deployed for periods of days to months in contrasting coral locations in Norway, off the west coast of Ireland and in the Ionian Sea.
- iv. Collection of material for taxonomy and genetic studies.

1.3.1. The development of essential methodologies and indicators for baseline and subsequent monitoring of closed areas.

1.3.1.1. Regional cold-water coral settings: the CoralFISH Coral Atlas

A first step in understanding the importance of coral habitat for fish is to estimate how much coral habitat actually occurs in an area relative to other habitats. Very few studies provide spatial context when describing habitats in the deep-sea and therefore a key goal of the CoralFISH project, was to quantify the extent of cold-water coral habitat in a defined area as a fundamental step in ascertaining its functional role in the deep-sea. Quantifying habitat provides much needed improvements in the scientific information supplied to (marine spatial) planners, tasked with, for example, drawing boundaries around marine protected areas. Also this information will help to inform the debate currently taking place in the International Council of Exploration for the Seas (i.e. the ICES Working Group on Deep-Sea Ecosystems) as to what quantity of Vulnerable Marine Ecosystem indicators actual constitutes a Vulnerable Marine Ecosystem *per se*.

CoralFISH succeeded in delivering harmonised maps of coral habitat in all six eco-regions studied by the project. This was achieved by considerable investment in the development of protocols and tools to support implementation of a standardised methodology including:

- A CoralFISH sampling protocol (including statistical sampling design),
- Standard data categories with explanatory glossary to add video analysis,
- Development of a bespoke software programme, ‘Cover’ - Customizable Video Image Observation Record, to support standardised video analysis.

CoralFISH seafloor classification was performed on high-resolution digital terrain models (DTMs) constructed from existing and newly acquired multi-beam bathymetric data. Semi-automatic classification algorithms were developed for use in a Geographic Information System (GIS) to support geomorphological characterisation (e.g. Figure 2) of each of the six CoralFISH study areas.

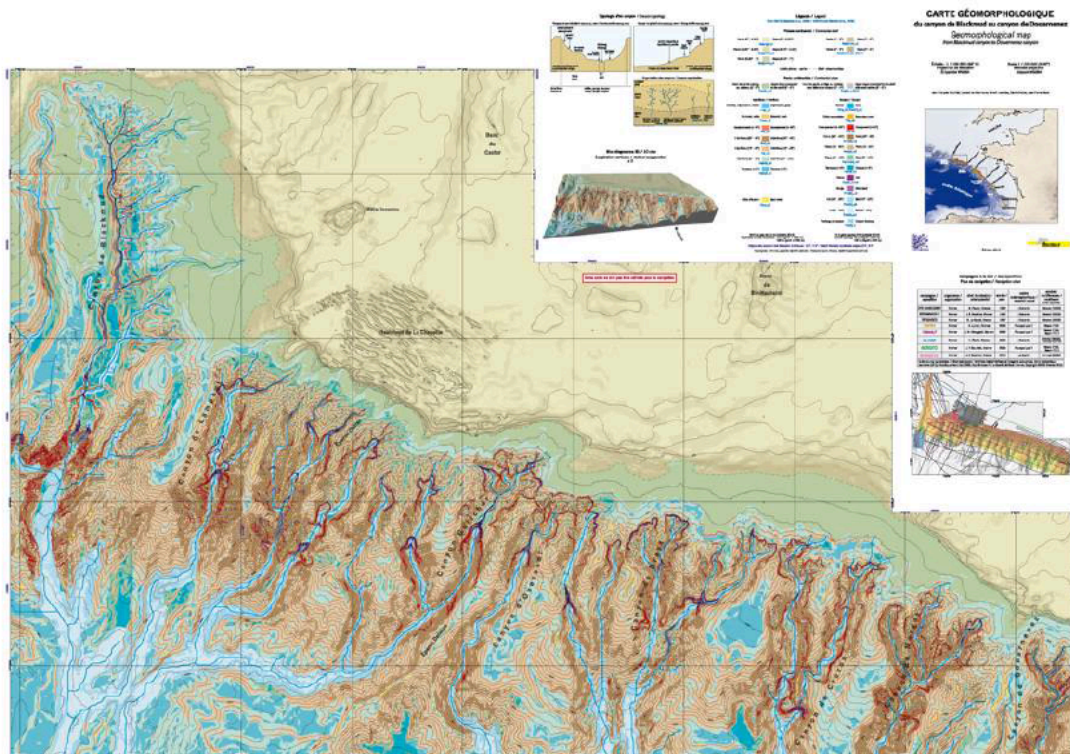


Figure 2. Geomorphologic map of the Bay of Biscay.

Quantitative coral coverage (areal extent) was then calculated by selecting those geomorphological classes that represented proxies for coral occurrence. This is the first time that a European inter-regional comparison of deep-sea habitats has been performed.

1.3.1.2. Regional cold-water coral settings: The CoralFISH Coral Habitat Catalogue

Describing the variation of coral habitats present in European waters is important not only to understand their likely different functioning with regards fish but also to improve the focus of conservation efforts particularly in light of the targets set by the EU Biodiversity Strategy to 2020 to fully implement the Birds and Habitats Directives, and maintain and restore ecosystems and their services by 2020. This information combined with the detailed mapping undertaken in the project can contribute to one of the key actions of the EU Biodiversity Strategy, i.e. the Mapping and Assessment of Ecosystems and their Services in Europe (MAES).

A comprehensive inventory describing the variety of European cold-water coral habitats was produced largely from the analysis of new video and photographs obtained during CoralFISH. In total 81 coral habitat types have been described including several new coral biotopes based on ‘repeat’ observations of similar species assemblages in different CoralFISH locations. This information will be of major interest to the European Environment Agency who are undertaking a revision of the European Union Nature Information System (EUNIS) classification of deep-sea biotopes in 2014. Regionally, the information will be used to support the designation of offshore Special Areas of Conservation to protect corals in the Bay of Biscay, France. It should be noted that CWC habitats have been found on sand and mud (soft bottoms), traditionally considered to be non-coral areas and exploitable by fishing. *The potential impact on these corals should be factored into the future management of offshore activities (including deep-sea fishing).*

1.3.1.3. Regional deep-water fish and fisheries: Commercial fish caught in the vicinity of coral reefs

A first step in understanding the importance of coral habitat for fish is to know what fish occur close to coral habitats. A CoralFISH review of commercial fish species caught in the vicinity of CWCs identified a total of 63 fish species. The review included a description of their distribution and known or supposed linkages with CWC habitats.

1.3.1.4. Regional deep-water fish and fisheries: CoralFISH deep-sea fish stomach content database

Analysing the diet of fish caught in the vicinity of CWC is an important means of potentially linking fish to the CWC food-web. CoralFISH built an extensive stomach content database by acquiring an important historical dataset and supplementing it with new data collected during the project. Records of 9898 non-empty stomach contents belonging to 88 fish species were amassed. The database is fully compatible with, and will add to, the international Integrated Database and Portal for Fish Stomach Records (DAPSTOM), an on-going initiative (supported by DEFRA, UK and the EU) to digitize and make available fish stomach content records spanning the past 100 years.

1.3.1.5. Regional deep-water fish and fisheries: Mapping fishing distribution over CWC habitats using Vessel Monitoring System data

The Vessel Monitoring System (VMS) is a satellite-based monitoring system that provides at regular intervals, data about the location, course and speed of fishing vessels to the fisheries authorities. This data can be used to estimate the fishing footprint (distribution and intensity) in a given area. When combined with electronic logbook data that records start and end position of individual fishing operations and catch, the spatial distribution of commercial fish species can be estimated. In the CoralFISH project, this type of information was only available to our non-European Union, Icelandic partners. They were able to accurately redraw the path of individual longlines or bottom trawl tows permitting full resolution of the footprint of the fishery at a spatial scale equivalent to the coverage of coral habitats (~1 km). *It should therefore be mandatory that future Horizon 2020 projects assessing fish-habitat interactions be given full access to electronic logbook and Vessel Monitoring System data collected under the Data Collection Regulation of the Common Fisheries Policy.*

1.3.1.6. Deep-water fish occurrence and fisheries impacts in cold-water coral habitat

Developing methods to describe the interaction of fish with corals was one of the main goals of CoralFISH. A variety of techniques were tested in combination with the development of a robust experimental statistical survey design. An intensive fieldwork programme using fisheries acoustics, long-line sampling, video transects, and benthic landers provided experimental data that facilitated comparison at different scales, of fish assemblages found in coral with those found in non-coral areas. This type of study has not previously been carried out in European deep-water research and should lead to more robust monitoring of, for example, cold-water coral Special Areas of Conservation and seafloor integrity as part of the Marine Strategy Framework Directive.

In general, while it was difficult to determine the outright importance of coral habitat for fish, a number of interesting relationships were identified. The species composition of fish and the number of species in coral habitats are very different between regions. In the Nordic Seas, the fish community is less diverse compared to the Azores and those of the Mediterranean. Species diversity is very similar in both coral and non-coral habitats. This is a general pattern found in all investigated areas.

In the Nordic Seas there is no evidence that CWC represents an essential fish habitat that influences fish stocks at the population level (e.g. saithe, blue whiting, redfish, tusk). However, some species show a statistically significant higher abundance in CWC habitat compared with non-CWC habitat in the same area. In Nordic Seas, the tusk (*Brosme brosme*) is the common species in long-line catches and the Catch Per Unit Effort (CPUE) is highest in coral habitat. It seems clear that the association is of a facultative nature and corals may act as a preferred rather than an essential habitat for tusk.

In more species-rich communities, e.g. in the NE Atlantic coral mounds and the Mediterranean, some species are more abundant in coral habitat, while others appear in all studied habitats, and some are never found in coral habitat. For the commercial *Pagellus bogavero* (Blackspot Seabream), large specimens were exclusively collected in Mediterranean coral habitats.

Evidence of the impact from fisheries has been documented from all investigated sites, however, a quantitative assessment has proved to be difficult. Impact was inferred from evidence of trawl marks close to damaged corals, lost and entangled gears such as lines, anchors, and moorings in coral habitats, and by-catch of corals and other fauna in experimental long-line fishing. The impact of bottom long-lining on benthic organisms was very much lower when compared to bottom trawl gears. Litter, not directly linked to fishing, is also commonly documented in some areas, e.g. plastic, glass, ceramics, terracotta, clothing and metal.

1.3.2. The use of genetic fingerprinting to assess the potential erosion of genetic fitness of corals due to long-term exposure to fishing impacts

Statistically robust sampling techniques were applied for the first time in the deep-sea to better understand the importance of clonality and connectivity in the principal European reef building

corals (*Lophelia pertusa* and *Madrepora oculata*) occurring all the way from the Mediterranean to Iceland.

Key findings included that there is a low influence of clonal (versus sexual) reproduction in both *Lophelia pertusa* and *Madrepora oculata*, based on efficient molecular barcoding facilitating the identification of each genetic individual. Interestingly, results suggest that mechanical disturbance by fisheries may increase the prevalence of clonal reproduction in some areas through increased fragmentation and dispersion of individual coral colonies.

The diversity and dispersion characteristics and hence population connectivity patterns of *L. pertusa* and *M. oculata* were shown to differ (Figure 3). Therefore in planning to optimize the representativeness and connectivity of Marine Protected Areas networks, multi-species conservation requirements need to be taken into account.

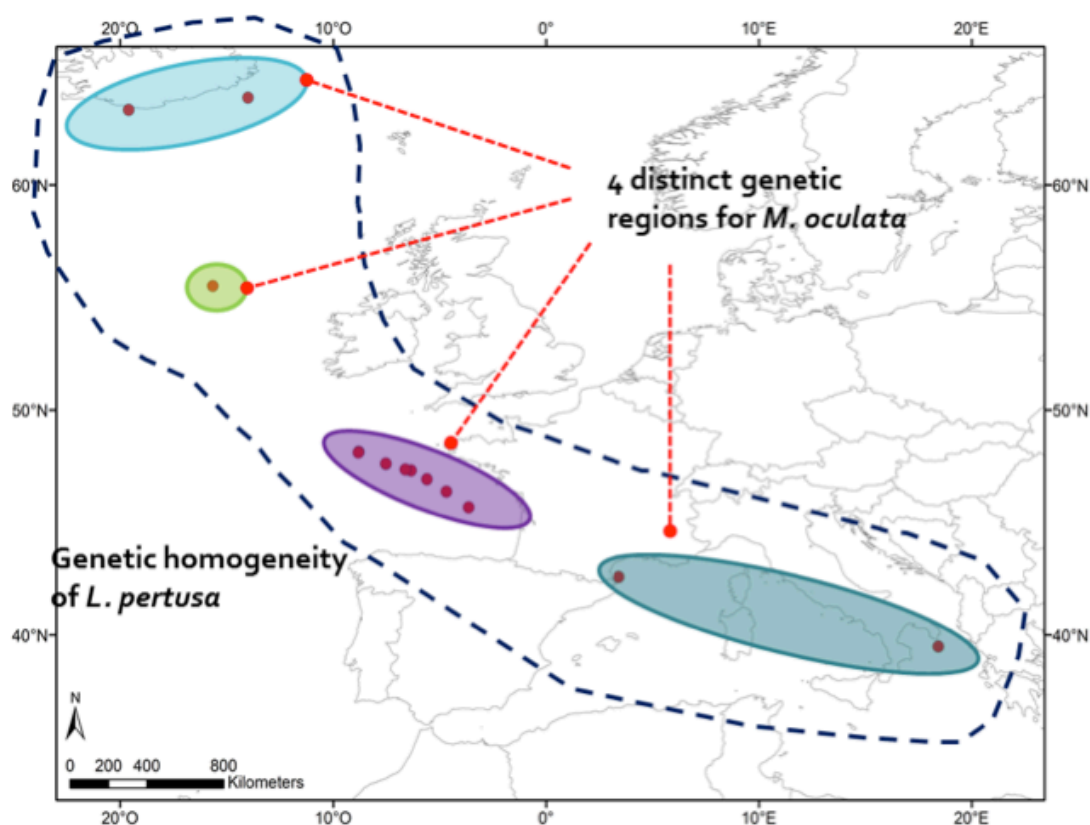


Figure 3. Genetic connectivity map highlighting: (i) genetically distinct areas (colour patches) for *Madrepora oculata* and (ii) the rather homogeneous distribution of the highly connected populations of *Lophelia pertusa* (dashed line).

While fishing related impacts do occur in coral habitats, the ability of CoralFISH geneticists to

arrive at a degree of quantification of these impacts to date has been compromised by difficulties obtaining relevant Member State Vessel Monitoring System data as a proxy for fishing activity.

1.3.3. The better understanding of coral habitat fish-carrying capacity through the integration of fish data into coral ecosystem models.

CoralFISH has shown that cold-water corals are hotspots of carbon processing along continental margins. Their high organic carbon-processing rate, previously unaccounted for in regional carbon budgets, indicate that CWCs make a significant (~25%) contribution to the annual organic carbon processing of the entire Norwegian Shelf.

A coupled hydrographic-ecosystem model describing a NE Atlantic coral mound province on Rockall Bank indicates that direct benthic-pelagic coupling exists between CWC habitats occurring at depths of 600m and surface productivity, due to a tidal-induced down-welling of fresh organic matter from the ocean surface towards the coral mound.

Strong inter-regional differences are apparent in the functioning of CWC reefs. Carbon cycling is dominated by corals at Traena (Norway) where there is a strong contribution from zooplankton in their diet. At the Belgica Mounds (Ireland) in contrast, a larger diversity of groups constitutes the food web, with zooplankton being of minor importance in coral diets. On Mediterranean reefs, the invertebrate biomass is substantially lower than at Atlantic sites, most likely due to differences in primary productivity in the overlying water column.

Fish abundance on cold-water coral reefs, assessed by measuring arrival times of fish to bait dispersed from baited landers, show that the fish density on corals is about 7 times higher than at non-coral reference stations.

1.3.4. The production of habitat suitability maps both regionally and for OSPAR Region V to identify areas likely to contain vulnerable marine habitat.

