



EUROPEAN
COMMISSION

European
Research Area

Projects with AFRICA in the area of Environment (Including Climate Change)



Catalogue of FP7 projects
2007 - 2009





European Commission

**Directorate General for Research
Environment Directorate**

LEGAL NOTICE:

The information and views expressed in this publication are the sole responsibility of the author and do not necessarily reflect the views of the European Commission.

Neither the European Commission nor any person acting on its behalf may be held responsible for the use which may be made of the information contained therein.

DISCLAIMER:

The preliminary information presented in this document is based on the proposal evaluation results and shall be considered as provisional and subject to potential modifications in the course of project negotiation.

EDITOR:

European Commission

DG Research, Environment Directorate

Rue de la Loi 200, B-1049 Brussels, Belgium


E-mail: RTD-ENV-CALL2009-PROPOSALS@ec.europa.eu

© European Commission, 2009

Reproduction is authorised provided the source is acknowledged

	Theme 6 – Environment (Including Climate Change) Table of Contents			
--	---	--	--	--

Proposal Number	Acronym	Title	Funding Scheme	Page
-----------------	---------	-------	----------------	------

	Research Area Climate Change Climate change natural and socio-economic impacts			
---	---	--	--	--

226310	REDD-ALERT	Reducing Emissions from Deforestation and Degradation through Alternative Landuses in Rainforests of the Tropics	CP-SICA	6
244151	CLIMB	Climate Induced Changes on the Hydrology of Mediterranean Basins: Reducing Uncertainty and Quantifying Risk through an Integrated Monitoring and Modeling System	CP-SICA	7
244255	WASSERMed	Water Availability and Security in Southern EuRope and the Mediterranean	CP-SICA	8

	Research Area Environment and health			
---	---	--	--	--


243964	QWeCI	Quantifying Weather and Climate Impacts on Health in Developing Countries	CP-SICA	9
--------	-------	---	---------	---

	Research Area Natural Hazards Hazard assessment, triggering factors and forecasting			
---	--	--	--	--

226967	SHARE	Seismic Hazard Harmonization in Europe	CP-FP	10
243888	FUME	Forest fires under climate, social and economic changes in Europe, the Mediterranean and other fire-affected areas of the world	CP-IP	11

Risk assessment and management				
---------------------------------------	--	--	--	--

211393	MIAVITA	Mitigate and assess risk from volcanic impact on terrain and human activities	CP-SICA	13
226555	IMPRINTS	IMproving Preparedness and Risk maNagemenT for flash floods and debriS flow events	CP-FP	14

	Research Area Natural Resources Management Water resources			
---	---	--	--	--

212300	WETwin	Enhancing the role of wetlands in integrated water resources management for twinned river basins in EU, Africa and South-America in support of EU Water Initiatives	CP-SICA	15
211732	MIRAGE	Mediterranean Intermittent River Management	CP-FP	16

Soil research and desertification				
--	--	--	--	--

226818	PRACTICE	Prevention and Restoration Actions to Combat Desertification. An Integrated Assessment.	CSA-SA	17
243857	LEDDRA	Land and Ecosystem Degradation and Desertification: Assessing the Fit of Responses	CP-SICA	18

Theme 6 – Environment (Including Climate Change)				
Table of Contents				
Proposal Number	Acronym	Title	Funding Scheme	Page

Proposal Number	Acronym	Title	Funding Scheme	Page
-----------------	---------	-------	----------------	------

Research Area Biodiversity				
----------------------------	--	--	--	--

212160	HUNT	Hunting for Sustainability	CP-SICA	19
211392	LiveDiverse	Sustainable Livelihoods and Biodiversity in Riparian Areas in Developing Countries	CP-SICA	20

Research Area Marine Environment				
----------------------------------	--	--	--	--

244170	PEGASO	People for Ecosystem Based Governance in Assessing Sustainable Development of Ocean and Coast	CP-SICA	21
--------	--------	---	---------	----

Research Area Environmental Technologies including Cultural Heritage				
Sub-Activity Environmental technologies for observation, simulation, prevention, mitigation, adaptation, remediation and restoration of the natural and man-made environment				
Waste				


