

PERSEUS in brief

What

PERSEUS stands for **P**olicy-oriented marine **E**nvironmental **R**esearch in the **S**outhern **EU**ropean **S**eas and is a large-scale research project funded by the European Commission's 7th Framework Research Programme (FP7) under the theme "Oceans of Tomorrow" OCEAN 2011-2013. The total project budget is nearly **€17 million**, of which almost €13 million (or 76%) is funded as a research grant under FP7.

Why

Marine life's at stake. Human activity, such as overexploitation of fisheries resources, pollution related to urbanisation and industrial activities, oil spills, alien species introduction, litter, and even tourism, are all creating serious and soon, irreversible threats to our seas. Combined with the impacts of global warming and other natural hazards, our seas are fundamentally changing and the consequences are just now starting to be fully understood. The new knowledge, insights, strategies and policies resulting from PERSEUS will be valuable on an international scale towards combating these pressures and saving our seas.

Where

The marine ecosystems of the Mediterranean and Black Seas, together representing the SES, are the focus of the project's research.

How

The innovation in PERSEUS is that, for the first time, the scientific community has been given a specific mandate to develop science-based policy recommendations for the better governance of the SES marine environment. By merging natural and socio-economic sciences, PERSEUS will fill the knowledge gaps and **design an effective and innovative governance framework**, based on sound scientific knowledge, to help achieve 'Good Environmental Status', in line with objectives and principles of the EU's MSFD.

Who & When

The PERSEUS project is implemented by **53 Partners** (over 300 scientists) from 21 countries over the course of 4 years, from 1 January 2012 until 31 December 2015.

