



Ecosystem Approach in the Mediterranean

Ecosystem Approach in the Mediterranean under the Barcelona Convention

The Barcelona Convention/UNEP MAP framework provides the regional legal basis for the Mediterranean by setting common environmental standards and targets for all Contracting Parties to agree on, take coordinated measures and monitor their implementation.

In 2008, during the 15th Conference of the Contracting Parties (COP) to the Barcelona Convention that took place in Almeria, Spain, the Ecosystem Approach (EcAp) was endorsed as an overarching principle of the UNEP/MAP system at strategic level.

Furthermore, in 2012 during COP17 in Paris, France, the Contracting Parties further re-confirmed the importance given to the EcAp in the Mediterranean, by recognizing it as a guiding principle for the overall work under the Barcelona Convention.

So far the following steps of the EcAp Roadmap have been achieved:

1. Agreement on vision and goals at COP17 in Paris in 2012;
2. Preparation of the Integrated Assessment of the Mediterranean Ecosystem by the Barcelona Convention/UNEP MAP with the contribution of and subject to peer-review by the Contracting Parties;
3. Adoption of 11 Ecological Objectives and corresponding 28 operational objectives and 61 indicators, ensuring full synergy with the EU Marine Strategy Framework Directive (MSFD) work.

There is work currently ongoing on the necessary further steps of the EcAp Roadmap, such as:

1. Implementation of a pilot case to test EcAp indicators;
2. Preparation of the Integrated Monitoring System based on the agreed indicators and targets;
3. A socio-economic assessment to complement the Integrated Assessment of the Mediterranean Ecosystem;
4. Policy on cyclic/periodical assessments of the marine and coastal environment to monitor implementation of the EcAp, assess Good Environmental Status (GES) and the effectiveness of programmes of measures (to this aim the EcAp timeline foresees the preparation of periodical quality status reports);
5. A first legally-binding Regional Plan on Marine Litter management fully embedding EcAp principles and objectives.

Achieving GES by 2020 will require ways to measure the status of the Mediterranean waters in a qualitative manner. In order to do so, it is planned to conduct a second regional environmental assessment in 2017 and assess progress in achieving the GES of the Mediterranean, which will evolve into a Quality Status Report (the latest by 2023). The next important step of this process is to agree on an Integrated Monitoring and Assessment Programme by COP19 in 2015, to ensure timely collection and assessment of data on a regional basis.

The European Commission, with the view to supporting the implementation of the MSFD and in synergy and cooperation with the Regional Seas Conventions, is funding (mainly under the FP7 Programme) several research and scientific projects addressing different challenges for the protection of the marine and coastal environment, which can provide useful contribution to this process.

In June 2013 the coordinators of 25 EU projects, including UNEP/MAP as coordinator of the EcAp MED project, met in Athens with a view to discussing ways of avoiding duplication and increasing the capacities, outputs and deliverables of these projects. They agreed on ways of collaboration to complement their efforts and use each other's knowledge-base towards mutual benefit, without losing focus of their objectives. These 25 projects are presented herein in alphabetical order.



11 Ecological Objectives of EcAp

1. Biodiversity is maintained or enhanced.
2. Non-indigenous species do not adversely alter the ecosystem.
3. Populations of commercially exploited fish and shellfish are within biologically safe limits.
4. Alterations to components of marine food webs do not have long-term adverse effects.
5. Human-induced eutrophication is prevented.
6. Sea-floor integrity is maintained.
7. Alteration of hydrographic conditions does not adversely affect coastal and marine ecosystems.
8. The natural dynamics of coastal areas are maintained and coastal ecosystems and landscapes are preserved.
9. Contaminants cause no significant impact on coastal and marine ecosystems and human health.
10. Marine and coastal litter does not adversely affect coastal and marine ecosystems.
11. Noise from human activities cause no significant impact on marine and coastal ecosystems.