Recognising that it is not technically feasible to map deep-sea biodiversity over large areas using video/photographic systems, CoralFISH put a major effort into developing robust habitat suitability modelling methodologies to predict coral habitat over large areas based on partial knowledge of

actual coral distribution in a given area. The work was among the principal successes of the CoralFISH project.

Global models of habitat suitability for a number of deep-water corals were developed. Global predictions for suborders of octocorals were published in the Journal of Biogeography, and a similar study for black corals will soon be published. Octocoral predicted distribution maps were incorporated as layers into the United Nations Environmental Programme (UNEP) Geographic Information System (GIS) that informed the initial identification of Ecologically or Biologically Significant Marine Areas (EBSAs) for the Atlantic during a joint OSPAR/NEAFC/CBD Scientific Workshop held in Toulon in September, 2011. An analysis of octocoral distribution in relation to management areas instigated by the Regional Fisheries Management Organisation NEAFC (the North-East Atlantic Fisheries Council) was presented at a NEAFC organised symposium on the Management of Bottom Fishing in June, 2012. Fishing currently occupies areas deemed highly suitable for all 7 octocoral suborders (Figure 4).

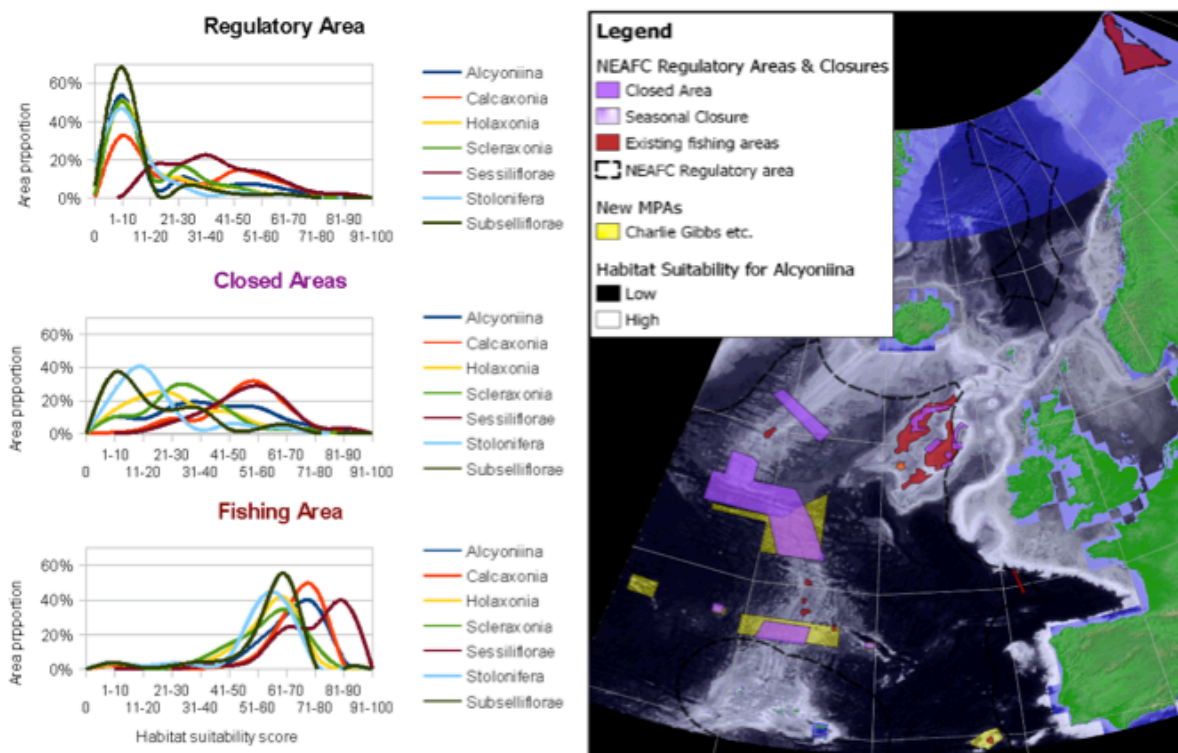


Figure 4. Habitat suitability models of octocoral distribution compared with management areas in the NEAFC region as presented at the NEAFC Deep Sea Fishing Symposium by ZSL in 2012.

Regional habitat suitability models for a number of cold water corals on the Azores plateau were developed. This work built on an extensive coral distribution database and produced high resolution estimates of coral distribution in the region. A regional high resolution model of habitat suitability for *Lophelia* reef in the Irish offshore was developed and published in the Journal of Biogeography. This work included the production of new oceanographic data for the area that has been archived in PANGAEA so that it can be used by other marine researchers. The maps produced enabled an assessment of the contribution of existing Special Areas of Conservation to protect the full biogeographic expression, in terms of associated biodiversity, of Irish cold-water coral reefs. Additionally, this important paper demonstrated that habitat suitability models based on terrain attributes derived from high resolution multi-beam generated bathymetry, are sufficiently robust to serve as decision support tools for policymakers tasked with marine spatial planning decisions.

1.3.5. The evaluation of the distribution of deep-water bottom fishing effort to identify areas of potential interaction and impact upon coral habitat

A re-occurring issue during the lifetime of the CoralFISH project has been the difficulty encountered by the project in obtaining relevant Vessel Monitoring System data from Member States in order to access the interaction and impact of fishing activity upon coral habitats. The lack of straightforward access to such data has impacted our planned work within the European Union Economic Exclusion Zone, however the current revision of the Common Fisheries Policy will hopefully ensure that this is not the case for similar projects in the future.

Our non-European Union partner, Iceland, however provided an example of a positive conservation/fisheries management outcome based on having access to VMS data. During the establishment of a marine protected area (MPA) to protect cold-water corals, VMS data showed that the closure partially extended into a heavily fished area. VMS data then facilitated redrawing of the MPA boundary to minimize the disruption to fishing while still ensuring the conservation objectives of the MPA were fully met.

To assist policy makers with the application of an ecosystem approach to fisheries management, CoralFISH undertook the development of web-enabled Geographic Information System tools. These tools demonstrate the technical feasibility of using web-services to produce predicted habitat maps outputs using different thresholds (i.e. likelihood of occurrence). These layers can then be queried against the fishing footprint to assess the risk of impact in coral habitats. Appropriate

fisheries management measures can then be applied to manage this risk and ensure minimal interaction between fisheries and vulnerable marine ecosystems.

1.3.6. The construction of bio-economic models to assess the impact on fisheries of various management measures adopted to protect coral habitat.

CoralFISH bioeconomic analysis focused on incorporating ecosystem processes into traditional fisheries bioeconomic models. The production function method used provided indications of the potential economic importance of cold-water coral. One important finding was that to successfully incorporate habitat into bioeconomic models, measurements of habitat areal extent (coverage) becomes critical for a more accurate economic analysis. This type of data is now available within the CoralFISH project.

CWC provide direct provisioning, regulating and cultural services but their main characteristic is as a provider of supporting services such as habitat and biodiversity.

Managing fisheries without taking into account this larger ecosystem perspective may potentially cost fisheries economically, as habitat loss will over time reduce fish carrying capacity and lead to lower fisheries profitability, particularly when target species derive some benefit from corals as a preferred habitat. This may lead to the development of a ‘tragedy of the commons’ scenario in relation to deep-sea seafloor habitats.

1.4. Potential impact and main dissemination activities and exploitation of results

CoralFISH scientists and students have all participated in disseminating CoralFISH research at international conferences, via the peer reviewed literature and through the media (e.g. Figure 5) and school outreach activities.



Figure 5. Sophie Arnaud, IFREMER, and chief scientist presenting some of the results from the BobEco expedition during her interview for French prime time TF1 TV news discussing some in November 2011.

The scientific research conducted by CoralFISH has been well received with 48 papers, many in high ranking journals, already published. To further promote the outputs from the project, CoralFISH collaborated with the EC Deepfishman project to host an international symposium: “The scientific basis for ecosystem based resource management and monitoring in the deep-waters of the Mediterranean & North Atlantic” in Galway between August 28th to 31st, 2012. A total of 78 participants (Figure 6) from 14 countries were present and participants included representatives from the EC DG Research, Government Agencies, NGOs and the UN Food and Agriculture Organisation (FAO).



Figure 6. Participants at the CoralFISH/Deepfishman symposium in Galway in 2012.

Dissemination of project results will continue for the next couple of years and will be facilitated in the short term by a planned Deep-Sea Research Special Issue with a commitment for a further twenty four papers. Project products such as the CoralFISH Coral Atlas and the Coral Habitat Catalogue (Figure 7) will prove valuable to scientific advisory groups, e.g. the ICES Working Groups on Deep-

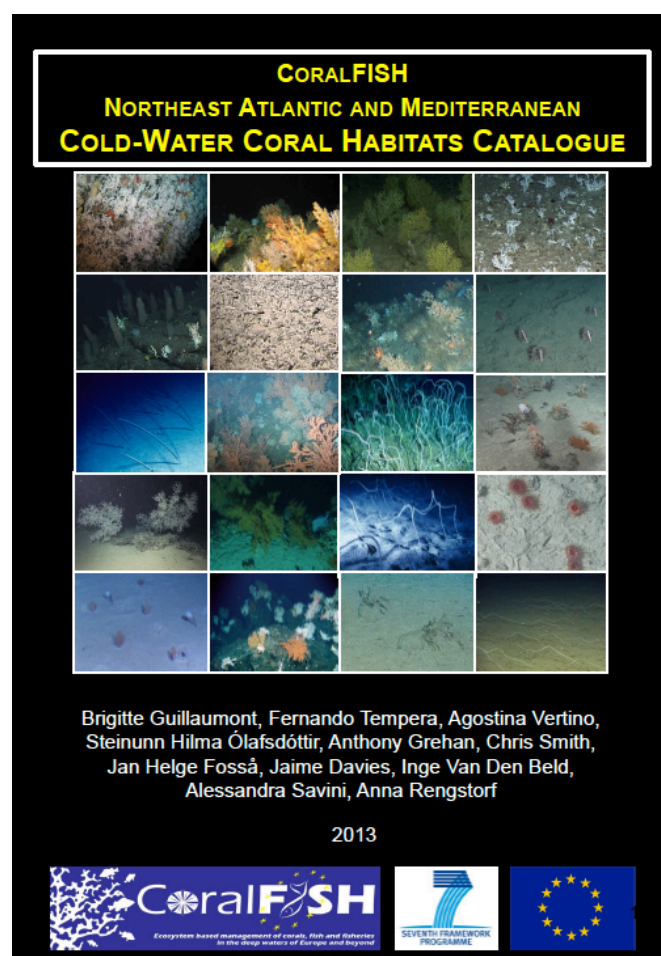


Figure 7. The CoralFISH Catalogue of European Cold Water Coral Habitats.

Sea Ecosystems and Marine Habitat Mapping, and EMODnet, as well as policymakers, e.g. the European Environmental Agency engaged in the EUNIS deep-sea biotopes classification revision.

During the lifetime of the project, CoralFISH results/outputs were highly relevant to the debate/implementation of a number of European policy instruments (Habitats Directive, Marine Strategy Framework Directive, Common Fisheries Policy) in the deep-sea:

1.4.1. Science-policy interactions: Common Fisheries Policy

To ensure that the latest scientific results were available to policy makers involved in the debate surrounding the revision of the Deep-Sea Access Regime, CoralFISH put a major effort into effectively communicating the latest science to policy makers (DG Mare) and industry (Regional Advisory Councils and the North East Atlantic Fisheries Council – NEAFC).

To ensure integrated ‘ecosystem based’ scientific advice at the European level, CoralFISH (with its deep-sea ecosystem focus), instigated collaboration with its FP7 sister project, Deepfishman (with its fisheries management focus), early in 2012. This collaboration resulted in a number of joint initiatives (including the Galway Symposium) and a consensus favouring recommendations with an emphasis on spatial planning to ensure adequate protection of vulnerable marine ecosystems in the management of fisheries.

DG Mare Briefings

A CoralFISH presentation of the latest science results was given by Anthony Grehan, Alessandra Savini, Sophie Arnaud, Julian M. Burgos, Stefán Aki Ragnarsson, and Jan-Helge Fossa at a DG Mare Conference de Midi on the 30th May, 2011 in Brussels.

A joint CoralFISH/Deepfishman presentation on some of the key findings from the Galway Symposium on the scientific basis for ecosystem based resource management and monitoring in the deep-waters of the Mediterranean & North Atlantic was given at a DG Mare ‘Conference de Midi’ on the 26th October, 2012 in Brussels (Figure 8).



Figure 8. CoralFISH and Deepfishman coordinators, Anthony Grehan (NUI Galway) and Pascal Lorance (IFREMER) and project scientists: Jean-Francois Bourillet and Verena Trenkel (IFREMER), and Andy Kenny (CEFAS); together with Ana Teresa Caetano (DG Research) and Armando Astudillo (moderator), Fernando Nieto Conde and John Brincat (DG Mare) at the Conference de Midi.

A rolling presentation of key CoralFISH results and round-table meeting between CoralFISH representatives, Anthony Grehan, Alessandra Savini, Pauline Harrison, Jan-Helge Fossa and Odd-Askel Bergstad and the Director, Atlantic, Outermost Regions and Arctic, Bernard Freiss and his team: Maria Candela Castillo and Fernando Nieto Conde, took place in Brussels on 1st February 2013.

Regional Advisory Council and NEAFC Briefings

A presentation entitled: ‘The FP7 CoralFISH project: supporting marine spatial planning as an important component of ecosystem based management in the deep-sea,’ was made at the North East Atlantic Fisheries Commission, ‘Management of Bottom Fishing Symposium’, 25th to 26th June, 2012, London.

Recommendations for the sustainable management of deep-sea resources were presented at the Deepfishman/CoralFISH ‘Deep-water fisheries ecosystem based management stakeholder workshop, 31st August, 2012, Galway.

A presentation entitled: “The FP7 CoralFISH project: supporting ecosystem based management in the deep-sea”, was made at the Joint Regional Advisory Councils (Common Fisheries Policy) Focus Group meeting on Deep-sea Habitats and Species, November, 2012, Paris and subsequently at the Inter RAC (Regional Advisory Councils to the Common Fisheries Policy) Seminar on the Management of Deep Sea species, May 2013, Edinburgh.

1.4.2. Science-policy interactions: Other Policy Instruments

Habitats Directive

The Marine Protected Areas Agency in France will use CoralFISH coral habitat maps to support the future designation of cold-water coral Special Areas of Conservation in the Bay of Biscay.

CoralFISH tools, namely: high resolution habitat suitability models and gene flow analytical techniques to improve the effectiveness and connectivity of MPA networks, were presented at the International Marine Protected Area Congress in Marseille, September 2013.

Marine Strategy Framework Directive

CoralFISH participated in the Mapping and Assessment of Ecosystems and their Services workshop organised by DG Environment under Action 5 of the EU Biodiversity Strategy to 2020 in 2013. *The need to include ecosystem valuations as a key component in marine spatial planning.*

An overview of CoralFISH mapping activities was presented to the Marine Observation and Data Expert Group (MODEG) of the European Marine Observation and Data Network (EMODnet) at their meeting in February 2012. *The need to consider the outputs from habitat suitability models to support EMODnet Biology was stressed.*

European Ocean Literacy

CoralFISH has supported the nascent ocean literacy movement in Europe through participation in the first and second European Ocean Literacy conferences held in Bruges and Plymouth in 2012 and 2013 respectively. CoralFISH also participated in a European Commission sponsored meeting hosted by VLIZ in Ostend in June, 2012, to advance the work programme for Horizon 2020.

United Nations Convention on Biological Diversity

CoralFISH participated in a meeting supporting the identification of areas of Ecological and Biological Significance (EBSAs) in the Atlantic organised by OSPAR and NEAFC in Port Cros, France in October 2011. Outputs from a CoralFISH NE Atlantic predicted habitat octocoral distribution map were included in the GIS database assembled to support identification of EBSAs.