Contacts

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www.perseus-net.eu

PERSEUS Consortium Partners

1. HELLENIC CENTER FOR MARINE RESEARCH (HCMR)
2. MIDDLE EAST TECHNICAL UNIVERSITY (METU)
3. INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER (IFREMER)
4. AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS (CSIC)
5. CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE (CoNISMa)
6. INSTITUTUL NATIONAL DE CERCETARE-DEZVOLTARE PENTRU GEOLOGIE SI GEOECOLOGIE MARINA-GEOECOMAR (GeoEcoMar)
7. PLAN BLEU POUR L'ENVIRONNEMENT ET LE DEVELOPPEMENT EN MEDITERRANEE (Plan Bleu)
8. COSNAV ENGINEERING SRL
9. UNIVERSITA TA MALTA (UMT-IOI-MOU)
10. EIR SYMVOLOI ANAPTYXIS ETAIREIA PERIORISMENIS EFTHYNIS (EIR)
11. BC3 BASQUE CENTRE FOR CLIMATE CHANGE - KLIMA ALDAKETA IKERGAI (BC3)
12. INSTITUTO ESPANOL DE OCEANOGRAFIA (IEO)
13. UNIVERSITAT DE BARCELONA (UB)
14. UNIVERSITAT POLITÈCNICA DE CATALUNYA (UPC)
15. CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)
16. UNIVERSITE D'AIX-MARSEILLE (UnivMed/COM)
17. UNIVERSITE PIERRE ET MARIE CURIE - PARIS 6 (UPMC)
18. UNIVERSITE PAUL SABATIER TOULOUSE III (UPS-LA)
19. CENTRO EURO-MEDITERRANEO PER I CAMBIAMENTI CLIMATICI SCARL (CMCC)
20. CONSIGLIO NAZIONALE DELLE RICERCHE (CNR)
21. AGENZIA NAZIONALE PER LE NUOVE TECNOLOGIE, L'ENERGIA E LO SVILUPPO ECONOMICO SOSTENIBILE (ENEA)
22. JRC - JOINT RESEARCH CENTRE- EUROPEAN COMMISSION (JRC IES)
23. ISTITUTO NAZIONALE DI OCEANOGRAFIA E DI GEOFISICA SPERIMENTALE OGS (OGS)
24. STAZIONE ZOOLOGICA ANTON DOHRN (SZN)
25. PLYMOUTH MARINE LABORATORY (PML)
26. UNIVERSITY OF PLYMOUTH (UoP)
27. STICHTING DELTAES (DELTAES)
28. UNIVERSITEIT UTRECHT (UU)
29. UNIVERSITE DE LIEGE (Ulg)
30. UNIVERSITY OF THE AEGEAN (AEGEAN)
31. NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS (NKUA)
32. PANEPISTIMIO KRITIS (UNIVERSITY OF CRETE) (UoC ECPL)
33. THE CYPRUS RESEARCH AND EDUCATIONAL FOUNDATION (CyREF)
34. UNIVERSITY OF CYPRUS (UC-CY)
35. NACIONALNI INSTITUT ZA BIOLOGIJO (NIB)
36. INSTITUTE OF OCEANOGRAPHY AND FISHERIES (IOF)
37. ISRAEL OCEANOGRAPHIC AND LIMNOLOGICAL RESEARCH LIMITED (IOLR)
38. UNIVERSITY OF HAIFA (HU)
39. BLACK SEA NGO NETWORK (BSNN)
40. SOFIISKI UNIVERSITET SVETI KLIMENT OHRIDSKI (DMG-SU)
41. INSTITUT PO BIORAZNOOBRAZIE I EKOSISTEMNI IZSLEDVANIYA BALGARSKA AKADEMIYA NA NAUKITE (IBER - BAS)
42. INSTITUTE OF OCEANOLOGY - BULGARIAN ACADEMY OF SCIENCES (IO-BAS)
43. INSTITUTUL NATIONAL DE CERCETARE-DEZVOLTARE MARINA GRIGORE ANTIPA (NIMRD)
44. ISTANBUL UNIVERSITY (IU)
45. A.O. KOVALEVSKIY INSTITUTE OF BIOLOGY OF SOUTHERN SEAS (IBSS)
46. MARINE HYDROPHYSICAL INSTITUTE - UKRAINIAN NATIONAL ACADEMY OF SCIENCES (MHI)
47. ODESSA NATIONAL I.I. MECHNIKOV UNIVERSITY (ONU)
48. P.P. SHIRSHOV INSTITUTE OF OCEANOLOGY OF RUSSIAN ACADEMY OF SCIENCES (SIO-RAS)
49. IVANE JAVAKHISHVILI TBILISI STATE UNIVERSITY (TSU)
50. INSTITUT NATIONAL DE RECHERCHE HALIEUTIQUE (INRH)
51. CLU srl
52. ECOLOGIC INSTITUT gemeinnützige GmbH (ECOLOGIC)
53. SAROST SA

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Clean Seas by 2020

Developing
science-based
policy recommendations toward
Good Environmental Status (GES)
in the Mediterranean and Black Seas

www.perseus-net.eu

January 2012 – December 2015

Where science meets policy

Context

The oceans offer many opportunities for economic growth, however, human activities such as coastal development, overfishing, tourism, litter and maritime transport, to name but a few, have exerted increasing pressures on the oceans and generated a range of threats to the marine environment. These threats have inevitably jeopardized the future uses of the marine ecosystem's goods and services.

What changes are occurring in our ecosystems, why and what measures can we take to turn back the tide on marine degradation? This is the focus of PERSEUS and science plays the leading role.

PERSEUS will give a clear picture of the current environmental status of the Mediterranean and Black Seas, and help design and support an ecosystem-based approach to marine environment management so that the EU goal of **Clean Seas by 2020** is facilitated.