Next to the EcAp MED project, which is an EU funded project, specifically assisting the Barcelona Convention Secretariat in achieving this Roadmap, there are several other projects on Marine Research in the Mediterranean and Black seas that are financed by the European Commission under the FP7 Programme and are critical to the achievement of GES in the Mediterranean by 2020, as described below.



BIOCLEAR 2012-2015

Biotechnological Solutions for the Degradation of Synthetic Polymeric Materials

BIOCLEAR aims at mitigating the impact of plastics on marine ecosystems, through the design of robust biotechnological solutions for the degradation and detoxification of plastic waste existing landfills and plastic fragments entering waste composting and anaerobic digesters. BIOCLEAR focuses more on achieving Ecological Objective (EO) 10 and advocates for the increase in the production of bio-based biodegradable plastics in Europe, since only less than 0.3% is produced in the continent. The project's total budget is € 3.000.000. BIOCLEAR is keen on collaborating with CLEANSEA on monitoring and remediation tools and on offering its expertise to the Technical Sub-Group on Marine Litter for the implementation of MSFD requirements relating to Descriptor 10. Activities planned in the near future also involve demonstrating the effectiveness of bio-augmentation protocols in Aegean seawater and a full-scale composting facility in Chania, Crete.

For more information please visit:

www.biocleanproject.eu or contact fabio.fava@unibo.it



Clean Sea Project 2013-2016

The CleanSea Project provides knowledge and tools to better define and monitor the impact of marine litter on ecosystems. CleanSea also proposes remediation techniques and policy options, with the overall objective of setting up a Roadmap to Good Environmental Status for Marine Litter in 2020. CleanSea is closely related to the EcAp, and particularly to EO 10. With an overall budget of € 3.788.527 CleanSea seeks to promote its vision for a clean sea through providing key scientific knowledge and tools from multiple disciplines to support marine litter policies and action plans. More specifically CleanSea already collaborates with PERSEUS and MEDSEA projects on sampling cruises and monitoring stations.

For more information please visit:

<http://www.cleansea-project.eu> or contact heather.leslie@vu.nl

CoCoNET 2012-2016

Towards COast to COast NETworks of marine protected areas (from the shore to the high and deep sea) coupled with sea-based wind energy potential

CoCoNET aims at enhancing cooperation around and capacity building on Marine Protected Areas (MPAs), while assessing the potential for Off-shore Wind Farms (OWF) in both the Mediterranean and the Black Seas, with a view to protecting sensitive habitats. The overall objective of CoCoNET is to produce guidelines to design, manage and monitor MPAs networks and OWF installations. The budget is € 9.000.000. CoCoNET is closely linked to the EcAp and specifically to EO 1, 6 and 7. CoCoNET will host a common General Assembly with PERSEUS in Athens early 2014, which will give space to both scientific communities to meet and interconnect

For more information please visit:

<http://www.coconet-fp7.eu> or contact boero@unisalento.it



CREAM 2011-2014

Coordinating Research in Support to Application of Ecosystem Approach to Fisheries and Management Advice in the Mediterranean and Black Seas

The CREAM consortium coordinates key players involved in fisheries research and management in the Mediterranean and Black seas with a view to establishing guidelines that will apply the ecosystems approach to the management of Fisheries (EAF) in the respective regions. It includes the main institutes carrying out fisheries scientific research in the EU and in third countries, as well as one international organization promoting scientific capacitation/training (CIHEAM). CREAM also has an External Advisory Committee composed by representatives of the Regional Bodies which have particular responsibility in fisheries management in the Mediterranean and Black Seas. Through its work the consortium is trying to identify the gaps and promote training and capacity-building to harmonize and coordinate fisheries data sampling and related methodologies.