244188	IWWA	INTEGRATED WASTE MANAGEMENT IN WESTERN AFRICA	CSA-CA	22
--------	------	---	--------	----

Research Area Environmental Technologies including Cultural Heritage				
Sub-Activity Protection, conservation and enhancement of cultural heritage, including human habitat				
Assessment and conservation in cultural heritage				

212458	TeACH	Technologies and Tools to prioritize assessment and diagnosis of air pollution impact on immovable and movable Cultural Heritage	CP-FP	23
226973	CLIMATE FOR CULTURE	Damage risk assessment, macroeconomic impact and mitigation strategies for sustainable preservation of cultural heritage in the times of climate change	CP-IP	24
244123	NIKER	NEW INTEGRATED KNOWLEDGE BASED APPROACHES TO THE PROTECTION OF CULTURAL HERITAGE FROM EARTHQUAKE-INDUCED RISK	CP-FP	26
244229	PERPETUATE	Performance-based approach to the earthquake protection of cultural heritage in European and Mediterranean countries	CP-FP	27
226995	EU CHIC	European Cultural Heritage Identity Card	CSA-CA	28
244088	FIRESENSE	Fire Detection and Management through a Multi-Sensor Network for the Protection of Cultural Heritage Areas from the Risk of Fire and Extreme Weather Conditions	CP-FP	29

Theme 6 – Environment (Including Climate Change) Table of Contents				
---	--	--	--	--

Proposal Number	Acronym	Title	Funding Scheme	Page
-----------------	---------	-------	----------------	------

	Research Area Environmental Technologies including Cultural Heritage Sub-Activity Technology Assessment, Verification and Testing Technology assessment			
---	--	--	--	--

241718	EuroBioRef	EUROpean multilevel integrated BIOREFinery design for sustainable biomass processing	CP	30
--------	------------	--	----	----

	Research Area Earth Observation Integration of European activities within GEO			
---	--	--	--	--


212322	EBONE	European Biodiversity Observation Network; a project to design and test a biodiversity observation system integrated in time and space	CP-FP	32
--------	-------	--	-------	----

Earth Observation activities in emerging areas				
---	--	--	--	--

244100	EO2HEAVEN	Earth Observation and ENVironmental modelling for the mitigation of HEALth risks	CP-IP	33
202955	EuroSITES	Integration and enhancement of key existing European deep-ocean observatories	CP-FP	34
244242	EO-MINERS	Earth Observation for Monitoring and Observing Environmental and Societal Impacts of Mineral Resources Exploration and Exploitation	CP-SICA	35
211578	e-SOTER	Regional pilot platform as EU contribution to a Global Soil Observing System	CP-FP	36

Developing capacity building activities in the domain of Earth Observation in the new EU countries and in the developing countries				
---	--	--	--	--

212545	AEGOS	African-European Georesources Observation System	CSA-SA	37
244172	GEONetCab	GEO Network for Capacity Building	CSA-SA	38
211307	DevCoCast	GEONETCast for and by Developing countries	CSA-SA	39

	Research Area Assessment Tools for Sustainable Development Interplay between social, economic and ecological systems			
---	---	--	--	--

211662	SustainergyNet	Integrating civil, scientific and stakeholder knowledge towards African sustainable energy policy	CSA-CA	40
--------	----------------	---	--------	----

Dissemination and horizontal activities				
--	--	--	--	--

244114	KNOSSOS	KNOWledge from Science to SOcieties	CSA-SA	41
--------	---------	-------------------------------------	--------	----

Activity Code: ENV.2008.1.1.5.1. **Funding Scheme:** CP-SICA **Duration (Months):** 36

Title: Reducing Emissions from Deforestation and Degradation through Alternative Landuses in Rainforests of the Tropics

Proposed EC Grant: 3.488.760 €

Abstract:

The proposal addresses Topic ENV.2008.1.1.5.1 "Addressing deforestation in tropical areas: greenhouse gas emissions, socio-economic drivers and impacts, and policy options for emissions reduction". The overall goal of the project is to contribute to the development and evaluation of mechanisms and the institutions needed at multiple levels for changing stakeholder behaviour to slow tropical deforestation rates and hence reduce GHG emissions. This will be achieved through enhancing our understanding of the social, cultural, economic and ecological drivers of forest transition in selected case study areas in Southeast Asia, Africa and South America. This understanding will facilitate the identification and assessment of viable policy options addressing the drivers of deforestation and their consistency with policy approaches on avoided deforestation, such as Reduced Emissions from Deforestation and degradation (REDD), currently being discussed in UNFCCC and other relevant international fora. At the same time, ways of improving the spatial quantification of land use change and the associated changes in GHG fluxes will be developed, thereby improving the accounting of GHG emissions resulting from land use change in tropical forest margins and peatlands. This will allow the analysis of scenarios of the local impacts of potential international climate change policies on GHG emission reductions, land use, and livelihoods in selected case study areas, the results of which will be used to develop new negotiation support tools for use with stakeholders at international, national and local scales to explore a basket of options for incorporating REDD into post-2012 climate agreements. The project will provide a unique link between international policy-makers and stakeholders on the ground who will be required to change their behaviour regarding deforestation, thereby contributing to well-informed policy-making at the international level.

Partners:

N	Partner Legal Name	Country
1	Macaulay Land Use Research Institute	UK
2	Université catholique de Louvain	BE
3	Vrije Universiteit, independent entity of	NL
4	Georg-August-Universität Göttingen Stiftung Öffentlichen Rechts	DE
5	International Centre for Research in Agroforestry (also called World Agroforestry Centre)	KE
6	Center for International Forestry Research	ID
7	International Institute of Tropical Agriculture	NG
8	International Center for Tropical Agriculture	CO
9	Indonesian Soil Research Institute	ID
10	Research Centre for Forest Ecology and Environment	VN
11	Insitute of Agricultural Research for Development	CM
12	Instituto Nacional de Investigación Agraria	PE

Activity Code: ENV.2009.1.1.5.2. **Funding Scheme:** CP-SICA **Duration (Months):** 48

Title: Climate Induced Changes on the Hydrology of Mediterranean Basins: Reducing Uncertainty and Quantifying Risk through an Integrated Monitoring and Modeling System

Proposed EC Grant: 3.149.757 €

Abstract:

With regard to the objectives specified in ENV-2009.1.1.5.2, modeling capabilities must be improved and appropriate tools developed to advance the capability to assess climate effects on water resources and uses. The project consortium will employ a combination of novel field monitoring concepts, remote sensing techniques, integrated hydrologic (and biophysical) modeling and socioeconomic factor analyses to reduce existing uncertainties in climate change impact analysis and to create an integrated quantitative risk and vulnerability assessment tool. Together, these will provide the necessary information to design appropriate adaptive water resources management instruments and select suitable agricultural practices under climate change conditions. The integrated risk and vulnerability analysis tool will also enable assessment of risks for conflict-inducing actions, e.g. migration. The improved models, new assessment tools, and their results will be evaluated against current methodologies. Improvements will be communicated to stakeholders and decision makers in a transparent, easy-to-understand form, enabling them to utilize the new findings in regional water resource and agricultural management initiatives as well as in the design of mechanisms to reduce potential for conflict (linkage to SSH-2009.4.2.1).

Partners:

N	Partner Legal Name	Country
1	LUDWIG-MAXIMILIANS-UNIVERSITAET MUENCHEN	DE
2	Agris Sardegna - Agenzia per la Ricerca in Agricoltura	IT
3	CHRISTIAN-ALBRECHTS-UNIVERSITAET ZU KIEL	DE
4	CENTRE NATIONAL DU MACHINISME AGRICOLE, DU GENIE RURAL, DES EAUX ET DES FORETS	FR
5	Centre de recherches et des technologies des eaux	TN
6	CINFAI	IT
7	CENTRO DI RICERCA, SVILUPPO E STUDI SUPERIORI IN SARDEGNA	IT
8	DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV	DE
9	FORSCHUNGSZENTRUM JUELICH GMBH	DE
10	GEBZE YUKSEK TEKNOLOJI ENSTITUSU	TR
11	Institut national de la recherche scientifique	CA
12	JOANNEUM RESEARCH FORSCHUNGSGESELLSCHAFT MBH	AT
13	UNIVERSITE D'ANGERS	FR
14	Islamic University of Gaza	PS
15	UNIVERSITA DEGLI STUDI DI PADOVA	IT
16	UNIVERSITA DEGLI STUDI DI TRENTO	IT
17	Zagazig University	EG
18	VISTA Geowissenschaftliche Fernerkundung GmbH	DE
19	Bayerische Forschungsallianz gemeinnützige GmbH	DE