1.4.3. Concluding Remarks

Finally, CoralFISH can be considered a ‘model’ large integrated project in that beneficiaries from all countries and disciplines cooperated closely. A particular feature of the project was a very good gender balance and young scientists taking positions of responsibility (Figure 9).



Figure 9. At work during a Cover video inter-calibration workshop in Faro.

CoralFISH brought together natural and fisheries scientists for the first time in meaningful collaboration to support the adoption of an ecosystem approach to fisheries management. The commitment and enthusiasm shown by all the participants in this project was exemplary and went far beyond what was contractually required.

1.5. Website and Contact Details



CoralFISH website: www.fp7-coralFISH.eu.

Email contact: anthony.grehan@nuigalway.ie

2. Use and dissemination of foreground

In addition to plans for publication of scientific results in a Deep-Sea Research Special Issue, it is expected that CoralFISH with its major research focus in the Atlantic will provide information in support of the Atlantic Strategy and Action Plan which recognises that the sustainable exploitation and management of marine resources and marine environmental protection (including the designation of coastal and high-seas Marine Protected Areas) require not only data and an understanding of how ecosystems function and interact, but also an ability to model, forecast and predict. CoralFISH research outputs relating to seafloor mapping, ecosystem functioning, marine protected area network connectivity, and habitat suitability modelling incorporating 3D hydrographic model outputs, and in particular our efforts to standardise methodologies including an extensive review of seafloor classification schemes in use on both sides of the Atlantic, will add value to future planned initiatives. Similarly in the Mediterranean, CoralFISH research will input into the UNEP-MAP-RAC/SPA Strategic Action Programme for the Conservation of Biological Diversity in the Mediterranean Region, particularly with regards the development of MPAs beyond national jurisdiction or in areas where the limits of national sovereignty or jurisdiction have yet to be defined.

Section A contains a list of all scientific publications and dissemination activities relating to foreground produced to date.

Section A (public)

This section includes two templates

- Template A1: List of all scientific (peer reviewed) publications relating to the foreground of the project.
- Template A2: List of all dissemination activities (publications, conferences, workshops, web sites/applications, press releases, flyers, articles published in the popular press, videos, media briefings, presentations, exhibitions, thesis, interviews, films, TV clips, posters).

These tables are cumulative, which means that they should always show all publications and activities from the beginning until after the end of the project. Updates are possible at any time.

TEMPLATE A1: LIST OF SCIENTIFIC (PEER REVIEWED) PUBLICATIONS, STARTING WITH THE MOST IMPORTANT ONES									
NO.	Title	Main author	Title of the periodical or the series	Number, date or frequency	Publisher		Year of publication	Relevant pages	Is/Will open access ¹ provided to this publication?
1	High resolution habitat suitability modelling can improve conservation of vulnerable marine ecosystems in the deep sea	Rengstorf A. M.	Journal of Biogeography	40	John Wiley & Sons Ltd		2013	1702–1714	No
2	Distribution and behaviour of deep-sea benthopelagic fauna observed using towed cameras in the Santa Maria di	D’Onghia, G.	Marine Ecology - Progress Series	443	Inter-Research		2011	95-110	No

3	Comparing Deep-Sea Fish Fauna between Coral and Non-Coral “Megahabitats” in the Santa Maria di Leuca Cold-Water Coral Province (Mediterranean Sea)	D'Onghia, G.	Public Library Quarterly	7 (9)	Routledge		2012	e44509		No
4	Definition and detection of vulnerable marine ecosystems on the high seas: problems with the “move-on” rule	Auster, P. J.	ICES Journal of Marine Science	68 (2)	Oxford University Press		2011	254-264		No
5	Towards High-Resolution Habitat Suitability Modeling of Vulnerable Marine Ecosystems in the Deep-Sea: Resolving Terrain Attribute Dependencies	Rengstorf, A. M.	Marine Geodesy	35 (4)	Taylor and Francis Inc.		2012	343-36		No
6	Using fisheries by-catch data to predict octocoral habitat suitability around South Georgia	Taylor, M. L.	Journal of Biogeography	40 (9)	Blackwell Publishing		2013	1365-2699		No
7	The global distribution of seamounts based on 30 arc seconds bathymetry data	Yesson, C.	Deep-Sea Research Part I: Oceanographic Research Papers	58 (4)	Elsevier Limited		2013	http://dx.doi.org/10.1016/j.ds		No
8	Global habitat suitability of cold-water octocorals	Yesson, C.	Journal of Biogeography	39 (7)	Blackwell Publishing		2012	1278-1292		No
9	The bathyal benthopelagic fauna in the north-western Ionian Sea: structure, patterns and interactions	Capezzuto, F.	Chemistry and Ecology	26 (1)	Taylor and Francis Ltd.		2010	199-217		No
10	Occurrence and behaviour of <i>Paromola cuvieri</i> (Crustacea, Decapoda) in the Santa Maria di Leuca cold-water coral community (Mediterranean Sea)	Capezzuto, F.	Deep-Sea Research Part I: Oceanographic Research Papers	59	Elsevier Limited		2012	1-7		No

11	Estimating Linkages between Redfish and Cold Water Coral on the Norwegian Coast	Foley, N. S.	Marine Resource Economics	25 (1)	The MRE Foundation		2010	105-120		No
12	The ecological and economic value of cold-water coral ecosystems	Foley, N. S.	Ocean and Coastal Management	53 (7)	Elsevier BV		2010	313-326		No
13	The rise and fall of the Irish orange roughly fishery: An economic analysis	Foley, N. S.	Marine Policy	35 (6)	Elsevier Limited		2011	756-763		No
14	Linking benthic hydrodynamics and cold-water coral occurrences: A high-resolution model study at three cold-water coral provinces in the NE Atlantic	Mohn, C.	Progress in Oceanography	122	Elsevier Limited		2014	92–104		No
15	Mapping Cold-Water Coral Habitats at Different Scales within the Northern Ionian Sea (Central Mediterranean): An Assessment of Coral Coverage and Associated Vulnerability.	Savini A.	PLoS Biology	9 (2)	Public Library of Science		2014	e87108		Yes
16	Cold-water coral mounds and sponge-beds as habitats for demersal fish on the Norwegian shelf.	Kutti, T.	Deep-Sea Research Part II: Topical Studies in Oceanography	99	Elsevier Limited		2014	122-133		No
17	Plastic debris ingested by deep-water fish of the Ionian Sea (Eastern Mediterranean)	Anastasopoulou, A.	Deep-Sea Research Part I: Oceanographic Research Papers	74	Elsevier Limited		2013	11-13		No
18	New records of rare deep-water fish species in the Eastern Ionian Sea (Mediterranean Sea)	Mytilineou, C.	Journal of Natural History	47	Taylor and Francis Ltd.		2013	1645-1662		No
19	Motion, Commotion, and Biophysical Connections at Deep Ocean Seamounts.	Lavelle, J.	Oceanography and Marine Biology	23	Oceanography and Marine		2010	90-103.		No

					Biology					
20	Seamounts in a restless ocean: Response of passive tracers to sub-tidal flow variability	Mohn, C.	Geophysical Research Letters	37 (15)	American Geophysical Union		2010	L15606		No
21	Implications of Extreme Life Span in Clonal Organisms: Millenary Clones in Meadows of the Threatened Seagrass <i>Posidonia oceanica</i>	Arnaud-Haond, S.	PLoS One	7 (2)	Public Library of Science		2012	e30454		Yes
22	Seamounts as refugia from ocean acidification for cold-water stony corals	Tittensor, D. P.	Marine Ecology	31	Blackwell Publishing		2010	212-225		No
23	Deep-sea demersal fish species richness in the Porcupine Seabight, NE Atlantic Ocean: global and regional patterns	Priede, I. G.	Marine Ecology	31 (1)	Blackwell Publishing		2010	247-260		No
24	Evolution of Nemertesia hydroids (Cnidaria: Hydrozoa, Plumulariidae) from the shallow and deep waters of the NE Atlantic and western Mediterranean	Moura, C. J.	Zoologica Scripta	41 (1)	Blackwell Publishing		2012	79-96		No
25	Spatiotemporal bioerosion patterns in deep-water scleractinians from off Santa Maria di Leuca (Apulia, Ionian Sea)	Beuck, L.	Deep-Sea Research Part II: Topical Studies in Oceanography	57 (5-6)	Elsevier Limited		2010	458-470		No
26	The association between a deep-sea gastropod <i>Pedicularia sicula</i> (Caenogastropoda: Pediculariidae) and its coral host <i>Errina dabneyi</i> (Hydrozoa: Stylasteridae) in the Azores	Braga-Henriques, A.	ICES Journal of Marine Science	68 (2)	Oxford University Press		2011	399-407		No
27	Carrying behavior in the deep-sea crab <i>Paromola cuvieri</i> (Northeast Atlantic)	Braga-Henriques, A.	Marine Biodiversity	42 (1)	Springer Publishing Company		2012	37-46		No

28	Biological structures as a source of habitat heterogeneity and biodiversity on the deep ocean margins	Buhl-Mortensen, L.	Marine Ecology	31 (1)	Blackwell Publishing		2010	21-50		No
29	Isozoanthus primnoidus, a new species of zoanthid (Cnidaria: Zoantharia) associated with the gorgonian Callogorgia verticillata (Cnidaria: Alcyonacea)	Carreiro-Silva, M.	ICES Journal of Marine Science	68 (2)	Oxford University Press		2011	408-415		No
30	Deep-Sea Biodiversity in the Mediterranean Sea: The Known, the Unknown, and the Unknowable	Danovaro, R.	PLoS One	5 (8)	Public Library of Science		2010	e11832		Yes
31	The white coral community in the central Mediterranean Sea revealed by ROV surveys	Freiwald, A.	Oceanography	22 (1)	The Oceanography Society, USA		2009	58–74		No
32	Marine protected areas—substantiating their worth	Wattage, G. H.	Marine Policy	34 (3)	Elsevier Limited		2010	421-430		No
33	Can we protect seamounts for research? A Call for Conservation.	Morato, T.	Oceanography	23 (1)	The Oceanography Society, USA		2010	190-199		No
34	Seamount Ecosystem Evaluation Framework (SEEF): a tool for global seamount research and data synthesis.	Pitcher, T. J.	Oceanography	23 (1)	The Oceanography Society, USA		2010	123-125.		No
35	Seamount fisheries: do they have a future?	Pitcher, T. J.	Oceanography	23 (1)	The Oceanography		2010	134-144.		No

					Society, USA					
36	A review of the spatial extent of fishery effects and species vulnerability of the deep-sea demersal fish assemblage of the Porcupine Seabight, Northeast Atlantic Ocean (ICES Subarea VII)	Priede, I.	ICES Journal of Marine Science	68 (2)	Oxford University Press		2011	281-289		No
37	Spotlight: Sedlo Seamount.	Santos, RS.	Oceanography	23 (1)	The Oceanography Society, USA		2010	202-203.		No
38	An Ecosystem Evaluation Framework for Global Seamount Conservation and Management	Taranto, G. H.	PLoS One	7 (8)	Public Library of Science		2012	e42950		Yes
39	Coralliophilinae (Gastropoda: Muricidae) associated with deep-water coral banks in the Mediterranean.	Taviani, M.	Nautilus	123 (3)	Bailey-Matthews Shell Museum		2009	106-112		No
40	Scleractinian cold-water corals in the Gulf of Cádiz—First clues about their spatial and temporal distribution	Wienberg, C.	Deep-Sea Research Part I: Oceanographic Research Papers	56 (10)	Elsevier Limited		2009	1873-1893		No
41	Shell architecture, element composition, and stable isotope signature of the giant deep-sea oyster <i>Neopycnodonte zibrowii</i> sp. n. from the NE Atlantic	Wisshak, M.	Deep-Sea Research Part I: Oceanographic Research Papers	56 (3)	Elsevier Limited		2009	374-407		No
42	The ‘living-fossil community’ of the cyrtocrinid <i>Cyathidium foresti</i> and the deep-sea oyster <i>Neopycnodonte zibrowii</i> (Azores Archipelago)	Wisshak, M.	Palaeogeography, Palaeoclimatology, Palaeoecology	271 (1–2)	Elsevier		2009	77-83		No
43	Abundance of litter on Condor seamount (Azores, Portugal, Northeast Atlantic)	Pham, C.K.	Deep-Sea Research Part II: Topical Studies in Oceanography	98 (A)	Elsevier Limited		2013	204–208		No

44	Scale worms (Polychaeta: Aphroditiformia) associated with cold-water corals in the eastern Gulf of Mexico	Barnich, R.	Journal of the Marine Biological Association of the United Kingdom	93 (8)	Cambridge University Press	2013	2129-2143	No
45	The diet and feeding ecology of <i>Conger conger</i> (L. 1758) in the deep waters of the Eastern Ionian Sea.	Anastasopoulou A.	Mediterranean Marine Science, Medit. Mar. Sci.	14 (2)	The National Documentation Centre of Greece	2013	365-368	No
46	Diet and feeding strategy of blackmouth catshark <i>Galeus melastomus</i> in the deep-waters of the Eastern Mediterranean.	Anastasopoulou A.	Journal of Fish Biology	83 (6)	Wiley	2013	1637-1655	No
47	Spatial distribution and aspects of the life history of blackspot seabream <i>Pagellus bogaraveo</i> (Brünnich 1768) (Osteichthyes: Sparidae) from the Eastern Mediterranean.	Mytilineou C.	Journal of Fish Biology	83 (6)	Wiley	2013	1551-1575.	No
48	New cold-water coral occurrences in the eastern Ionian Sea: results from experimental long line fishing.	Mytilineou C.	Deep Sea Research II	99	Elsevier Limited	2014	146-157	No

TEMPLATE A2: LIST OF DISSEMINATION ACTIVITIES

N°	Type of activities	Main leader	Title	Date	Place	Type of audience	Size of audience	Countries addressed
1	Organisation of Workshops	Zoological Society of London, Institute of Zoology	Spatial models in animal ecology, management and conservation	09/03/2010	UK	Scientific community (higher education, Research)	unknown	na
2	Organisation of Workshops	NATIONAL UNIVERSITY OF IRELAND, GALWAY	Implementation of the FAO Guidelines for the Management of Deep-Sea Fisheries in the High Seas	10/05/2010	Busan, Republic of Korea	Scientific community (higher education, Research)	unknown	na
3	Organisation of Workshops	Zoological Society of London, Institute of Zoology	Deep-sea Biology Symposium	07/06/2011	Reykjavik, Iceland	Scientific community (higher education, Research)	unknown	na

4	Organisation of Workshops	Zoological Society of London, Institute of Zoology	A workshop teaching habitat suitability modelling techniques to members of the University of Leiden,	17/06/2010	Netherlands	Scientific community (higher education, Research)	unknown	na
5	Organisation of Workshops	Zoological Society of London, Institute of Zoology	Deep-Sea Coral Information Management Workshop	20/06/2010	Maryland, USA	Scientific community (higher education, Research)	unknown	na
6	Organisation of Workshops	Zoological Society of London, Institute of Zoology	GIS and habitat suitability modelling to members of the Tanzanian Biodiversity Information Facility	08/11/2010	Tanzania	Scientific community (higher education, Research)	unknown	na
7	Organisation of Workshops	Zoological Society of London, Institute of Zoology	A workshop to identify specimens from the Indian Ocean	01/11/2010	South Africa	Scientific community (higher education, Research)	unknown	na