For more information please visit:

www.cream-fp7.eu or contact paloma@icm.csic.es



DEVOTES 2012-2016

DEVELOPMENT Of innovative Tools for understanding marine biodiversity and assessing good Environmental Status

The overall goal of DEVOTES is to advance our understanding of the relationship between pressures from human activities and climate change and how this affects marine ecosystems. DEVOTES focuses on EOs 1, 4 and 6. The outcomes of the project are expected to support the ecosystem-based management of marine natural resources and contribute to achieving GES of marine waters. To meet these targets scientists participating in DEVOTES are :

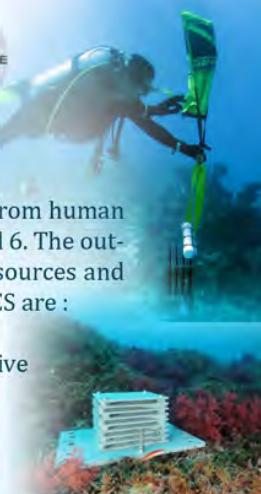
i) analyzing existing and developing new innovative indicators to assess marine biodiversity in a harmonized way, within the four European Regional Seas ii) developing, testing and validating innovative and integrative modeling tools and monitoring techniques, such as remote sensing, high definition multi-beams and genomics iii) implementing cost-effective indicators, monitoring and management strategies and iv) preparing to propose measures to the European Authorities, which can contribute to the sustainable use of the seas and the marine resources.

DEVOTES operates under a budget of € 12.000.000.

For more information please visit:

www.devotes-project.eu or contact aborja@azti.es.

DEVOTES



EcAp MED 2012-2015

The Ecosystem Approach Project in the Mediterranean

EcAp MED's objective is to support UNEP/MAP in implementing the 2008 COP decisions regarding the application of the EcAp in the Mediterranean in full synergy and coherence with the implementation of the EU's MSFD. To achieve this EcAp MED assesses the state of play in the Mediterranean, fuels cooperation between the different actors involved and overall aims to assist the achievement of the EcAp Roadmap's next steps, such as establishing an Integrated Monitoring and Assessment Programme in the Mediterranean, carrying out socio-economic assessment, developing assessment fact sheets, testing EcAp indicators/targets feasibility, next to reviewing relevant measures for the implementation of the EcAp, assisting the Marine Litter Regional Plan implementation and contributing to building a framework to facilitate the joint establishment of SPAMIs in open seas. The total budget of the project is € 1.616.000.

For more information please contact:

gyorgyi.gurban@unepmap.gr



EMBLAS/UNDP 2013-2014

Improving Environmental Monitoring in the Black Sea

This one-year project assists partner countries, namely Georgia, Russia and Ukraine in performing marine environmental monitoring along MSFD principles, focusing primarily on improving the availability and quality of data on the chemical and biological status of the Black Sea. Significant effort will be put into training and capacity building. In order to promote ownership, engagement of local experts and organizations is foreseen. Relevant results and experiences of previous and ongoing projects will be duly taken into account.

For more information please contact:

vasyl.kostiushyn@undp.org



IRIS-SES 2013-2015

Integrated Regional monitoring Implementation Strategy in the South European Seas

The main objective of IRIS-SES is the development of a new concept and related decision-making tools to support integrated environmental monitoring within the MSFD framework, in order to better manage human activities and their effects in EU marine waters, specifically in the Mediterranean and Black Seas. The project will use existing sampling across various disciplines (physical, chemical, biological, etc) and will scope the potential for establishing joint programs (within and between Member States). Furthermore IRIS-SES will demonstrate a practical way of using existing resources more efficiently through for example the multiple uses of existing monitoring platforms. The project will collaborate with UNEP/MEDPOL, General Fisheries Commission for the Mediterranean and other organizations and EU projects, such as PERSEUS and MISIS and potentially DEVOTES and STAGES, in order to achieve its goals. The budget of the project is estimated at € 1.201.986.

For more information please contact:

popi@hcmr.gr

KILLSPILL 2013-2016

KILL SPILL is currently developing highly efficient, economically and environmentally viable technologies to accelerate the biodegradation of hydrocarbons in the marine environment (water column and sediments), with filed applications in the Mediterranean Sea and the Norwegian coast. The project is mostly related to EO 9 and has a budget of € 9.000.000.