Activity Code: ENV.2009.1.1.5.2. **Funding Scheme:** CP-SICA **Duration (Months):** 36

Title: Water Availability and Security in Southern Europe and the Mediterranean

Proposed EC Grant: 2.934.287 €

Abstract:

The WASSERMed project will analyse, in a multi-disciplinary way, ongoing and future climate induced changes in hydrological budgets and extremes in southern Europe, North Africa and the Middle East under the frame of threats to national and human security. A climatic and hydrological component directly addresses the reduction of uncertainty and quantification of risk. This component will provide an interface to other climatologic projects and models, producing climate change scenarios for the Mediterranean and Southern Europe, with special emphasis on precipitation. Five case studies will be considered: 1) Syros Island (Greece), 2) Sardinia Island (Italy), 3) Merguellil watershed (Tunisia), 4) Jordan river basin, and 5) the Nile River system (Egypt). The case studies are illustrative and represent situations which deserve special attention, due to their relevance to national and human security. Furthermore, impacts on key strategic sectors, such as agriculture and tourism, will be considered, as well as macroeconomic implications of water availability in terms of regional income, consumption, investment, trade flows, industrial structure and competitiveness. WASSERMed is an interdisciplinary project, which overall aims at all three targets of the call, through the integration of climate change scenarios, holistic water system modelling and interdisciplinary impact assessment, with three main contributions: a) Integration of climate change scenarios, holistic water system modelling. This provides results for reduction of uncertainties of climate change impacts on hydrology in the identified regions; b) Interdisciplinary approach, coupling macroeconomic implications and technical indicators. This provides a better assessment of climate effects to water resources, water uses and expected security risks; c) Proposal of specific adaptation measures for key sectors of the Mediterranean economy. This provides better basis for achieving water security.

Partners:

N	Partner Legal Name	Country
1	CENTRO EURO-MEDITERRANEO PER I CAMBIAMENTI CLIMATICI SCARL	IT
2	THE UNIVERSITY OF EXETER	UK
3	CENTRO INTERNAZIONALE DI ALTI STUDI AGRONOMICI MEDITERRANEI - ISTITUTO AGRONOMICO MEDITERRANEO DI BARI	IT
4	CLU srl	IT
5	NATIONAL TECHNICAL UNIVERSITY OF ATHENS	EL
6	UNIVERSIDAD POLITECNICA DE MADRID	ES
7	National Center for Agricultural Research and Extension	JO
8	POTSDAM INSTITUT FUER KLIMAFOLGENFORSCHUNG	DE
9	INSTITUT DE RECHERCHE POUR LE DEVELOPPEMENT	FR
10	Environment & Climate Research Institute	EG
11	Institut National Agronomique de Tunisie	TN

Activity Code: ENV.2009.1.2.1.2. **Funding Scheme:** CP-SICA **Duration (Months):** 36

Title: Quantifying Weather and Climate Impacts on Health in Developing Countries

Proposed EC Grant: 3.499.403 €

Abstract:

One of the most dramatic and immediate impacts of climate variation is that on disease, especially the vector-borne diseases that disproportionately affect the poorest people in Africa. Although we can clearly see that, for example, an El Nino event triggers Rift Valley Fever epidemics, we remain poor at understanding why particular areas are vulnerable and how this will change in coming decades, since climate change is likely to cause entirely new global disease distributions. This applies to most vector borne disease. At the same time, we do not know currently the limit of predictability of the specific climate drivers for vector-borne disease using state-of-the-art seasonal forecast models, and how best to use these to produce skilful infection-rate predictions on seasonal timescales. □□The QWeCI project thus aims to understand at a more fundamental level the climate drivers of the vector-borne diseases of malaria, Rift Valley Fever, and certain tick-borne diseases, which all have major human and livestock health and economic implications in Africa, in order to assist with their short-term management and make projections of their future likely impacts. QWeCI will develop and test the methods and technology required for an integrated decision support framework for health impacts of climate and weather. Uniquely, QWeCI will bring together the best in world integrated weather/climate forecasting systems with health impacts modelling and climate change research groups in order to build an end-to-end seamless integration of climate and weather information for the quantification and prediction of climate and weather on health impacts in Africa.