8	Organisation of Workshops	NATIONAL UNIVERSITY OF IRELAND, GALWAY	'Grenelle de la mer' Commission addressing the Sustainability of French Deep-Sea Fisheries	05/11/2010	France	Scientific community (higher education, Research)	unknown	na
9	Organisation of Workshops	NATIONAL UNIVERSITY OF IRELAND, GALWAY	Science for Policy, Science for Innovation, and Science Strategy	25/11/2010	Brussels, Belgium	Scientific community (higher education, Research)	unknown	na
10	Organisation of Workshops	NATIONAL UNIVERSITY OF IRELAND, GALWAY	High Seas Marine Protected Area workshop	06/09/2010	Brussels, Belgium	Scientific community (higher education, Research)	unknown	na
11	Media briefings	IMAR- INSTITUTO DO MAR	Filipe M. Porteiro and Fernando Tempera interview in the show "Os Dias do Futuro" from RDP - Antena	20/02/2010	Portugal	Scientific community (higher education, Research)	unknown	na
12	Articles published in the popular press	IMAR- INSTITUTO DO MAR	Durupt V., 2010. Dans les coraux du Golfe de Gascogne, une vie menacée, Le Télégramme,	01/02/2010	Brest, France	Scientific community (higher education, Research)	unknown	na

13	TV clips	IMAR- INSTITUTO DO MAR	RTP (the public nation-wide channel) and RTP Açores. The CoralFISH cruise to the Condor and Voador	02/01/2010	Portugal	Scientific community (higher education, Research)	unknown	na
14	Articles published in the popular press	IMAR- INSTITUTO DO MAR	"Laboratories imitate the bottom of the sea"	03/03/2010	Portugal	Scientific community (higher education, Research)	unknown	na
15	Organisation of Workshops	IMAR- INSTITUTO DO MAR	"Department of Oceanography and Fisheries: a tour." (Students report their visit to the department.	04/03/2010	Portugal	Scientific community (higher education, Research)	unknown	na
16	Videos	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	The life in the Deep-sea	06/03/2010	Portugal	Scientific community (higher education, Research)	unknown	na

17	Media briefings	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	Broadcast about the first results of the two CoralFISH cruises in 2010 in which NIOZ participated	04/04/2010	Italy	Scientific community (higher education, Research)	unknown	na
18	Articles published in the popular press	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	A la découverte des coraux d'eau froide du golfe de Gascogne.	05/05/2010	Netherlands	Scientific community (higher education, Research)	unknown	na
19	Articles published in the popular press	IMAR- INSTITUTO DO MAR	Forbidden fishing on Condor Seamount	05/05/2010	Portugal	Scientific community (higher education, Research)	unknown	na
20	Videos	IMAR- INSTITUTO DO MAR	Archipelago promotes marine potentialities	06/02/2014	Portugal	Scientific community (higher education, Research)	unknown	na
21	Articles published in the popular press	IMAR- INSTITUTO DO MAR	Condor finally free for investigation	07/05/2010	Portugal	Scientific community (higher education, Research)	unknown	na

22	Media briefings	IMAR- INSTITUTO DO MAR	Fernando Tempera was awarded the best technical image prize during the 1st Science Meeting	07/05/2010	Portugal	Scientific community (higher education, Research)	unknown	na
23	Oral presentation to a wider public	IMAR- INSTITUTO DO MAR	Cold Water coral Ecosystems and their Survival in Acid Waters	07/05/2010	USA	Scientific community (higher education, Research)	unknown	na
24	Oral presentation to a wider public	IMAR- INSTITUTO DO MAR	Exploring the Ocean in School	07/05/2010	USA	Scientific community (higher education, Research)	unknown	na
25	Oral presentation to a wider public	IMAR- INSTITUTO DO MAR	Cold Water coral Ecosystems and their Survival in Acid Waters	09/05/2010	Horta, Azores	Scientific community (higher education, Research)	unknown	na
26	Oral presentation to a wider public	IMAR- INSTITUTO DO MAR	Ethics on Coral Reef Ecosystems Research and Exploitation as part of the Philosophy course	10/05/2010	Portugal	Scientific community (higher education, Research)	unknown	na

27	Oral presentation to a wider public	NATIONAL UNIVERSITY OF IRELAND, GALWAY	'What's for dinner?' food web exercise, talk and Q&A session.	10/06/2010	NUI, Galway, Ireland	Scientific community (higher education, Research)	unknown	na
28	Press releases	IMAR- INSTITUTO DO MAR	The greatest expedition ever	10/06/2010	Portugal	Scientific community (higher education, Research)	unknown	na
29	Articles published in the popular press	IMAR- INSTITUTO DO MAR	Condor Seamount closed to fishing	11/06/2010	Portugal	Scientific community (higher education, Research)	unknown	na
30	Oral presentation to a wider public	IMAR- INSTITUTO DO MAR	Cold water coral conservation.	11/06/2010	Dublin, Ireland	Scientific community (higher education, Research)	unknown	na
31	Articles published in the popular press	IMAR- INSTITUTO DO MAR	Scientific expedition with economical value	10/06/2010	Portugal	Scientific community (higher education, Research)	unknown	na
32	Articles published in the popular press	IMAR- INSTITUTO DO MAR	Azores: Condor seamount closed to fishing to allow scientific research	10/06/2010	Portugal	Scientific community (higher education, Research)	unknown	na

33	Articles published in the popular press	IMAR- INSTITUTO DO MAR	DOP studies corals to help fisheries	10/06/2010	Portugal	Scientific community (higher education, Research)	unknown	na
34	Articles published in the popular press	IMAR- INSTITUTO DO MAR	Underwater robot left on seabottom leaves Azorean scientists concerned	10/06/2010	Portugal	Scientific community (higher education, Research)	unknown	na
35	Articles published in the popular press	HAFRANNSOKNASTOFNUNIN	Studies on cold-water corals in Icelandic waters	10/08/2010	Iceland	Scientific community (higher education, Research)	unknown	na
36	Media briefings	IMAR- INSTITUTO DO MAR	Scientific mission studies cold water corals of the sea of the Azores	10/08/2010	Portugal	Scientific community (higher education, Research)	unknown	na
37	Exhibitions	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	La diversité prend le large : les récifs coralliens de grande profondeur	10/08/2010	France	Scientific community (higher education, Research)	unknown	na
38	Articles published in the popular press	IMAR- INSTITUTO DO MAR	Mission makes pictures of cold water corals in the Azores sea	10/08/2010	Portugal	Scientific community (higher education, Research)	unknown	na

39	Articles published in the popular press	IMAR- INSTITUTO DO MAR	Açores: Scientific mission begins today at the seamounts off Azores	10/08/2010	Portugal	Scientific community (higher education, Research)	unknown	na
40	Articles published in the popular press	IMAR- INSTITUTO DO MAR	Scientific mission off Faial begins today	10/08/2010	Portugal	Scientific community (higher education, Research)	unknown	na
41	Articles published in the popular press	IMAR- INSTITUTO DO MAR	Revelation of the underwater landscape of the Azores Diário de Notícias	10/08/2010	Portugal	Scientific community (higher education, Research)	unknown	na
42	Articles published in the popular press	IMAR- INSTITUTO DO MAR	Secrets of the deep sea	10/08/2010	Portugal	Scientific community (higher education, Research)	unknown	na
43	TV clips	IMAR- INSTITUTO DO MAR	Various interviews in national and regional stations	10/08/2010	Portugal	Scientific community (higher education, Research)	unknown	na
44	Exhibitions	THE UNIVERSITY COURT OF THE UNIVERSITY OF ABERDEEN	Techfest: Technology at Work event	10/09/2010	Scotland	Scientific community (higher education, Research)	unknown	na

45	Exhibitions	THE UNIVERSITY COURT OF THE UNIVERSITY OF ABERDEEN	Thomas Linley completed his training as a Science, Technology, Engineering and Mathematics Ambassado	10/10/2010	Scotland	Scientific community (higher education, Research)	unknown	na
46	Posters	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	Cold-water coral research at NIOZ.	10/10/2010	Scotland	Scientific community (higher education, Research)	unknown	na
47	Exhibitions	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Les coraux d'eau froide, Fête de la Science	10/10/2010	France	Scientific community (higher education, Research)	unknown	na
48	Films	IMAR- INSTITUTO DO MAR	For some people the Film Festival is everyday	10/11/2010	Fazendo	Scientific community (higher education, Research)	unknown	na
49	Films	NATIONAL UNIVERSITY OF IRELAND, GALWAY	For some people the Film Festival is everyday	10/02/2011	Galway, Ireland	Scientific community (higher education, Research)	unknown	na

50	Films	NATIONAL UNIVERSITY OF IRELAND, GALWAY	Interview for French TV 'Thalassa' documentary with regards to the French Department of Ecology	10/07/2010	Galway, Ireland	Scientific community (higher education, Research)	unknown	na
51	Exhibitions	IMAR- INSTITUTO DO MAR	Geomorphology of the Azores (in Portuguese). Seminar presented for a class of students from Faial's	10/10/2010	Portugal	Scientific community (higher education, Research)	unknown	na
52	Organisation of Conference	HELLENIC CENTRE FOR MARINE RESEARCH	Options for Ecosystem-based Management (FP7).	29/03/2010	Liverpool, UK	Scientific community (higher education, Research)	unknown	na
53	Organisation of Conference	HELLENIC CENTRE FOR MARINE RESEARCH	Annual Meeting EuroSITES	22/04/2010	Triste, Italy	Scientific community (higher education, Research)	unknown	na
54	Organisation of Conference	HELLENIC CENTRE FOR MARINE RESEARCH	Mediterranean Science Commission	10/05/2010	Venice	Scientific community (higher education, Research)	unknown	na
55	Organisation of Conference	HELLENIC CENTRE FOR MARINE RESEARCH	Pan-Hellenic Symposium of Ichthyologists	07/05/2010	Piraeus	Scientific community (higher education, Research)	unknown	na

56	Organisation of Conference	HELLENIC CENTRE FOR MARINE RESEARCH	Michigan State University Study Abroad Programme	31/05/2010	Iraklion, Crete	Scientific community (higher education, Research)	unknown	na
57	Organisation of Conference	HELLENIC CENTRE FOR MARINE RESEARCH	World Environment Day	05/06/2010	Crete, Greece	Scientific community (higher education, Research)	unknown	na
58	Organisation of Conference	HELLENIC CENTRE FOR MARINE RESEARCH	DEEPFISHMAN	14/09/2010	France	Scientific community (higher education, Research)	unknown	na
59	Organisation of Conference	HELLENIC CENTRE FOR MARINE RESEARCH	International Amphipod Conference	12/09/2010	Sevilla, Spain	Scientific community (higher education, Research)	unknown	na
60	Organisation of Conference	HELLENIC CENTRE FOR MARINE RESEARCH	Researcher's Day, HCMR & Crete Aquarium Event	24/09/2010	Iraklion, Crete	Scientific community (higher education, Research)	unknown	na
61	Organisation of Conference	HELLENIC CENTRE FOR MARINE RESEARCH	WP1 Workshop ODEMM	26/09/2010	Romania	Scientific community (higher education, Research)	unknown	na
62	Organisation of Conference	HELLENIC CENTRE FOR MARINE RESEARCH	Researcher's Day, HCMR & Crete Aquarium Event,	24/09/2010	Iraklion, Crete	Scientific community (higher education, Research)	unknown	na

63	Organisation of Conference	HELLENIC CENTRE FOR MARINE RESEARCH	WP1 Workshop ODEMM	26/09/2010	Romania	Scientific community (higher education, Research)	unknown	na
64	Organisation of Conference	HELLENIC CENTRE FOR MARINE RESEARCH	IMBER-IMBIZO II World Conference	10/10/2010	Iraklion, Crete	Scientific community (higher education, Research)	unknown	na
65	Organisation of Conference	HELLENIC CENTRE FOR MARINE RESEARCH	Summer School Kiel University, HCMR	08/10/2010	Iraklion, Crete	Scientific community (higher education, Research)	unknown	na
66	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	Getting a wider picture: MPA design	22/03/2009	Las Vegas, NV, USA.	Scientific community (higher education, Research)	unknown	na
67	Oral presentation to a scientific event	UNIVERSITETET I TROMSOE	Bioeconomic modelling of habitat-fishery interactions	01/11/2008	University of Iceland, Reykjavik, Iceland	Scientific community (higher education, Research)	unknown	na
68	Oral presentation to a scientific event	UNIVERSITETET I TROMSOE	Bioeconomic modelling of habitat-fishery linkages.	01/07/2008	Vietnam	Scientific community (higher education, Research)	unknown	na
69	Oral presentation to a scientific event	UNIVERSITETET I TROMSOE	Fisheries and Habitats – an important missing link.	01/10/2008	University of Tromsø	Scientific community (higher education, Research)	unknown	na

70	Oral presentation to a scientific event	UNIVERSITETET I TROMSOE	Fisheries and Habitats – an important missing link in the sea?	19/02/2009	Northern Norwegian Academy of Science	Scientific community (higher education, Research)	unknown	na
71	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Genetic fingerprinting of cumulative long-term effects of fishing impacts on corals	05/10/2009	France	Scientific community (higher education, Research)	unknown	na
72	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	Results of the ROV surveys at the Formigas Bank.	30/06/2005	Horta, Azores, Portugal.	Scientific community (higher education, Research)	unknown	na
73	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	Results of the preliminary ROV surveys on the Condor de Terra seamount	01/05/2009	Azores, Portugal.	Scientific community (higher education, Research)	unknown	na
74	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Life-history patterns of commercial species living in and around Santa Maria di Leuca coral habitat	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na

75	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	Impacts of Deep-Sea Fisheries on Ecosystems and the experience with MPAs and VMS in management.	04/11/2009	Paris, France	Scientific community (higher education, Research)	unknown	na
76	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	Consequences of ocean acidification for fisheries.	26/11/2009	Trondheim	Scientific community (higher education, Research)	unknown	na
77	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	Consequences of ocean acidification for fisheries. Invited talk.	17/08/2009	Tallin	Scientific community (higher education, Research)	unknown	na
78	Oral presentation to a scientific event	THE UNIVERSITY COURT OF THE UNIVERSITY OF ABERDEEN	Ecological Research Issues Surrounding Offshore Oil Platform Decommissioning.	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na
79	Oral presentation to a scientific event	NATIONAL UNIVERSITY OF IRELAND, GALWAY	De retour de la campagne océanographique	18/11/2009	Paris, Institut Océanographique	Scientific community (higher education, Research)	unknown	na

80	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Cold-Water Coral Typology for habitats mapping	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na
81	Oral presentation to a scientific event	HAVFORSKNINGSINSTITUTTET	Fishing effort trends in coral areas off Iceland.	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na
82	Oral presentation to a scientific event	Zoological Society of London, Institute of Zoology	Deep-water benthic ecosystem ecology.	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na
83	Oral presentation to a scientific event	Zoological Society of London, Institute of Zoology	Understanding the ecosystem patterns that characterise cold water coral Communities.	29/10/2009	UK	Scientific community (higher education, Research)	unknown	na
84	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	Experimental long-line fishing in the Træna coral field in Norway.	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na

85	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	Large scale distribution of fish on and off cold-water coral ecosystems in Norway.	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na
86	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Give insight/matter of discussion on methodology for qualitative and quantitative evaluation of fish	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na
87	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Methodology for fish identification during ROV survey and/or video analysis	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na
88	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	VMS data and impact on CWC and other deep-water VMEs	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na

89	Oral presentation to a scientific event	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	The cold-water coral community of Hatton Bank, NE Atlantic.	01/05/2008	Wellington, New Zealand	Scientific community (higher education, Research)	unknown	na
90	Oral presentation to a scientific event	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	Abundance and composition of the fish population of a cold-water coral community at Hatton Bank	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na
91	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Pagellus bogaraveo in the Bay of Biscay in the 1970s: dynamics and consequences.	27/04/2009	Horta, Azores, Portugal	Scientific community (higher education, Research)	unknown	na
92	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Comparison of the sizes and abundances in fish species between habitats with and without deep-sea	26/05/2009	Livorno, Italy	Scientific community (higher education, Research)	unknown	na