For more information please visit:

www.killspill.eu or contact nicolas.kalogerakis@enveng.tuc.gr



MARLISCO 2012-2015

MARine Litter in Europe's Seas: Social Awareness and CO-Responsibility

MARLISCO is an FP7 – Science in Society project – that raises public awareness, triggers co-responsibility across the different sectors and facilitates dialogue between the different stakeholders on both problems and potential solutions regarding marine litter. MARLISCO provides a series of mechanisms to inform, empower and engage key stakeholders and its activities extend over the 4 Regional Seas of Europe, in 15 coastal countries. Specifically MARLISCO aspires to deliver: i) a scoping study of the sources and trends regarding marine litter in each Regional Sea ii) a collection of best practices for dealing with marine litter from all partner countries iii) an international survey to evaluate the perceptions and attitudes of stakeholders regarding marine litter iv) a series of national debates in many countries, involving industry sectors, scientists and the wider public v) a European video contest for school students vi) educational activities and tools targeting youth and vii) many tailor-made national activities such as exhibitions, workshops, festivals and clean-ups. MARLISCO's total budget is €4.119.357.

For more information please visit: www.marlisco.eu or contact marlisco@provincia.teramo.it

MARLISCO



Stopping Marine Litter Together





MED-JELLYRISK 2012-2015

Enhancing Management Approach and Mitigation Measures against Jellyfish Proliferations Impacts

MED-JELLYRISK assesses the impact of jellyfish proliferation on the ecosystem and on the economy. The project promotes monitoring and implementation of countermeasures, by applying a cross-border approach in 10 selected Mediterranean coastal zones. The project operates under a budget of € 2.593.194 and focuses its efforts more on meeting EO 2.

For more information please visit:

www.jellyrisk.eu or contact stefano.piraino@icloud.com

MEDINA 2011-2014

Marine Ecosystem Dynamics and Indicators for North Africa

MEDINA works towards enhancing Northern African Countries' (Morocco, Algeria, Tunisia, Libya, and Egypt) capacity to monitor their coastal and marine ecosystems, and in turn implement environmental policies, conventions and protocols. The implementation of the MSFD and Integrated Coastal Zone Management (ICZM) guide MEDINA's work. E-infrastructure, compliant with Global Earth Observation System of Systems (GEOSS) on drivers, state and pressure indicators and impacts is available through MEDINA.

The project, which operates under a budget of € 4.86.532, seeks to develop robust integrative methodologies to assess the status of the environment and implement the EcAp, particularly focusing on EOs 1, 2, 6, 7 and 8.

To advance its work, MEDINA intends to explore the potential for cooperation, particularly with PERSEUS and MERMAID on strengthening capacities of non-European countries.

For more information please visit:

www.medinaproject.eu or contact pastres@unive.it



MEDISEH 2011-2013

Mediterranean Sensitive Habitats

MEDISEH focuses on Mediterranean Sensitive Habitats and particularly on gathering and disseminating, through a Geographic Information System (GIS), dispersed information useful to integrate the environmental dimension into fisheries management. More specifically the project seeks to compile information on historical and current data on the locations and the status of seagrass beds, coralligenous and mærl beds all over the Mediterranean basin and to identify and map suitable areas for Posidonia, coralligenous and mærl communities by developing habitat distribution models at different spatial scales. Moreover information is compiled on existing MPAs and Fishing Restricted Areas (FRAs) in the Mediterranean, particularly in relation to the location of nursery and spawning aggregations of several small pelagic and demersal fish species.

MEDISEH is mostly linked to EOs 1 and 3 and is working with a budget of € 568.341.

For more information please visit:

<http://mareaproject.net/contracts/5/overview/>

or contact marianna@hcmr.gr

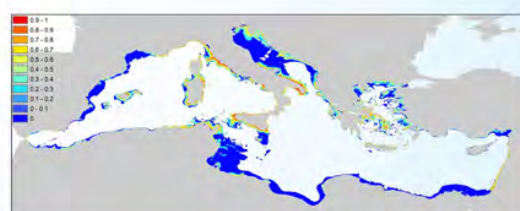


Fig 1. Predicted occurrence probability for coralligenous formations.