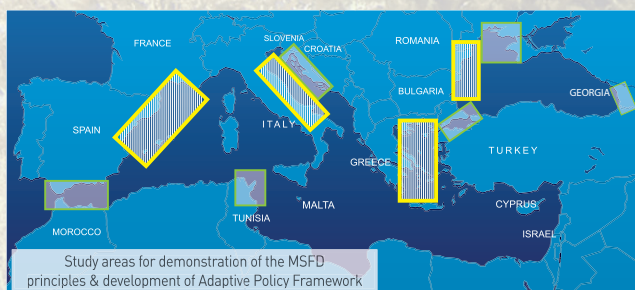
Objectives

The overall scientific objectives of PERSEUS are to:

- ★ Identify the interacting patterns of both natural and human-derived pressures on the Southern European Seas (SES) and proceed with the assessment of their impact on the marine ecosystems;
- ★ Develop tools for the evaluation of the environmental status using existing and upgraded monitoring and modelling capabilities;
- ★ Implement the principles and objectives put forward in the Marine Strategy Framework Directive (MSFD) and promote them across the SES;
- ★ Develop a framework for future implementation of adaptive policies and management schemes to achieve 'Good Environmental Status' (GES) of marine waters.

Work Scope

The PERSEUS research project provides state-of-the-art expertise combining the specialized knowledge of both marine and socio-economic scientists from Europe and beyond, coming together towards a common goal: the Good Environmental Status of the Mediterranean and Black Seas.



PERSEUS addresses the diverse project objectives through four integrated clusters:

New KNOWLEDGE

PERSEUS will bring new knowledge on the combined effects of natural and anthropogenic pressures, assess their impact on the SES ecosystems and help advance our understanding on the selection and application of the appropriate descriptors and indicators of the MSFD.



New TOOLS

PERSEUS will develop new tools to evaluate the current environmental status of the SES through combined monitoring and modelling capabilities and by extending existing observation systems. Innovative tools include ecosystem models and the concept of a survey vessel, specially designed for use in very shallow waters.

Science-based POLICY

PERSEUS promotes the best possible scientific support to policy and decision makers, through the development of a new, scenario-based Adaptive Policy Framework. This, in turn, will enhance the overall capability of policymakers to create policies and a regulatory framework for achieving and maintaining GES. PERSEUS targets the promotion and demonstration of the MSFD principles across the SES, both in EU and non-EU countries.

Engaging USERS (stakeholders)

PERSEUS places a strong emphasis on informing and engaging scientists and policymakers to understand their respective roles in protecting our seas while helping them to make informed decisions based on sound scientific knowledge.

"Through research and innovation, we can unlock the untapped potential of maritime sectors."

Maria Damanaki

European Commissioner for Maritime Affairs and Fisheries

PERSEUS benefits

Scientific Community

PERSEUS provides the scientific community with a unique opportunity to 'translate' scientific knowledge into evidence-based policy recommendations for the better governance of the Southern European Seas. It brings new knowledge, tools and methodologies, creating a strong platform for international scientific cooperation towards the assessment of the pressures and their impact in the marine environment under the principles of the MSFD. Based on the PERSEUS findings, scientists will also be able to create more accurate and dynamic forecasting of possible risk scenarios.

Policy & Decision makers

Policy and decision makers are presented with ever-increasing demands to create policies and a regulatory framework that make the marine environment productive and biologically diverse allowing for sustainable use. PERSEUS helps policymakers meet these challenges by enhancing their capacity for science-based policy-making. The PERSEUS Adaptive Policy Framework Tool Box will provide scenario-based, management schemes and adaptive policies towards better governance of the SES, in both EU and non-EU countries.

Media & Advocacy

The media and non-governmental environmental organisations play an important role in creating awareness of scientific findings and their impact, and in this way, help to change behaviours and push through policy reforms. PERSEUS aims to produce a regular stream of user-friendly scientific information and insights for different stakeholder groups helping not only to raise awareness, but also to educate on new behaviours.

General Public

The general public is very much concerned with environmental issues and interested to understand the threats of marine pollution. PERSEUS aims to provide science-based information to the general public and provide advice on what they can do to help reduce marine environmental damage. PERSEUS has two specially designed "Citizen Scientists" programmes, Jellyfish Spotting and Litter Watch, which give the general public an opportunity to become actively engaged in the project, while contributing to scientific advancement.

Visit the PERSEUS website www.perseus-net.eu for the latest information on the PERSEUS project's activities, findings and useful tools.