93	Oral presentation to a scientific event	NATIONAL UNIVERSITY OF IRELAND, GALWAY	Moving towards high resolution habitat suitability modelling of cold-water corals	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	NA
94	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	How Will Conservation Science Meet Policy Requirements on the High Seas.	17/05/2009	The International Marine Conservation Congress, Washington DC	Scientific community (higher education, Research)	unknown	NA
95	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	Developing Practical and Innovative Strategies for Marine Climate Change Impacts Assessment	17/05/2009	The International Marine Conservation Congress, Washington DC	Scientific community (higher education, Research)	unknown	NA
96	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	Coral biodiversity and assemblages in the Azores.	10/10/2008	Azores, Portugal.	Scientific community (higher education, Research)	unknown	NA
97	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	Where the ocean knowledge goes deeper.	03/03/2009	Portuguese National Parliament, Lisbon.	Scientific community (higher education, Research)	unknown	NA

98	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	Research and Conservation in Azorean Seamounts (North-East Atlantic) Seamount Marine Protected Areas	10/10/2009	Washington DC, USA	Scientific community (higher education, Research)	unknown	na
99	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	Exploration, Biogeosciences and Fisheries.	19/03/2009	Scripps Institution of Oceanography, La Jolla	Scientific community (higher education, Research)	unknown	na
100	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Environment including Global Change.	05/10/2009	Palermo	Scientific community (higher education, Research)	unknown	NA
101	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	what we know from small to large scale seafloor mapping at one representative site	06/11/2008	Brest, France	Scientific community (higher education, Research)	unknown	NA

102	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	High resolution geomorphological interpretation of the Bay of Biscay upper slope margin.	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na
103	Oral presentation to a scientific event	HAVFORSKNINGSINSTITUTTET	Distribution and abundance of fish in coral locations off southern Iceland.	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na
104	Oral presentation to a scientific event	HAVFORSKNINGSINSTITUTTET	Vulnerable habitats in Icelandic waters.	24/11/2009	Marine Research Institute of Spain, Vigo	Scientific community (higher education, Research)	unknown	na
105	Oral presentation to a scientific event	HAVFORSKNINGSINSTITUTTET	Mapping coral habitats off southern Iceland	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na
106	Oral presentation to a scientific event	HAVFORSKNINGSINSTITUTTET	The fauna at cold-water coral grounds in Icelandic waters	21/02/2009	Marine research Institute of Iceland.	Scientific community (higher education, Research)	unknown	na

107	Oral presentation to a scientific event	UNIVERSITY COLLEGE CORK, NATIONAL UNIVERSITY OF IRELAND, CORK	Ecosystem based management of corals, fish and fisheries in the deep waters of Europe and beyond.	01/05/2009	Galway, Ireland	Scientific community (higher education, Research)	unknown	na
108	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	Biodiversity in Seamounts of the Azores (in Portuguese).	10/10/2008	Azores, Portugal.	Scientific community (higher education, Research)	unknown	na
109	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	Classification and Identification of Marine Organisms from Images and Video.	10/10/2009	Moss Landing, CA (USA).	Scientific community (higher education, Research)	unknown	na
110	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	Seafloor diversity and spatially-explicit predictive modelling of dominant macroalgae distributions	10/10/2009	Geohah, Trondheim, Norway.	Scientific community (higher education, Research)	unknown	na
111	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	Scientific progress of project Coralfish in the Azores.	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na

112	Oral presentation to a scientific event	Zoological Society of London, Institute of Zoology	How simulated data and global scale models can help us produce habitat suitability models at local	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na
113	Articles published in the popular press	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	Fish abundance and their reaction to light at cold water corals on Hatton Bank, NE Atlantic.	10/10/2010	NIOZ & University Groningen	Scientific community (higher education, Research)	unknown	na
114	Articles published in the popular press	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	La campagne BobGeo du programme européen CoralFISH.	07/05/2009	Brest, France	Scientific community (higher education, Research)	unknown	na
115	Articles published in the popular press	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	The macrofauna at two sites with cold-water corals on Hatton Bank (North-Atlantic Ocean).	10/10/2009	Netherlands	Scientific community (higher education, Research)	unknown	na

116	Articles published in the popular press	IMAR- INSTITUTO DO MAR	Sea-based and land-based observatories: new approaches for the integrated study of biodiversity	10/10/2010	Portugal	Scientific community (higher education, Research)	unknown	na
117	Articles published in the popular press	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	Biodiversity, ecosystem functioning and food web complexity of cold water coral reefs	16/07/2008	Netherlands	Scientific community (higher education, Research)	unknown	na
118	Articles published in the popular press	HELLENIC CENTRE FOR MARINE RESEARCH	Demersal deep-water species observations during remote operated vehicle surveys	10/10/2009	Greece	Scientific community (higher education, Research)	unknown	na
119	Articles published in the popular press	IMAR- INSTITUTO DO MAR	Taxonomy of cold-water corals of the Azores' seamounts.	10/10/2009	Portugal	Scientific community (higher education, Research)	unknown	na

120	Articles published in the popular press	IMAR- INSTITUTO DO MAR	How we can save the tigers of the sea. Independent 17th July, 2009.	17/07/2009	Portugal	Scientific community (higher education, Research)	unknown	na
121	Articles published in the popular press	IMAR- INSTITUTO DO MAR	How not to kill the oceans for fish. Invited article. Yale Global, 18th September, 2009.	18/09/2009	Portugal	Scientific community (higher education, Research)	unknown	na
122	Articles published in the popular press	IMAR- INSTITUTO DO MAR	The murky waters of EU fisheries. Comment. European Voice 30 July, 2009. P9.	30/07/2009	Portugal	Scientific community (higher education, Research)	unknown	na
123	Articles published in the popular press	HELLENIC CENTRE FOR MARINE RESEARCH	Deep coral environments south of Crete. 9th PanHellenic Symposium on Oceanography and Fisheries.	13/05/2009	Greece	Scientific community (higher education, Research)	unknown	NA

124	Articles published in the popular press	HAVFORSKNINGSINSTITUTTET	Species diversity and associated fauna composition of cold-water corals in Icelandic waters.	10/10/2009	Iceland	Scientific community (higher education, Research)	unknown	NA
125	Articles published in the popular press	IMAR- INSTITUTO DO MAR	Protocols for standardised fish census sampling strategies and methods.	10/10/2009	Portugal	Scientific community (higher education, Research)	unknown	na
126	Posters	IMAR- INSTITUTO DO MAR	Cold-water corals of the Azores: potential use in marine biotechnology.	01/12/2008	Wellington, New Zealand	Scientific community (higher education, Research)	unknown	na
127	Posters	IMAR- INSTITUTO DO MAR	Cold-water corals of the Azores	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na
128	Posters	IMAR- INSTITUTO DO MAR	Experimental Studies on the Response of Cold-Water Corals to Anthropogenic Stressors.	25/09/2008	Açores, Portugal	Scientific community (higher education, Research)	unknown	na

129	Posters	IMAR- INSTITUTO DO MAR	Association between <i>Callogorgia verticillata</i> (Anthozoa: Primnoidae) and an epizoan zoanthid anemone	10/10/2009	Azores, Portugal.	Scientific community (higher education, Research)	unknown	na
130	Posters	IMAR- INSTITUTO DO MAR	<i>Isozoanthus primnoidus</i> , a new species of zoanthid (Anthozoa: Hexacorallia)	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na
131	Posters	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Cartographie et caractérisation d'habitats profonds vulnérables	03/02/2009	Brest, France	Scientific community (higher education, Research)	unknown	na
132	Posters	Zoological Society of London, Institute of Zoology	Biodiversity and benthic ecology of bathyal seamounts in the Faial Channel, Azores.	27/04/2009	Azores, Portugal	Scientific community (higher education, Research)	unknown	na

133	Posters	IMAR- INSTITUTO DO MAR	Description of a new species of <i>Leiopathes</i> (Anthozoa: Antipatharia) from the NE Atlantic.	10/10/2009	Azores, Portugal	Scientific community (higher education, Research)	unknown	na
134	Posters	IMAR- INSTITUTO DO MAR	Description of a new species of <i>Leiopathes</i> (Anthozoa: Antipatharia) from the NE Atlantic.	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na
135	Posters	IMAR- INSTITUTO DO MAR	Revision of the occurrence and distribution of <i>Leiopathes</i> sp. (Anthozoa: Antipatharia)	01/12/2008	Wellington, New Zealand	Scientific community (higher education, Research)	unknown	na
136	Posters	IMAR- INSTITUTO DO MAR	Going deep on the Condor seamount.	10/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na

137	Posters	IMAR- INSTITUTO DO MAR	Azorean deep-water coral communities as perceived from bottom long-line fishery surveys.	10/10/2009	Azores, Portugal	Scientific community (higher education, Research)	unknown	na
138	Posters	IMAR- INSTITUTO DO MAR	Azorean deep-water coral communities as perceived from bottom long-line fishery surveys.	10/10/2009	Azores, Portugal.	Scientific community (higher education, Research)	unknown	na
139	Articles published in the popular press	Zoological Society of London, Institute of Zoology	Azorean deep-water coral communities as perceived from bottom long-line fishery surveys.	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na
140	Posters	HAVFORSKNINGSINSTITUTTET	On coral grounds	06/11/2009	Iceland	Scientific community (higher education, Research)	unknown	na
141	Posters	HAFRANNSOKNASTOFNUNIN	The role of MPA's for benthic fauna and habitats	20/02/2009	Iceland	Scientific community (higher education, Research)	unknown	na

142	Posters	IMAR- INSTITUTO DO MAR	Constraining the geomorphological setting of deep-sea biotopes using high resolution bathymetry	10/10/2009	Azores, Portugal	Scientific community (higher education, Research)	unknown	na
143	Posters	IMAR- INSTITUTO DO MAR	Constraining the geomorphological setting of deep-sea biotopes using high resolution bathymetry	10/10/2009	Norway	Scientific community (higher education, Research)	unknown	na
144	Posters	IMAR- INSTITUTO DO MAR	Constraining the geomorphological setting of deep-sea biotopes using high resolution bathymetry	05/10/2009	Crete, Greece	Scientific community (higher education, Research)	unknown	na
145	Posters	Zoological Society of London, Institute of Zoology	Multidisciplinary Perspectives on the History and Future of Marine Animals	26/05/2009	Vancouver	Scientific community (higher education, Research)	unknown	na

146	Organisation of Workshops	IMAR- INSTITUTO DO MAR	Classification and Identification of Marine Organisms from Images and Video.	10/10/2010	Monterey (USA)	Scientific community (higher education, Research)	unknown	na
147	Organisation of Workshops	IMAR- INSTITUTO DO MAR	Azores cold water coral identification	14/05/2009	Horta	Scientific community (higher education, Research)	unknown	na
148	Organisation of Workshops	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Deepsea Coral Symposium.	01/12/2008	Wellington, NZ.	Scientific community (higher education, Research)	unknown	na
149	Organisation of Workshops	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	International Symposium Deep Sea Corals.	01/12/2008	Wellington, New Zealand	Scientific community (higher education, Research)	unknown	na
150	Organisation of Workshops	Zoological Society of London, Institute of Zoology	MBARI image analysis workshop.	29/03/2009	Monterey, California	Scientific community (higher education, Research)	unknown	na

151	Organisation of Workshops	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Classification and identification of marine organisms from images and video	29/03/2009	Monterey, California	Scientific community (higher education, Research)	unknown	na
152	Organisation of Workshops	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	NIWA Coral identification workshop	08/12/2008	Wellington, New Zealand	Scientific community (higher education, Research)	unknown	na
153	Organisation of Workshops	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	OSPAR Convention	23/06/2008	Brest, France	Scientific community (higher education, Research)	unknown	na
154	Organisation of Workshops	IMAR- INSTITUTO DO MAR	Participation in USGS DISCOVRE cruise with RV Nancy Foster (NOAA) to deep-water coral reefs in Gulf	10/10/2008	Mexico	Scientific community (higher education, Research)	unknown	unknown

155	Organisation of Workshops	IMAR- INSTITUTO DO MAR	Pre-GeoHab Workshop on Techniques for using video and stills as a tool for quantitative habitat desc	10/10/2010	Trondheim, Norway.	Scientific community (higher education, Research)	unknown	unknown
156	Organisation of Conference	UNIVERSITETET I TROMSOE	Claire Armstrong (UiT) held meeting and discussion with P. O'Malley (Partner 13)	10/11/2009	Tromsø	Scientific community (higher education, Research)	unknown	unknown
157	Organisation of Conference	UNIVERSITETET I TROMSOE	Claire Armstrong (UiT) held meeting and discussion with partners at MRI (partner 3)	10/11/2008	Reykjavik, Iceland	Scientific community (higher education, Research)	unknown	unknown
158	Organisation of Conference	Zoological Society of London, Institute of Zoology	Geohab (Marine Geological and Biological Habitat Mapping) meeting	05/05/2009	Trondheim, Norway	Scientific community (higher education, Research)	unknown	na
159	Organisation of Conference	Zoological Society of London, Institute of Zoology	ICES Deep Sea Meeting	27/04/2009	Horta, Azores, Portugal.	Scientific community (higher education, Research)	unknown	unknown

160	Organisation of Conference	Zoological Society of London, Institute of Zoology	International Marine Conservation Congress.	17/05/2009	Washington DC	Scientific community (higher education, Research)	unknown	unknown
161	Organisation of Conference	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Marine Environmental Research and Education: Biological aspects	20/10/2008	Bari	Scientific community (higher education, Research)	unknown	na
162	Organisation of Conference	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	MEDECO post-cruise meeting to plan oceanographic expedition within the Santa Maria di Leuca	10/10/2007	unknown	Scientific community (higher education, Research)	unknown	na
163	Posters	NATIONAL UNIVERSITY OF IRELAND, GALWAY	CoralFISH: Ecosystem based management of corals, fish and fisheries in the deep waters of Europe	02/11/2010	Dublin, Ireland	Scientific community (higher education, Research)	unknown	na

164	Posters	NATIONAL UNIVERSITY OF IRELAND, GALWAY	CoralFISH: Ecosystem based management of corals, fish and fisheries in the deep waters of Europe	06/10/2010	Dublin, Ireland	Scientific community (higher education, Research)	unknown	na
165	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Genetic or genotypic diversity and population stability: conflicting evidence from experimental data	10/10/2010	Pittsburgh, Pennsylvania	Scientific community (higher education, Research)	unknown	na
166	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Geomorphological characterisation of cold water corals habitats (Bay of Biscay, NE Atlantic).	10/10/2010	Wellington, New Zealand	Scientific community (higher education, Research)	unknown	na
167	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	A la découverte des coraux d'eau froide du golfe de Gascogne.	10/10/2010	Brest, France	Scientific community (higher education, Research)	unknown	na

168	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	The CoNISMa lander MEMO (Marine Environment MONitoring system): a result of the CoralFISH project	29/12/2010	Milan, Italy	Scientific community (higher education, Research)	unknown	na
169	Oral presentation to a scientific event	NATIONAL UNIVERSITY OF IRELAND, GALWAY	The Production Function Approach: Estimating linkages between redfish and cold water coral	01/01/2010	Galway, Ireland	Scientific community (higher education, Research)	unknown	na
170	Oral presentation to a scientific event	NATIONAL UNIVERSITY OF IRELAND, GALWAY	CoralFISH research booth (posters, newsletters, etc) at EurOCEAN 2010 – Grand Challenges for Marine	12/10/2010	Ostend, Belgium	Scientific community (higher education, Research)	unknown	na
171	Oral presentation to a scientific event	NATIONAL UNIVERSITY OF IRELAND, GALWAY	'CoralFISH' Project: a Unique Science-Fisheries Research Partnership.	23/06/2010	Galway, Ireland	Scientific community (higher education, Research)	unknown	na

172	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Fishing effort and catch composition on the boundaries of Santa Maria di Leuca deep-water coral bank	01/06/2010	Rapallo (GE)	Scientific community (higher education, Research)	unknown	na
173	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Fishery-Coral habitat interaction in the Santa Maria di Leuca coral region.	29/11/2010	Milan, Italy	Scientific community (higher education, Research)	unknown	na
174	Oral presentation to a scientific event	Zoological Society of London, Institute of Zoology	Investigation of cold water coral ecosystems of the Azores archipelago within the framework of EU FP	01/06/2010	Reykjavik, Iceland	Scientific community (higher education, Research)	unknown	na
175	Oral presentation to a scientific event	Zoological Society of London, Institute of Zoology	Investigation of cold water coral ecosystems of the Azores archipelago within the framework of EU FP	01/11/2010	Reykjavik, Iceland	Scientific community (higher education, Research)	unknown	na