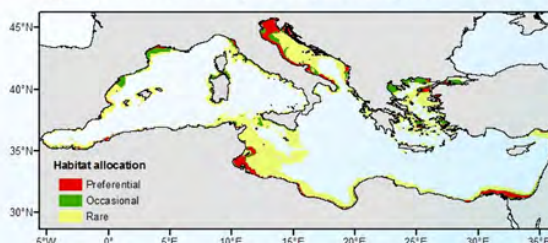


Fig 2 Persistent habitat maps of sardine nurseries in the Mediterranean Sea for the period 2003-2008 during summer.



Fig 3 Persistent nurseries of hake in the north part of the Mediterranean Sea for the period 2000-2010 during summer.

Strategic Partnership for the Mediterranean Large Marine Ecosystem

MedPartnership

MedPartnership 2009-2015

The Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem

The Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem (MedPartnership) is a collective effort of leading environmental institutions and organizations together with countries sharing the Mediterranean Sea to address the main environmental challenges that Mediterranean marine and coastal ecosystems face. The MedPartnership catalyzes action to create an enabling environment for the necessary policy, legal and institutional reforms in the partner countries, as well as investments, to improve environmental conditions of pollution and biodiversity hotspots and other priority areas under stress; promote the sustainable use of marine and coastal resources through integrated approaches; reduce pollution from land-based sources; enhance the protection of 'critical' habitats and species; integrate climate considerations into national marine and coastal planning. The MedPartnership is led by UNEP/MAP and is financially supported by the Global Environment Facility (GEF) and other donors, including the European Commission and all participating countries. Partner countries: Albania, Algeria, Bosnia and Herzegovina, Croatia, Egypt, Lebanon, Libya, Morocco, Montenegro, Palestine, Syria, Tunisia and Turkey. For more information please visit:

www.themedpartnership.org or contact
themedpartnership@unepmap.gr



MedSeA 2011-2014

Mediterranean Sea Acidification in a changing climate

MedSeA assesses uncertainties, risks and thresholds related to Mediterranean acidification and temperature rise at organismal, ecosystem and socio-economical scales. 'Ocean acidification' is caused primarily by the ocean uptake of atmospheric human-generated carbon dioxide (CO₂). A main aim of the project is to forecast chemical, ecological, biological, and socio-economic changes of the Mediterranean driven by increases in CO₂, while focusing on the combined impacts of acidification and warming on marine organisms, ecosystems and biogeochemical processes. MedSeA is linked to the EcAp through EOs 1, 4 and 8 and has a budget of € 6.000.000 (excluding ship time). In addition, it is aiming to develop a Mediterranean long-term monitoring platform for acidification and warming. Acquired scientific knowledge is transferred to a wider audience of reference users [Ocean Acidification - Mediterranean Reference User Group (OA-MRUG)], while suggesting policy measures for adaptation and mitigation that are responsive to the needs of the different sub-regions in the Mediterranean. Furthermore MedSeA is expanding its information outlet on Mediterranean Sea climate and environmental change into a new on-line platform containing news and output from different EU Mediterranean coordinated projects.

For more information please visit:

<http://medsea-project.eu/> or contact Patrizia.Ziveri@uab.cat





MERMAID 2013-2015

Marine environmental targets linked to regional management schemes based on indicators developed for the Mediterranean

MERMAID is developing a state-of-the-art methodology that will deepen knowledge on indicators and pressures for which limited data exist in the Mediterranean, set targets and link these with management measures to achieve GES in the Mediterranean. This methodology will be applied in three study areas of the Mediterranean. MERMAID is covering those EOs related to healthy fish stocks, hydrography, coastal ecosystems, contaminants and marine litter. The project's overall objective is to reinforce international cooperation particularly through transferring methodologies and assessment procedures to a non-EU country. In this regard, the potential for collaboration with PERSEUS and MEDINA has been identified. MERMAID's total budget is € 1.132.500.