176	Oral presentation to a scientific event	THE UNIVERSITY COURT OF THE UNIVERSITY OF ABERDEEN	Associated ichthyofauna of cold water reefs: observations from baited photographic lander deployment	29/11/2011	Milan, Italy	Scientific community (higher education, Research)	unknown	na
177	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Facies at <i>Kophobelemnon stelliferum</i> from the Santa Maria di Leuca coral area	29/11/2011	Milan, Italy	Scientific community (higher education, Research)	unknown	na
178	Oral presentation to a scientific event	Zoological Society of London, Institute of Zoology	Distribution and abundance of deep-sea corals upon an Axial Volcanic Ridge (AVR) of the Mid-Atlantic	01/06/2010	Reykjavik, Iceland	Scientific community (higher education, Research)	unknown	na
179	Oral presentation to a scientific event	HAVFORSKNINGSINSTITUTTET	Cold water coral research in Iceland.	07/06/2011	Reykjavik, Iceland	Scientific community (higher education, Research)	unknown	na

180	Oral presentation to a scientific event	Zoological Society of London, Institute of Zoology	Protection of deep-sea ecosystems by regional fisheries management organisations (RFMOs).	01/06/2010	Reykjavik, Iceland	Scientific community (higher education, Research)	unknown	na
181	Articles published in the popular press	HAVFORSKNINGSINSTITUTTET	Exploration and Conservation of Seamounts: The Ecosystem Evaluation Framework.	27/04/2010	Brussels, Belgium	Scientific community (higher education, Research)	unknown	na
182	Oral presentation to a scientific event	HAVFORSKNINGSINSTITUTTET	Indicators for the Conservation of Seamounts and Associated Biodiversity: The BDC Azores Scientific	03/02/2010	Paris, France	Scientific community (higher education, Research)	unknown	na
183	Oral presentation to a scientific event	HAVFORSKNINGSINSTITUTTET	An Overview of Seamounts Biodiversity: Azores in the Context of Conservation.	05/05/2010	Braga, Portugal	Scientific community (higher education, Research)	unknown	na

184	Oral presentation to a scientific event	HAVFORSKNINGSINSTITUTTET	Deeper than Light: Touching the Bottom of the Ocean.	06/05/2010	Braga, Portugal	Scientific community (higher education, Research)	unknown	na
185	Oral presentation to a scientific event	HAVFORSKNINGSINSTITUTTET	Seamounts and Cold Water Corals: Threaten Oases of the Deep-sea.	04/03/2010	Lisbon, Portugal	Scientific community (higher education, Research)	unknown	na
186	Oral presentation to a scientific event	HAVFORSKNINGSINSTITUTTET	Seamounts: Oases of the Deep-sea.	06/08/2010	Gago Coutinho	Scientific community (higher education, Research)	unknown	na
187	Oral presentation to a scientific event	HAVFORSKNINGSINSTITUTTET	Conservation and Utilization of Biodiversity in Seamounts.	14/05/2010	Angra do Heroísmo	Scientific community (higher education, Research)	unknown	na
188	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Deep sea habitat mapping at the Santa Maria di Leuca cold water coral province.	10/05/2010	Venezia	Scientific community (higher education, Research)	unknown	na
189	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	In preparation. Mapping deep-sea habitats in the northern Ionian Sea.	29/11/2010	Milan, Italy	Scientific community (higher education, Research)	unknown	na

190	Oral presentation to a scientific event	THE UNIVERSITY COURT OF THE UNIVERSITY OF ABERDEEN	Developing tools for ecosystem management: education, dissemination and outreach.	29/11/2010	Milan, Italy	Scientific community (higher education, Research)	unknown	na
191	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Longline survey in the Santa Maria di Leuca coral region.	29/11/2010	Milan, Italy	Scientific community (higher education, Research)	unknown	na
192	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	ROV observations on fish and megafauna in deep coral areas of the western Ionian.	10/10/2010	Venice	Scientific community (higher education, Research)	unknown	na
193	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	Long-line fishing in and out of coral areas in the Eastern Ionian Sea: preliminary observations.	01/11/2010	Milano	Scientific community (higher education, Research)	unknown	na

194	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	Looking for corals: records of deep-sea fish fauna and invertebrate megafauna from the Ionian Sea	10/10/2010	Piraeus, Greece	Scientific community (higher education, Research)	unknown	na
195	Oral presentation to a scientific event	UNIVERSITY COLLEGE CORK, NATIONAL UNIVERSITY OF IRELAND, CORK	CoralFISH project: an overview	10/10/2010	Holland.	Scientific community (higher education, Research)	unknown	na
196	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	Seamount habitat mapping on the Condor Bank (Azores, NE Atlantic).	10/10/2010	Wellington, New Zealand.	Scientific community (higher education, Research)	unknown	na
197	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	More secrets from the deep.	10/10/2009	Azores, Portugal	Scientific community (higher education, Research)	unknown	na
198	Oral presentation to a scientific event	IMAR- INSTITUTO DO MAR	GIS approaches for seamount mapping	10/10/2010	Malta	Scientific community (higher education, Research)	unknown	na

199	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	In preparation. Cold-water coral province from Santa Maria di Leuca (Ionian Sea)	29/11/2010	Milan, Italy	Scientific community (higher education, Research)	unknown	na
200	Oral presentation to a scientific event	Zoological Society of London, Institute of Zoology	Habitat suitability modelling for cold water corals: some problems and benefits.	01/02/2010	UK	Scientific community (higher education, Research)	unknown	na
201	Oral presentation to a scientific event	Zoological Society of London, Institute of Zoology	Habitat suitability modelling for cold water corals: some problems and benefits.	01/03/2010	UK	Scientific community (higher education, Research)	unknown	na
202	Videos	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	COVER, general presentation	04/08/2010	Brest, France	Scientific community (higher education, Research)	unknown	na

203	Videos	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Introduction to knowledge tables and annotation table	01/10/2010	Brussels, Belgium	Scientific community (higher education, Research)	unknown	na
204	Videos	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Revision of ADELIE-Observation's acquire interface module	10/04/2010	Malta	Scientific community (higher education, Research)	unknown	na
205	Videos	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Proposals for Biotic Cover and Surface Geologic Classes	01/10/2010	Brussels, Belgium	Scientific community (higher education, Research)	unknown	na
206	Videos	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Habitat Characterization, Classification and Mapping: main steps and concepts.	01/10/2010	Brussels, Belgium	Scientific community (higher education, Research)	unknown	na

207	Organisation of Workshops	HAFRANNSOKNASTOFNUNIN	Addressing the impacts of bottom fishing on vulnerable marine ecosystems	15/09/2011	New York	Scientific community (higher education, Research)	unknown	na
208	Organisation of Workshops	HAVFORSKNINGSINSTITUTTET	The identification of Ecologically or Biologically Significant Marine Areas (EBSAs)	08/09/2011	Port-Cros, France	Scientific community (higher education, Research)	unknown	na
209	Organisation of Workshops	HAVFORSKNINGSINSTITUTTET	Expert meeting to develop a series of joint expert review processes to monitor and assess the impact	20/10/2011	Montreal, Canada	Scientific community (higher education, Research)	unknown	na
210	Organisation of Workshops	HAVFORSKNINGSINSTITUTTET	Improvement of the definitions of habitats on the OSPAR list	20/10/2011	Bergen, Norway	Scientific community (higher education, Research)	unknown	na

211	Oral presentation to a scientific event	HAVFORSKNINGSINSTITUTTET	Experimental and commercial long-line fishing on and off Lophelia-reefs	01/04/2012	Amsterdam, The Netherlands	Scientific community (higher education, Research)	unknown	na
212	Oral presentation to a scientific event	HAVFORSKNINGSINSTITUTTET	Experimental and commercial long-line fishing on and off Lophelia-reefs on the Norewegian shelf	28/08/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na
213	Posters	HAVFORSKNINGSINSTITUTTET	Lophelia-reefs as habitats for fish on the Norwegian shelf. Results from visual and acoustical asses	28/09/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na
214	Oral presentation to a scientific event	HAVFORSKNINGSINSTITUTTET	Are the coral habitat important for fish on the population level?	01/02/2013	Brussels, Belgium	Scientific community (higher education, Research)	unknown	na
215	Oral presentation to a scientific event	HAVFORSKNINGSINSTITUTTET	Sustainability of deep-water fisheries	01/02/2013	Brussels, Belgium	Scientific community (higher education, Research)	unknown	na

216	Oral presentation to a scientific event	HAFRANNSOKNASTOFNUNIN	Spatial analysis of fish communities and coral habitats	10/10/2011	Heraklion, Crete	Scientific community (higher education, Research)	unknown	na
217	Oral presentation to a scientific event	HAFRANNSOKNASTOFNUNIN	High resolution fishing effort mapping on the Icelandic shelf	10/10/2011	Heraklion, Crete	Scientific community (higher education, Research)	unknown	na
218	Oral presentation to a scientific event	HAFRANNSOKNASTOFNUNIN	Conservation Biology	10/10/2012	University of Iceland	Scientific community (higher education, Research)	unknown	na
219	Oral presentation to a scientific event	HAFRANNSOKNASTOFNUNIN	Examining interactions between fisheries and coral areas in Icelandic waters using fishing effort	10/10/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na
220	Oral presentation to a scientific event	HAFRANNSOKNASTOFNUNIN	Do fish care about cold-water coral habitats? If so, at which spatial scales	10/10/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na
221	Oral presentation to a scientific event	HAFRANNSOKNASTOFNUNIN	Mapping cold water coral habitats on the Icelandic shelf	10/10/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na

222	Oral presentation to a scientific event	HAFRANNSOKNASTOFNUNIN	Cold-water corals in Iceland	10/10/2013	University of Iceland	Scientific community (higher education, Research)	unknown	na
223	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Did cold water coral reef of the Atlantic follow the Mediterranean outflow water and when?	28/08/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na
224	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Genetic diversity of the cold water coral <i>Lophelia pertusa</i> in reefs exhibiting different levels of	28/08/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na
225	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Genetic diversity of the cold water coral <i>Lophelia pertusa</i> in reefs exhibiting different levels of	03/12/2012	Wellington, New Zealand	Scientific community (higher education, Research)	unknown	na

226	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Géomorphologie du golfe de Gascogne et cartographie des habitats des coraux d'eau froide	26/03/2013	Brest, France	Scientific community (higher education, Research)	unknown	na
227	Posters	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Cold water coral mappings: geomorphology of the bay of Biscay	26/10/2012	Brussels, Belgium	Scientific community (higher education, Research)	unknown	na
228	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Geomorphological characterisation of cold water corals habitats (Bay of Biscay, NE Atlantic)	04/05/2012	Wellington, New Zealand	Scientific community (higher education, Research)	unknown	na
229	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Geomorphological classification of cold water coral seabed (Bay of Biscay – NE Atlantic).	03/05/2012	Finland	Scientific community (higher education, Research)	unknown	na

230	Oral presentation to a scientific event	Zoological Society of London, Institute of Zoology	Geomorphology of the Bay of Biscay and cold-water corals habitat mapping (NE Atlantic)	28/08/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na
231	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Coral gardens in the Bay of Biscay (NE Atlantic)	01/04/2012	Amsterdam, the Netherlands	Scientific community (higher education, Research)	unknown	na
232	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	A cold-water coral biota classification scheme for ecosystem based management of the deep sea.	26/03/2013	Brest, France	Scientific community (higher education, Research)	unknown	na
233	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	A cold-water coral biota classification scheme for ecosystem based management of the deep sea.	06/05/2013	Rome, Italy	Scientific community (higher education, Research)	unknown	na

234	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Developing tools and methodologies to promote ecosystem based management of deep-sea resources	06/05/2013	Rome, Italy	Scientific community (higher education, Research)	unknown	na
235	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Available imagery, annotation procedure and work to be done	24/01/2012	unknown	Scientific community (higher education, Research)	unknown	na
236	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Identification of deep-sea corals on imagery data	01/04/2012	Amsterdam, the Netherlands	Scientific community (higher education, Research)	unknown	na
237	Posters	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Annotating optical images from ROVs or drop-frames in Vulnerable Marine Ecosystems studies	01/04/2012	Amsterdam, the Netherlands	Scientific community (higher education, Research)	unknown	na

238	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Deep-sea Coral and sponge habitats on the Bay of Biscay - new habitat types	19/04/2012	Plymouth, UK	Scientific community (higher education, Research)	unknown	na
239	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Vulnerable marine ecosystems of the Bay of Biscay (NE Atlantic)	03/05/2011	Finland	Scientific community (higher education, Research)	unknown	na
240	Organisation of Workshops	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Mapping vulnerable Marine Ecosystems (VMEs) in the deep-sea: the CoralFISH approach and its feedback	16/05/2012	italy	Scientific community (higher education, Research)	unknown	na
241	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Cataloguing deep-sea biological facies in the Azores.	23/04/2012	San Sebastian, Spain	Scientific community (higher education, Research)	unknown	na

242	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Coral-dominated biotope cataloguing and mapping in the Azores (NE Atlantic).	01/04/2012	unknown	Scientific community (higher education, Research)	unknown	na
243	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	The distribution of coral reefs in the Bay of Biscay. 5th International Deepsea Coral Symposium 2012	01/04/2012	Amsterdam, the Netherlands	Scientific community (higher education, Research)	unknown	na
244	Organisation of Workshops	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Anthropogenic impacts in submarine canyons of the Bay of Biscay	10/07/2012	Brest, France	Scientific community (higher education, Research)	unknown	na
245	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Methodology of annotating videos and still images and the development of the software COVER	20/06/2011	Faro, Portugal	Scientific community (higher education, Research)	unknown	na

246	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Analysing videos and still images of Vulnerable Marine Ecosystems in the deep-sea	21/06/2011	Faro, Portugal	Scientific community (higher education, Research)	unknown	na
247	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	The distribution of coral reefs in the Bay of Biscay	01/04/2012	Amsterdam, the Netherlands	Scientific community (higher education, Research)	unknown	na
248	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	The continental slope of the northern Bay of Biscay (French Atlantic margin)	28/01/2013	Hull, Uk	Scientific community (higher education, Research)	unknown	na
249	Oral presentation to a scientific event	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	Elements for the hydrodynamic regime along the slope at the northern margin of the Bay of Bisacy	28/08/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na

250	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	ROV observations of slope habitats and biodiversity	10/04/2011	Malaga, April	Scientific community (higher education, Research)	unknown	na
251	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	Deep sea fish biodiversity: comparisons of coral and non-coral areas	10/10/2011	Aberdeen, UK	Scientific community (higher education, Research)	unknown	na
252	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	New records of rare deep-water fish species in the Eastern Ionian Sea.	10/10/2011	Aberdeen, UK.	Scientific community (higher education, Research)	unknown	na
253	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	Deep sea fish biodiversity in the Eastern Ionian Sea: comparisons of coral and non-coral areas.	31/10/2011	Heraklion, Crete.	Scientific community (higher education, Research)	unknown	na
254	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	The cephalopod species associated with the deep waters of the Eastern Ionian	31/10/2011	Heraklion, Crete.	Scientific community (higher education, Research)	unknown	na

255	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	Preliminary qualitative diet analysis for deep-water fishes inhabiting a coral and a non-coral area	31/10/2011	Heraklion, Crete.	Scientific community (higher education, Research)	unknown	na
256	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	New records of rare deep-water fish species in the Eastern Ionian Sea.	31/10/2011	Heraklion, Crete	Scientific community (higher education, Research)	unknown	na
257	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	Information on the deep-water fishery in the Eastern Ionian Sea collected from questionnaires.	31/10/2011	Heraklion, Crete	Scientific community (higher education, Research)	unknown	na
258	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	Long line impact on cold water corals using two different hook sizes.	31/10/2011	Heraklion, Crete	Scientific community (higher education, Research)	unknown	na