For more information please visit:

<http://mermaid-era.eu> or contact ekaberi@hcmr.gr



MISIS 2012-2014

MSFD Guiding Improvements in the Black Sea in Monitoring System

MISIS supports efforts to protect and restore the environmental quality and sustainability of the Black Sea, through: i) integrated monitoring and assessment, especially focusing on biodiversity and habitats and in line with the MSFD and the Water Framework Directive (WFD) ii) increase in the number and robustness of protected areas iii) greater stakeholder participation and public awareness on environmental issues iv) better implementation of the Bucharest Convention. In this regard, MISIS supports the use of already existing structures and platforms for databases, the organization of common trainings, workshops, stakeholder meetings, cruises and public awareness activities. The total budget of the project is € 872.066.

For more information please visit:

www.misisproject.eu or contact boicenco@alpha.rmri.ro

MYOCEAN II 2012-2014

MYOCEAN II operates and delivers a rigorous, robust and sustainable Ocean Monitoring and Forecasting system (in the context of the Global Monitoring for Environment and Security Marine Service) to users involved in maritime safety, marine resources, marine and coastal environment and climate, seasonal and weather forecasting. MYOCEAN II uses ocean state variables as the common-denominator, necessary for those working in the environmental and civil security policy making, assessment and implementation field. The project, which has a budget of € 6.000.000 is expected to end in 2014 and pave the way for the Copernicus Marine Service for 2014-2020.

For more information please visit:

www.myocean.eu or contact marina.tonani@bo.ingv.it



ODEMM 2010-2014

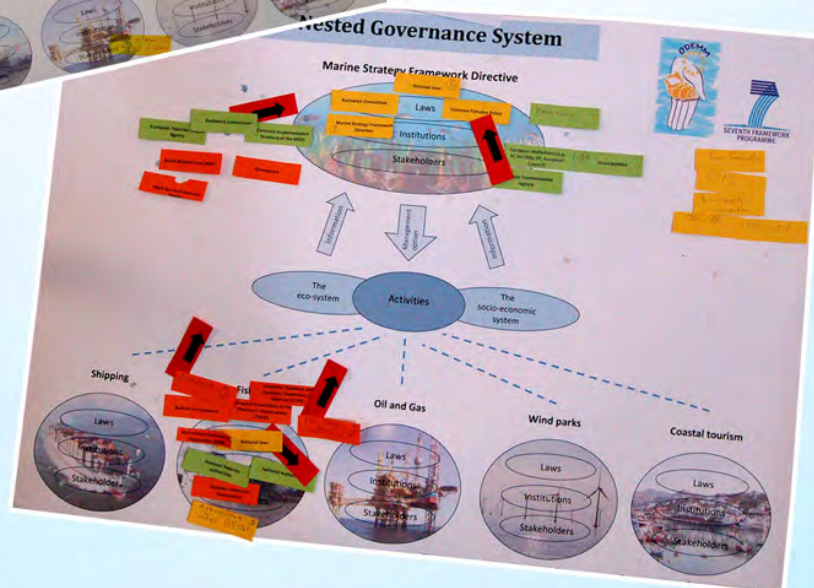
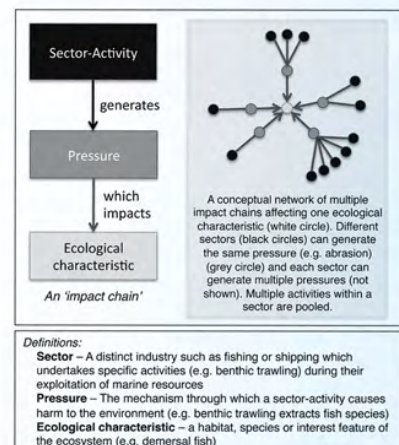
Options for Delivering Ecosystem-Based Marine Management

ODEMM aims to deliver on the objectives of the MSFD, to identify stakeholder opinions on the creation of governance structures directed towards the implementation of the ecosystem approach, and to elaborate different scenarios for changing governance structures and legislation to facilitate a gradual transition from the current fragmented management approach towards fully integrated ecosystem-based marine management. ODEMM has developed a toolkit on Threat and Pressure Evaluations, GES risk assessment, Management strategy evaluation, cost benefit analysis and ecosystem services approaches. In its final year ODEMM has investigated decision-making processes associated with choosing and implementing management measures to support a sustainable future for European Seas. ODEMM's case-studies focus on seafloor integrity and food web descriptors and its 4 regional seas stakeholders' roadshows on ecological risk, ecosystem services and governance complexity.

The total budget of the project is € 8.271.981.

For more information please visit:

<http://www.liv.ac.uk/odemm> and www.odemm.com or contact Leonie.Robinson@liverpool.ac.uk (coordinator) and nadiapap@hcmr.gr (regional lead)





pegasoproject.eu

PEGASO 2010-2014

People for ecosystem based governance
in assessing sustainable development of ocean and coast

PEGASO aims at constructing an ICZM governance platform to bridge scientist and end-user communities. The project seeks to refine and further develop efficient and easy-to-use tools for making sustainability assessments in the coastal zone, by focusing on indicators, accounting methods, models and scenarios. Furthermore PEGASO seeks to implement a Spatial Data Infrastructure (SDI) to organize and standardize spatial data and support information-sharing through an interactive platform, in order to make this data available and disseminate all results to end users and interested parties. With a budget of € 7.000.000 PEGASO is exploring the possibility of collaborating with PERSEUS to conduct socio-economic analyses, and with MEDINA on aspects related to ICZM. Building on the above,

PEGASO is contributing to the implementation of the EcAp and specifically of the EO 1, 6 and 8. For more information please visit: www.pegasoproject.eu or contact francoise.breton@uab.cat



PERSEUS

POLICY-ORIENTED MARINE
ENVIRONMENTAL RESEARCH IN
THE SOUTHERN EUROPEAN SEAS

PERSEUS 2011-2013

Policy-oriented marine Environmental Research for the Southern European Seas

PERSEUS's work involves designing an effective and innovative research governance framework to assess, in line with the MSFD, the dual, long-term impact of human activities and natural pressures on the Mediterranean and Black Seas, with an emphasis on non-European areas. The result of this assessment will inform policymakers' efforts to introduce an ecosystem-based approach to management and meet the 2020 Clean Seas objective. PERSEUS is directly linked to the EcAp, since it builds on existing or develops new monitoring and modeling capabilities, while applying a results-based approach using specific quantitative/qualitative MSFD descriptors to identify the most efficient strategy of achieving GES. PERSEUS's budget is € 17.000.000.

For more information please visit: www.perseus-fp7.eu or contact vpapath@hcmr.gr

The PERSEUS Adaptive Policy Framework (APF) Toolbox

Creating science-based governance tools for Policymakers



The APF Toolbox in brief

WHAT: The PERSEUS APF Toolbox is a specific decision support system based on scientific evidence, using a scenario-planning approach to support management schemes. It is organised as a guidebook for policymakers and linked to a set of tools, resources and databases.

HOW: It uses a step-by-step, cyclical approach to policymaking and offering a wide range of tools, useful resources, databases and case studies for each step.

FOR WHOM: Policymakers, decision makers, practitioners and stakeholders.

WHERE: The APF Toolbox will be tested on the four APF Pilot Cases and the lessons from these will then be applied on the whole of the Mediterranean and Black Sea basins.



WHEN: The APF Toolbox is under preparation and a working version will be ready by the end of 2013. As it develops, it will be showcased on the PERSEUS website.