259	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	Comparison of biological and population parameters of species inhabiting coral and non-coral areas	31/10/2011	Heraklion, Crete	Scientific community (higher education, Research)	unknown	na
260	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	On-going research on Cold Water Corals, fish and fisheries in the Ionian Sea- The Coral FISH project	23/01/2012	Rome, Italy	Scientific community (higher education, Research)	unknown	na
261	Posters	HELLENIC CENTRE FOR MARINE RESEARCH	Coral occurrence in the Eastern Ionian Sea based on experimental long line fishery.	01/06/2012	Amsterdam, Netherlands	Scientific community (higher education, Research)	unknown	na
262	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	New records of rare deep-water fish species in the Eastern Ionian Sea.	07/05/2012	Athens, Greece	Scientific community (higher education, Research)	unknown	na

263	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	Information from fishers on the Eastern Ionian deep-water fishery and its interaction with coral hab	07/05/2012	Athens, Greece	Scientific community (higher education, Research)	unknown	na
264	Posters	HELLENIC CENTRE FOR MARINE RESEARCH	The diet of Conger conger (L. 1758) in the deep-waters of Eastern Mediterranean Sea	07/05/2012	Athens, Greece	Scientific community (higher education, Research)	unknown	na
265	Posters	HELLENIC CENTRE FOR MARINE RESEARCH	Comparison of CPUE, biological and population parameters of fish species	07/05/2012	Edinburgh, UK	Scientific community (higher education, Research)	unknown	na
266	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	Crustacean preys in the diet of deep-fish species in the Eastern Ionian Sea.	03/06/2012	Athens, Greece	Scientific community (higher education, Research)	unknown	na
267	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	Cephalopod prey species of bony fish caught by long-line over the eastern Ionian slope	10/06/2012	Athens, Greece	Scientific community (higher education, Research)	unknown	na

268	Posters	HELLENIC CENTRE FOR MARINE RESEARCH	Litter in the guts of deep-water fish in the Eastern Ionian Sea	10/06/2012	Athens, Greece	Scientific community (higher education, Research)	unknown	na
269	Posters	HELLENIC CENTRE FOR MARINE RESEARCH	olyprion americanus occurrence in a coral and non-coral area of the Eastern Ionian Sea.	10/06/2012	Athens, Greece	Scientific community (higher education, Research)	unknown	na
270	Posters	HELLENIC CENTRE FOR MARINE RESEARCH	The diet of Helicolenus dactylopterus (Delaroche 1758) in the deep-waters of Eastern Ionian Sea	10/07/2012	Liege, Belgium	Scientific community (higher education, Research)	unknown	na
271	Posters	HELLENIC CENTRE FOR MARINE RESEARCH	Elasmobranch occurrence in a coral and non-coral area in the deep waters of E. Ionian Sea	10/09/2012	Bergen, Norway	Scientific community (higher education, Research)	unknown	na

272	Posters	HELLENIC CENTRE FOR MARINE RESEARCH	Comparison of biodiversity and population parameters between fish assemblages inhabiting deep coral	10/09/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na
273	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	Feeding habits of fish encountering a deep coral and non-coral area in the Eastern Ionian Sea	10/09/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na
274	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	Cold water corals in the Eastern Ionian Sea - ROV observations	10/09/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na
275	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	The scientific basis for ecosystem based resource management and monitoring in the deep-waters	10/09/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na

276	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	Observations on coral habitat fish assemblages: ROV transects in the Eastern Ionian Sea.	10/09/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na
277	Oral presentation to a scientific event	HELLENIC CENTRE FOR MARINE RESEARCH	Anthropogenic litter on the sea bottom and ingested by fish in the deep waters of the Eastern Ionian	18/02/2013	Rome, Italy	Scientific community (higher education, Research)	unknown	NA
278	Flyers	HELLENIC CENTRE FOR MARINE RESEARCH	HCMR surveys in Greek Ionian Sea Smith-Mytilineou-Papadopoulou	06/03/2012	France	Scientific community (higher education, Research)	unknown	na
279	Flyers	HELLENIC CENTRE FOR MARINE RESEARCH	Litter in the stomachs of deep-water fish in the Eastern Ionian Sea	06/03/2012	France	Scientific community (higher education, Research)	unknown	na
280	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Morphometrics in <i>Desmophyllum dianthus</i> : a complementary tool for phylogenetic studies.	01/02/2012	Amsterdam, The Netherlands	Scientific community (higher education, Research)	unknown	na

281	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	A review of the differing baited lander systems utilised in the CoralFISH project.	28/08/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na
282	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Protocol and illustrated glossary for mapping and characterisation of cold-water coral ecosystems	31/10/2011	Heraklion, Crete	Scientific community (higher education, Research)	unknown	na
283	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Can the Santa Maria di Leuca coral province act as an essential fish habitat for the teleosts fish	31/10/2011	Heraklion	Scientific community (higher education, Research)	unknown	na
284	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	The CoNISMa lander MEMO (Marine Environment MONitoring system): a result of the CoralFISH project.	29/11/2010	Milan	Scientific community (higher education, Research)	unknown	na

285	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Fishery-Coral habitat interaction in the Santa Maria di Leuca coral region	29/11/2010	Milan, Italy	Scientific community (higher education, Research)	unknown	na
286	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	In situ observations of the benthopelagic fauna in the Santa Maria di Leuca coral province.	31/10/2011	Heraklion	Scientific community (higher education, Research)	unknown	na
287	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Facies at <i>Kophobelemnion stelliferum</i> from the Santa Maria di Leuca coral area.	29/11/2010	Milan	Scientific community (higher education, Research)	unknown	na
288	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Comparison of biodiversity and population parameters between fish assemblages inhabiting deep coral	28/08/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na

289	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Taxonomic characterization of deep-water coral communities: does remote underwater analysis replace	01/04/2012	Amsterdam, The Netherlands	Scientific community (higher education, Research)	unknown	na
290	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Serpula/Madrepora (serpulid/coral) bioconstructions in deep-water settings from the Adriatic Sea	01/04/2012	Amsterdam, The Netherlands	Scientific community (higher education, Research)	unknown	na
291	Organisation of Workshops	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Mapping Vulnerable Marine Ecosystems (VMEs) in the deep-sea	15/05/2012	Leece, Italy	Scientific community (higher education, Research)	unknown	na
292	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Mapping deep-sea habitats in the northern Ionian Sea	29/11/2010	Milan, Italy	Scientific community (higher education, Research)	unknown	na

293	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Multi-scale mapping of cold-water coral habitats on the Ionian margin (Mediterranean sea).	03/05/2011	Helsinki, Finland	Scientific community (higher education, Research)	unknown	na
294	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Multi-scale mapping of cold-water coral habitats on the Ionian margin (Mediterranean Sea).	20/06/2011	unknown	Scientific community (higher education, Research)	unknown	na
295	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	High resolution Side Scan Sonar data from S.Maria di Leuca CWC province (northern Ionian sea).	31/10/2011	Heraklion	Scientific community (higher education, Research)	unknown	na
296	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	The role of habitat mapping in deep-sea ecosystem-based management	10/10/2012	Italy	Scientific community (higher education, Research)	unknown	na

297	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Longline survey in the Santa Maria di Leuca coral region	29/11/2010	Milan, Italy	Scientific community (higher education, Research)	unknown	na
298	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Cold-water coral Province from Santa Maria di Leuca (Ionian Sea)	29/11/2010	Milan, Italy	Scientific community (higher education, Research)	unknown	na
299	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Pleistocene cold-water coral facies in a tectonically active setting	19/09/2011	Geotitalia, Torino	Scientific community (higher education, Research)	unknown	na
300	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Recruitment and transplantation of Mediterranean frame-building bathyal corals: a pilot study.	01/07/2012	Amsterdam, The Netherlands	Scientific community (higher education, Research)	unknown	na

301	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Bathyal benthic habitats from the southern Apulian slope: characterization, spatial distribution and	01/12/2011	Heraklion	Scientific community (higher education, Research)	unknown	na
302	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Cold-water corals from Santa Maria di Leuca (Ionian Sea, Mediterranean)	13/12/2010	Wageningen, The Netherlands	Scientific community (higher education, Research)	unknown	na
303	Oral presentation to a scientific event	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	Mediterranean Scleractinian corals: from Miocene to present.	01/04/2012	Amsterdam, The Netherlands	Scientific community (higher education, Research)	unknown	na
304	Articles published in the popular press	Zoological Society of London, Institute of Zoology	Global Distribution Estimates for Black Corals (Antipatharia).	10/10/2011	UK	Scientific community (higher education, Research)	unknown	na
305	Oral presentation to a scientific event	Zoological Society of London, Institute of Zoology	Global distribution of deep-sea octocorals using habitat suitability models.	10/09/2011	Aberdeen	Scientific community (higher education, Research)	unknown	na

306	Oral presentation to a scientific event	Zoological Society of London, Institute of Zoology	A global habitat suitability model of deep sea Antipatharia.	02/04/2012	Amsterdam	Scientific community (higher education, Research)	unknown	na
307	Oral presentation to a scientific event	Zoological Society of London, Institute of Zoology	Global scale habitat suitability models as tools for conservation planning	10/09/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na
308	Organisation of Conference	THE UNIVERSITY COURT OF THE UNIVERSITY OF ABERDEEN	Associated ichthyofauna of cold water reefs	10/10/2011	MASTS, Edinburgh	Scientific community (higher education, Research)	unknown	na
309	Organisation of Workshops	THE UNIVERSITY COURT OF THE UNIVERSITY OF ABERDEEN	The link between cold water corals and fish, examples from across Europe	10/10/2012	Amsterdam	Scientific community (higher education, Research)	unknown	na
310	Posters	THE UNIVERSITY COURT OF THE UNIVERSITY OF ABERDEEN	A review of the lander systems within the CoralFISH project	10/10/2012	unknown	Scientific community (higher education, Research)	unknown	na

311	Oral presentation to a scientific event	UNIVERSITY COLLEGE CORK, NATIONAL UNIVERSITY OF IRELAND, CORK	Current and legal status of VMS for scientific research	01/12/2010	Milan, Italy	Scientific community (higher education, Research)	unknown	na
312	Oral presentation to a scientific event	UNIVERSITY COLLEGE CORK, NATIONAL UNIVERSITY OF IRELAND, CORK	Review of the methods used to link VMs and logbook data to map fishing activities	01/12/2010	Milan, Italy	Scientific community (higher education, Research)	unknown	na
313	Oral presentation to a scientific event	UNIVERSITY COLLEGE CORK, NATIONAL UNIVERSITY OF IRELAND, CORK	Results of Preliminary Investigations of Irish logbook and VMS data	01/11/2011	Milan, Italy	Scientific community (higher education, Research)	unknown	na
314	Oral presentation to a scientific event	UNIVERSITY COLLEGE CORK, NATIONAL UNIVERSITY OF IRELAND, CORK	Using VMS and EU logbook data to analysis deep water fishing activity in the seas around Ireland.	29/08/2012	Galway	Scientific community (higher education, Research)	unknown	na

315	Oral presentation to a scientific event	NATIONAL UNIVERSITY OF IRELAND, GALWAY	Online GIS and Analytics for Decision Support	29/08/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na
316	Oral presentation to a scientific event	UNIVERSITY COLLEGE CORK, NATIONAL UNIVERSITY OF IRELAND, CORK	Key Recommendations Arising from the Analysis of fishing activity and effort using VMS	01/02/2013	Brussels, Belgium	Scientific community (higher education, Research)	unknown	na
317	Oral presentation to a scientific event	UNIVERSITY COLLEGE CORK, NATIONAL UNIVERSITY OF IRELAND, CORK	Clustering of shipping vessel speeds using Vessel Monitoring System data	10/01/2013	Cork	Scientific community (higher education, Research)	unknown	na
318	Posters	AARHUS UNIVERSITET	Linking benthic dynamics and cold-water coral occurrences	28/08/2012	Galway	Scientific community (higher education, Research)	unknown	na

319	Posters	AARHUS UNIVERSITET	Modeling concepts and approaches to study bio-physical connections over complex deep-sea topography	10/04/2012	Galway, Ireland	Scientific community (higher education, Research)	unknown	na
320	Oral presentation to a scientific event	AARHUS UNIVERSITET	Topographic controls of near-bottom flow and tracer dispersal	08/03/2012	Denmark	Scientific community (higher education, Research)	unknown	na
321	Oral presentation to a scientific event	AARHUS UNIVERSITET	Benthic currents at three coral mound provinces in the NE Atlantic west of Ireland	31/10/2011	Heraklion, Greece	Scientific community (higher education, Research)	unknown	na
322	TV clips	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	The discovery of deep-sea corals in the Bay of Biscay	27/10/2011	Coraux du Golfe de Gascogne	Scientific community (higher education, Research)	unknown	na

323	Oral presentation to a wider public	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	The deep sea" and "Cold Water Corals"	04/02/2011	Taranto	Scientific community (higher education, Research)	unknown	na
324	Oral presentation to a scientific event	THE UNIVERSITY COURT OF THE UNIVERSITY OF ABERDEEN	Details of lessons plans with a marine science focus were presented to local primary school	24/02/2011	UK	Scientific community (higher education, Research)	unknown	na
325	Oral presentation to a wider public	THE UNIVERSITY COURT OF THE UNIVERSITY OF ABERDEEN	CoralFISH presentation	19/03/2011	Maritime Museum in Aberdeen	Scientific community (higher education, Research)	unknown	na
326	Oral presentation to a wider public	THE UNIVERSITY COURT OF THE UNIVERSITY OF ABERDEEN	World Conference for Marine Biodiversity held at Oceanlab and in partnership with Aberdeen City Coun	25/05/2011	Aberdeen	Scientific community (higher education, Research)	unknown	na

327	Oral presentation to a wider public	THE UNIVERSITY COURT OF THE UNIVERSITY OF ABERDEEN	Techfest in September event hosted at Oceanlab	13/09/2011	Aberdeen	Scientific community (higher education, Research)	unknown	na
328	Media briefings	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	first results of the CoralFISH cruises with the Hakon Mosby	17/07/2011	unknown	Scientific community (higher education, Research)	unknown	na
329	Media briefings	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	Daily blog of the scientific activities on the CoralFISH cruise with the RV Pelagia	28/09/2011	na	Scientific community (higher education, Research)	unknown	na
330	Media briefings	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	Life radio interview on the Dutch Radio channel by VARA in the program	09/04/2012	Amsterdam, The Netherlands	Scientific community (higher education, Research)	unknown	na

331	Media briefings	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	Blog of the scientific activities on the CoralFISH cruise 64PE360 with the RV Pelagia from 1-28 Oct	01/10/2012	na	Scientific community (higher education, Research)	unknown	na
332	TV clips	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	TV broadcasting: Marc Lavaleye was interviewed about the deep-sea coral reef research.	10/02/2013	na	Scientific community (higher education, Research)	unknown	na
333	TV clips	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	A short movie about NIOZ CoralFish cruise at http://www.nioz.nl/youtubes-en .	10/10/2011	na	Scientific community (higher education, Research)	unknown	na
334	Oral presentation to a wider public	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	Jewels of the Sea	01/05/2013	German Wadden Sea Visitor Centre, Wilhelmshaven	Scientific community (higher education, Research)	unknown	na

Section B (Confidential² or public: confidential information to be marked clearly)
Part B1

The applications for patents, trademarks, registered designs, etc. shall be listed according to the template B1 provided hereafter.

The list should, specify at least one unique identifier e.g. European Patent application reference. For patent applications, only if applicable, contributions to standards should be specified. This table is cumulative, which means that it should always show all applications from the beginning until after the end of the project.

TEMPLATE B1: LIST OF APPLICATIONS FOR PATENTS, TRADEMARKS, REGISTERED DESIGNS, ETC.					
Type of IP Rights ³ :	Confidential Click on YES/NO	Foreseen embargo date dd/mm/yyyy	Application reference(s) (e.g. EP123456)	Subject or title of application	Applicant (s) (as on the application)

² Note to be confused with the "EU CONFIDENTIAL" classification for some security research projects.

³ A drop down list allows choosing the type of IP rights: Patents, Trademarks, Registered designs, Utility models, Others.

Part B2

Please complete the table hereafter:

Type of Exploitable Foreground ⁴	Description of exploitable foreground	Confidential Click on YES/NO	Foreseen embargo date dd/mm/yyyy	Exploitable product(s) or measure(s)	Sector(s) of application ⁵	Timetable, commercial or any other use	Patents or other IPR exploitation (licences)	Owner & Other Beneficiary(s) involved
	<i>Ex: New superconductive Nb-Ti alloy</i>			<i>MRI equipment</i>	<i>1. Medical 2. Industrial inspection</i>	<i>2008 2010</i>	<i>A materials patent is planned for 2006</i>	<i>Beneficiary X (owner) Beneficiary Y, Beneficiary Z, Poss. licensing to equipment manuf. ABC</i>

In addition to the table, please provide a text to explain the exploitable foreground, in particular:

- Its purpose
- How the foreground might be exploited, when and by whom
- IPR exploitable measures taken or intended
- Further research necessary, if any
- Potential/expected impact (quantify where possible)

¹⁹ A drop down list allows choosing the type of foreground: General advancement of knowledge, Commercial exploitation of R&D results, Exploitation of R&D results via standards, exploitation of results through EU policies, exploitation of results through (social) innovation.

⁵ A drop down list allows choosing the type sector (NACE nomenclature) : http://ec.europa.eu/competition/mergers/cases/index/nace_all.html

2.2. Report on societal implications

Replies to the following questions will assist the Commission to obtain statistics and indicators on societal and socio-economic issues addressed by projects. The questions are arranged in a number of key themes. As well as producing certain statistics, the replies will also help identify those projects that have shown a real engagement with wider societal issues, and thereby identify interesting approaches to these issues and best practices. The replies for individual projects will not be made public.

A General Information (completed automatically when **Grant Agreement number** is entered).

Grant Agreement Number:

213144

Title of Project:

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

Name and Title of Coordinator:

Dr. Anthony J. Grehan - Senior Research Fellow

B Ethics

1. Did your project undergo an Ethics Review (and/or Screening)?

- If Yes: have you described the progress of compliance with the relevant Ethics Review/Screening Requirements in the frame of the periodic/final project reports?

No

Special Reminder: the progress of compliance with the Ethics Review/Screening Requirements should be described in the Period/Final Project Reports under the Section 3.2.2 'Work Progress and Achievements'

2. Please indicate whether your project involved any of the following issues (tick box) :

No

RESEARCH ON HUMANS

- Did the project involve children?
- Did the project involve patients?
- Did the project involve persons not able to give consent?
- Did the project involve adult healthy volunteers?
- Did the project involve Human genetic material?
- Did the project involve Human biological samples?
- Did the project involve Human data collection?

RESEARCH ON HUMAN EMBRYO/FOETUS

- Did the project involve Human Embryos?
- Did the project involve Human Foetal Tissue / Cells?
- Did the project involve Human Embryonic Stem Cells (hESCs)?
- Did the project on human Embryonic Stem Cells involve cells in culture?
- Did the project on human Embryonic Stem Cells involve the derivation of cells from Embryos?

PRIVACY

- Did the project involve processing of genetic information or personal data (eg. health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction)?
- Did the project involve tracking the location or observation of people?

RESEARCH ON ANIMALS

- Did the project involve research on animals?
- Were those animals transgenic small laboratory animals?
- Were those animals transgenic farm animals?
- Were those animals cloned farm animals?
- Were those animals non-human primates?

RESEARCH INVOLVING DEVELOPING COUNTRIES

- Did the project involve the use of local resources (genetic, animal, plant etc)?
- Was the project of benefit to local community (capacity building, access to healthcare, education etc)?

DUAL USE

- Research having direct military use
- Research having the potential for terrorist abuse

C Workforce Statistics		
3. Workforce statistics for the project: Please indicate in the table below the number of people who worked on the project (on a headcount basis).		
Type of Position	Number of Women	Number of Men
Scientific Coordinator		1
Work package leaders	5	5
Experienced researchers (i.e. PhD holders)	28	45
PhD Students	4	3
Other	35	36
4. How many additional researchers (in companies and universities) were recruited specifically for this project?		7
Of which, indicate the number of men:		5

D Gender Aspects		
5. Did you carry out specific Gender Equality Actions under the project?	<input type="radio"/> Yes <input checked="" type="radio"/> No	<input type="radio"/> Yes <input checked="" type="radio"/> No
6. Which of the following actions did you carry out and how effective were they?		
<input type="checkbox"/> Design and implement an equal opportunity policy	Not at all effective <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Very effective <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="checkbox"/> Set targets to achieve a gender balance in the workforce	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="checkbox"/> Organise conferences and workshops on gender	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="checkbox"/> Actions to improve work-life balance	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input checked="" type="checkbox"/> Other:	Ensured gender balance in selection of the project Steering Committee and WP Leaders.	
7. Was there a gender dimension associated with the research content – i.e. wherever people were the focus of the research as, for example, consumers, users, patients or in trials, was the issue of gender considered and addressed?		
<input type="radio"/> Yes- please specify		
<input checked="" type="radio"/> No		
E Synergies with Science Education		
8. Did your project involve working with students and/or school pupils (e.g. open days, participation in science festivals and events, prizes/competitions or joint projects)?		
<input checked="" type="radio"/> Yes- please specify		
Schools outreach and public science festivals.		
<input type="radio"/> No		
9. Did the project generate any science education material (e.g. kits, websites, explanatory booklets, DVDs)?		
<input checked="" type="radio"/> Yes- please specify		
Website with downloadable games		
<input type="radio"/> No		
F Interdisciplinarity		
10. Which disciplines (see list below) are involved in your project?		
<input type="radio"/> Main discipline ⁶ : 1.4		
<input type="radio"/> Associated discipline ⁶ : 1.5		
<input type="radio"/> Associated discipline ⁶ : 5.2		
G Engaging with Civil society and policy makers		
11a Did your project engage with societal actors beyond the research community? (if 'No', go to Question 14)		
<input checked="" type="radio"/> Yes <input type="radio"/> No		
11b If yes, did you engage with citizens (citizens' panels / juries) or organised civil society (NGOs, patients' groups etc.)?		
<input type="radio"/> No		
<input type="radio"/> Yes- in determining what research should be performed		
<input type="radio"/> Yes - in implementing the research		
<input checked="" type="radio"/> Yes, in communicating /disseminating / using the results of the project		

⁶ Insert number from list below (Frascati Manual).

13c If Yes, at which level? <input type="radio"/> Local / regional levels <input checked="" type="radio"/> National level <input checked="" type="radio"/> European level <input checked="" type="radio"/> International level		
H Use and dissemination		
14. How many Articles were published/accepted for publication in peer-reviewed journals?		48
To how many of these is open access⁷ provided?		4
How many of these are published in open access journals?		4
How many of these are published in open repositories?		
To how many of these is open access not provided?		44
Please check all applicable reasons for not providing open access:		
<input type="checkbox"/> publisher's licensing agreement would not permit publishing in a repository <input type="checkbox"/> no suitable repository available <input type="checkbox"/> no suitable open access journal available <input checked="" type="checkbox"/> no funds available to publish in an open access journal <input type="checkbox"/> lack of time and resources <input type="checkbox"/> lack of information on open access <input type="checkbox"/> other ⁸ :		
15. How many new patent applications ('priority filings') have been made? <i>("Technologically unique": multiple applications for the same invention in different jurisdictions should be counted as just one application of grant).</i>		Not applicable
16. Indicate how many of the following Intellectual Property Rights were applied for (give number in each box).	Trademark	Nil
	Registered design	Nil
	Other	Nil
17. How many spin-off companies were created / are planned as a direct result of the project?		Nil
<i>Indicate the approximate number of additional jobs in these companies:</i>		
18. Please indicate whether your project has a potential impact on employment, in comparison with the situation before your project:		
<input checked="" type="checkbox"/> Increase in employment, or <input type="checkbox"/> Safeguard employment, or <input type="checkbox"/> Decrease in employment, <input type="checkbox"/> Difficult to estimate / not possible to quantify	<input type="checkbox"/> In small & medium-sized enterprises <input checked="" type="checkbox"/> In large companies <input type="checkbox"/> None of the above / not relevant to the project	
19. For your project partnership please estimate the employment effect resulting directly from your participation in Full Time Equivalent (FTE = one person working fulltime for a year) jobs:		Indicate figure:

⁷ Open Access is defined as free of charge access for anyone via Internet.

⁸ For instance: classification for security project.

Difficult to estimate / not possible to quantify		X												
I Media and Communication to the general public														
20. As part of the project, were any of the beneficiaries professionals in communication or media relations? <input type="radio"/> Yes <input checked="" type="radio"/> No														
21. As part of the project, have any beneficiaries received professional media / communication training / advice to improve communication with the general public? <input checked="" type="radio"/> Yes <input type="radio"/> No														
22 Which of the following have been used to communicate information about your project to the general public, or have resulted from your project? <table border="1"> <tr> <td><input checked="" type="checkbox"/> Press Release</td> <td><input checked="" type="checkbox"/> Coverage in specialist press</td> </tr> <tr> <td><input checked="" type="checkbox"/> Media briefing</td> <td><input checked="" type="checkbox"/> Coverage in general (non-specialist) press</td> </tr> <tr> <td><input checked="" type="checkbox"/> TV coverage / report</td> <td><input checked="" type="checkbox"/> Coverage in national press</td> </tr> <tr> <td><input checked="" type="checkbox"/> Radio coverage / report</td> <td><input checked="" type="checkbox"/> Coverage in international press</td> </tr> <tr> <td><input checked="" type="checkbox"/> Brochures /posters / flyers</td> <td><input checked="" type="checkbox"/> Website for the general public / internet</td> </tr> <tr> <td><input checked="" type="checkbox"/> DVD /Film /Multimedia</td> <td><input checked="" type="checkbox"/> Event targeting general public (festival, conference, exhibition, science café)</td> </tr> </table>			<input checked="" type="checkbox"/> Press Release	<input checked="" type="checkbox"/> Coverage in specialist press	<input checked="" type="checkbox"/> Media briefing	<input checked="" type="checkbox"/> Coverage in general (non-specialist) press	<input checked="" type="checkbox"/> TV coverage / report	<input checked="" type="checkbox"/> Coverage in national press	<input checked="" type="checkbox"/> Radio coverage / report	<input checked="" type="checkbox"/> Coverage in international press	<input checked="" type="checkbox"/> Brochures /posters / flyers	<input checked="" type="checkbox"/> Website for the general public / internet	<input checked="" type="checkbox"/> DVD /Film /Multimedia	<input checked="" type="checkbox"/> Event targeting general public (festival, conference, exhibition, science café)
<input checked="" type="checkbox"/> Press Release	<input checked="" type="checkbox"/> Coverage in specialist press													
<input checked="" type="checkbox"/> Media briefing	<input checked="" type="checkbox"/> Coverage in general (non-specialist) press													
<input checked="" type="checkbox"/> TV coverage / report	<input checked="" type="checkbox"/> Coverage in national press													
<input checked="" type="checkbox"/> Radio coverage / report	<input checked="" type="checkbox"/> Coverage in international press													
<input checked="" type="checkbox"/> Brochures /posters / flyers	<input checked="" type="checkbox"/> Website for the general public / internet													
<input checked="" type="checkbox"/> DVD /Film /Multimedia	<input checked="" type="checkbox"/> Event targeting general public (festival, conference, exhibition, science café)													
23 In which languages are the information products for the general public produced? <table border="1"> <tr> <td><input checked="" type="checkbox"/> Language of the coordinator</td> <td><input checked="" type="checkbox"/> English</td> </tr> <tr> <td><input checked="" type="checkbox"/> Other language(s)</td> <td></td> </tr> </table>			<input checked="" type="checkbox"/> Language of the coordinator	<input checked="" type="checkbox"/> English	<input checked="" type="checkbox"/> Other language(s)									
<input checked="" type="checkbox"/> Language of the coordinator	<input checked="" type="checkbox"/> English													
<input checked="" type="checkbox"/> Other language(s)														

Question F-10: Classification of Scientific Disciplines according to the Frascati Manual 2002 (Proposed Standard Practice for Surveys on Research and Experimental Development, OECD 2002):

FIELDS OF SCIENCE AND TECHNOLOGY

1. NATURAL SCIENCES

- 1.1 Mathematics and computer sciences [mathematics and other allied fields: computer sciences and other allied subjects (software development only; hardware development should be classified in the engineering fields)]
- 1.2 Physical sciences (astronomy and space sciences, physics and other allied subjects)
- 1.3 Chemical sciences (chemistry, other allied subjects)
- 1.4 Earth and related environmental sciences (geology, geophysics, mineralogy, physical geography and other geosciences, meteorology and other atmospheric sciences including climatic research, oceanography, vulcanology, palaeoecology, other allied sciences)
- 1.5 Biological sciences (biology, botany, bacteriology, microbiology, zoology, entomology, genetics, biochemistry, biophysics, other allied sciences, excluding clinical and veterinary sciences)

2. ENGINEERING AND TECHNOLOGY

- 2.1 Civil engineering (architecture engineering, building science and engineering, construction engineering, municipal and structural engineering and other allied subjects)
- 2.2 Electrical engineering, electronics [electrical engineering, electronics, communication engineering and systems, computer engineering (hardware only) and other allied subjects]
- 2.3. Other engineering sciences (such as chemical, aeronautical and space, mechanical, metallurgical and materials engineering, and their specialised subdivisions; forest products; applied sciences such as

geodesy, industrial chemistry, etc.; the science and technology of food production; specialised technologies of interdisciplinary fields, e.g. systems analysis, metallurgy, mining, textile technology and other applied subjects)

3. MEDICAL SCIENCES

- 3.1 Basic medicine (anatomy, cytology, physiology, genetics, pharmacy, pharmacology, toxicology, immunology and immunohaematology, clinical chemistry, clinical microbiology, pathology)
- 3.2 Clinical medicine (anaesthesiology, paediatrics, obstetrics and gynaecology, internal medicine, surgery, dentistry, neurology, psychiatry, radiology, therapeutics, otorhinolaryngology, ophthalmology)
- 3.3 Health sciences (public health services, social medicine, hygiene, nursing, epidemiology)

4. AGRICULTURAL SCIENCES

- 4.1 Agriculture, forestry, fisheries and allied sciences (agronomy, animal husbandry, fisheries, forestry, horticulture, other allied subjects)
- 4.2 Veterinary medicine

5. SOCIAL SCIENCES

- 5.1 Psychology
- 5.2 Economics
- 5.3 Educational sciences (education and training and other allied subjects)
- 5.4 Other social sciences [anthropology (social and cultural) and ethnology, demography, geography (human, economic and social), town and country planning, management, law, linguistics, political sciences, sociology, organisation and methods, miscellaneous social sciences and interdisciplinary, methodological and historical S1T activities relating to subjects in this group. Physical anthropology, physical geography and psychophysiology should normally be classified with the natural sciences].

6. HUMANITIES

- 6.1 History (history, prehistory and history, together with auxiliary historical disciplines such as archaeology, numismatics, palaeography, genealogy, etc.)
- 6.2 Languages and literature (ancient and modern)
- 6.3 Other humanities [philosophy (including the history of science and technology) arts, history of art, art criticism, painting, sculpture, musicology, dramatic art excluding artistic "research" of any kind, religion, theology, other fields and subjects pertaining to the humanities, methodological, historical and other S1T activities relating to the subjects in this group]