5 Steps of Policymaking @ the PERSEUS APF Toolbox



Examples of supporting tools associated to the APF five steps

- Stakeholder mapping
- Assessment of DPSIR (Drivers, Pressures, State, Impact, Response)
- Cost benefits assessment
- Decision Support Systems
- Integrated models for policy simulation
- Monitoring systems
- Policy performance evaluation methods
- Participatory methods
- Communication tools
- Project management tools



SeaDataNet 2012-2015

Pan-European Infrastructure for Ocean & Marine Data Management

SeaDataNet Infrastructure is a pan-European infrastructure for managing marine and ocean data by connecting National Oceanographic Data Centres (NODCs) from 35 countries bordering European seas. SeaDataNet is capable of contributing to the creation of a coherent EU data policy. At the core of the second phase of SeaDataNet lies the need to upgrade the present infrastructure into an operationally robust and state-of-the-art system that provides up-to-date and high quality access to ocean and marine metadata, data and data products. The SeaDataNet standards and tools have been adopted by several EU Projects such as, Geo-Seas, Eurofleets, Jerico, and Upgrade Black Sea Network. MyOcean and SeaDataNet projects cooperate through a memorandum of understanding and the production of common product. SeaDataNet is providing a major contribution to the development process for the overarching EMODNet (European Marine Observation and Data Network) that is included in the MSFD.

For more information please visit: www.seadatanet.org or contact sisy@hnodc.hcmr.gr



STAGES 2012-2014

Science and Technology Advancing Governance on Good Environmental Status

STAGES aims to bridge the science-policy gap by improving the scientific knowledge base, identifying gaps and needs for further research and developing recommendations to establish an effective science-policy platform to support GES research and implementation of the MSFD. STAGES is carrying out a comprehensive knowledge collection in order to build an inventory of MSFD-relevant research projects and their associated knowledge outputs. Through comprehensive scientific foresight targeted at MSFD knowledge gaps, STAGES is making recommendations as to where future research needs to focus, so as to address identified knowledge deficits. STAGES will develop innovative solutions to achieve effective collaboration between MSFD stakeholders. This includes developing a tailor-made proposal for an MSFD science-policy interface, which can channel the best scientific advice to the appropriate end-users, thereby underpinning implementation of the Directive in the long term. The budget of the project is € 999.733. .

For more information please visit:

<http://www.stagesproject.eu/> or contact mfernandez@cetmar.org



ULIXES 2011-2014

Unraveling and Exploiting Mediterranean Sea Microbial Diversity and Ecology for xenobiotics' and pollutants' cleanup

ULIXES unravels, categorizes and catalogues marine microbial diversity in marine polluted sites with a view to developing bio-remediation methodologies all over Mediterranean Sea and Aqaba Gulf. Ulixes has a budget of € 3.000.00 and its work falls within the remit of EOs 1 and 9.

For more information please visit: www.ulixes.unimi.it or contact daniele.daffonchio@unimi.it



أوديسيوس ΟΥΛΙΞΗΣ



VECTORS 2011-2015

VECTORS of Change in European Marine Ecosystems and their Environmental and Socio-Economic Impacts

VECTORS is an integrated, multi-disciplinary project investigating the increasing and diversifying human use of the European marine environment (e.g. transportation, overfishing, climate change) and how this is leading to new and challenging changes for marine life and society. VECTORS is examining how these changes affect the range of ecosystem services provided by the oceans, the ensuing socio-economic impacts and some of the measures that could be developed to reduce or adapt to these changes. In the Mediterranean, VECTORS is particularly focused on the study of biological invasions and outbreaks including development of large databases for alien invasive species and their vectors of introduction and the creation of a DNA/tissue data bank for populations' genetics. VECTORS is a € 16.600.000 million European project supported within the Ocean of Tomorrow call of the EC FP7 Programme and covers a wide range of EOs, namely 1, 2, 3, 4, 5, 9, and 11. The understanding developed through VECTORS will contribute the information and knowledge required to inform the development and implementation of forthcoming strategies, policies regional seas conventions, management bodies and regulations of the IOM Convention on Water Ballast Management, the MSFD and EU's Maritime Policy.

For future information please visit:
<http://www.marine-vectors.eu/> or contact vectors@pml.ac.uk