Partners:

N	Partner Legal Name	Country
1	THE UNIVERSITY OF LIVERPOOL	UK
2	CENTRE DE SUIVI ECOLOGIQUE	SN
3	CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
4	EUROPEAN CENTRE FOR MEDIUM-RANGE WEATHER FORECASTS.	UK
5	Fundació Privada Institut Català de Ciències del Clima	ES
6	THE ABDUS SALAM INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS	IT
7	International Livestock Research Institute	KE
8	Institut Pasteur de Dakar	SN
9	Kwame Nkrumah University of Science and Technology (KNUST)	GH
10	Universite Cheikh Anta Diop	SN
11	University of Malawi (Polytechnic & College of Medicine)	MW
12	UNIVERSITAET ZU KOELN	DE
13	UNIVERSITY OF PRETORIA	ZA

Activity Code: ENV.2008.1.3.1.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Seismic Hazard Harmonization in Europe

Proposed EC Grant: 3.200.000 €

Abstract:

SHARE will deliver measurable progress in all steps leading to a harmonized assessment of seismic hazard – in the definition of engineering requirements, in the collection and analysis of input data, in procedures for hazard assessment, and in engineering applications. SHARE will create a unified framework and computational infrastructure for seismic hazard assessment and produce an integrated European probabilistic seismic hazard assessment (PSHA) model and specific scenario based modeling tools. The SHARE results will deliver long-lasting structural impact in areas of societal and economic relevance, they will serve as a reference for the Eurocode 8 application, and will provide homogeneous input for the correct seismic safety assessment for critical industry, such as the energy infrastructures and the re-insurance sector. SHARE will cover the whole European territory, the Maghreb countries in the Southern Mediterranean and Turkey in the Eastern Mediterranean.

Partners:

N	Partner Legal Name	Country
1	Eidgenössische Technische Hochschule Zürich	CH
2	GeoForschungsZentrum Potsdam	DE
3	Istituto Nazionale di Geofisica e Vulcanologia	IT
4	Université Joseph Fourier Grenoble 1	FR
5	Università degli Studi di Pavia	IT
6	Aristotle University of Thessaloniki	EL
7	Bureau de Recherches Géologiques et Minières	FR
8	Centre de Recherche en Astronomie, Astrophysique et Géophysique	DZ
9	Instituto Superior Tecnico	PT
10	Bogazici University-Kandilli Observatory and Earthquake Research Institute	TR
11	Laboratório Nacional de Engenharia Civil, I.P.	PT
12	Middle East Technical University	TR
13	MONTENEGRO SEISMOLOGICAL OBSERVATORY (Seizmološki zavod Crne Gore)	ME
14	Natural Environment Research Council	UK
15	National Institute for Earth Physics	RO
16	NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS	EL
17	Stiftelsen NORSAR	NO
18	Royal Observatory Of Belgium	BE

Activity Code: ENV.2009.1.3.1.1. **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Forest fires under climate, social and economic changes in Europe, the Mediterranean and other fire-affected areas of the world

Proposed EC Grant: 6.178.337 €

Abstract:

Fire regimes result from interactions between climate, land-use and land-cover (LULC), and socioeconomic factors, among other. These changed during the last decades, particularly around the Mediterranean. Our understanding of how they affected fire regime in the past is limited. During this century temperatures, drought and heat waves will very likely increase, and rainfall decrease. These and further socioeconomic change will affect LULC. Additional areas will be abandoned due to being unsuitable for agriculture or other uses. Fire danger and fire hazard are very likely to increase, affecting fire regimes. FUME will learn from the past to understand future impacts. Mod. 1 we will study how LULC and socioeconomics changed and how climate and weather affected fire in dynamically changing landscapes. Fires will be mapped throughout Europe to determine hazard burning functions for LULC types. Since climate has changed, an attempt to attribute (sensu IPCC) fire regime change to climate, differentiating it from socioeconomic change, will be made. Mod. 2 will produce scenarios of change (climate, including extremes, land-use land-cover, socioeconomics, vegetation) for various emissions pathways and three time-slices during this century. With these and results from Mod. 1, models and field experiments projected impacts on fire-regime and vegetation vulnerabilities will be calculated, including climate extremes (drought, heat-waves). Mod. 3 will investigate adaptation options in fire- and land-management, including restoration. Fire prevention and fire fighting protocols will be tested/developed under the new conditions to mitigating fire risks. A company managing fire will be a key player. Costs and policy impacts of changes in fire will be studied. Research will focus on old and new fire areas, the rural interface, whole Europe and the Mediterranean, including all Mediterranean countries of the world. Users will be involved in training and other activities.

Partners:

N	Partner Legal Name	Country
1	UNIVERSIDAD DE CASTILLA - LA MANCHA	ES
2	FUNDACION CENTRO DE ESTUDIOS AMBIENTALES DEL MEDITERRANEO	ES
3	UNIVERSITA DEGLI STUDI DELLA TUSCIA	IT
4	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)	FR
5	POTSDAM INSTITUT FUER KLIMAFOLGENFORSCHUNG	DE
6	FUNDACAO DA FACULDADE DE CIENCIAS DA UNIVERSIDADE DE LISBOA	PT
7	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
8	CENTRO EURO-MEDITERRANEO PER I CAMBIAMENTI CLIMATICI SCARL	IT
9	UNIVERSITA DEGLI STUDI DI SASSARI	IT
10	CENTRE NATIONAL DU MACHINISME AGRICOLE, DU GENIE RURAL, DES EAUX ET DES FORETS	FR
11	NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS	EL
12	PANEPISTIMIO IOANNINON	EL
13	LUNDS UNIVERSITET	SE
14	UNIVERSIDAD DE CANTABRIA	ES
15	INSTITUT DE RECHERCHE POUR LE DEVELOPPEMENT	FR
16	ILMATIETEEN LAITOS	FI
17	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
18	Mediterranean Agronomic Institute of Zaragoza / International Centre for Advanced Mediterranean Agronomic Studies	ES
19	CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
20	TECNOLOGÍAS Y SERVICIOS AGRARIOS, S.A.	ES
21	Instituto Superior de Agronomia	PT
22	CENTRE FOR EUROPEAN POLICY STUDIES	BE
23	Université F. Abbas de Sétif	DZ
24	Institut National de Recherches en Génie Rural, Eaux et Forêts	TN
25	National Meteorological Service Morocco	MA

Important notice: Provisional data based on evaluation results and subject to modification (see Disclaimer)

26	Southwest Anatolia Forestry Research	TR
27	South African National Biodiversity Institute	ZA
28	US FOREST SERVICE - PACIFIC SOUTHWEST RESEARCH STATION	US
29	Arizona Board of Regents for and on behalf of Northern Arizona University	US
30	The University of Arizona	US
31	US Geological Service, Western Ecological Research Center	US
32	University of Wollongong	AU
33	Universidad Austral de Chile	CL

Activity Code: ENV.2007.1.3.3.1. **Funding Scheme:** CP-SICA **Duration (Months):** 48

Title: Mitigate and assess risk from volcanic impact on terrain and human activities

Proposed EC Grant: 3.498.938 €

Abstract:

In EU countries, volcanic risks assessment and management are tackled through scientific knowledge and monitoring, although there is still a need for integration between all risk management components. For international cooperation partner countries (ICPCs), the risk management depends on local situations but is often less favourable. Therefore, following UN International Strategy for Disaster Reduction recommendations and starting from shared existing knowledge and practices, the MIA-VITA project aims at developing tools and integrated cost effective methodologies to mitigate risks from various hazards on active volcanoes (prevention, crisis management and recovering). Such methodology will be designed for ICPCs contexts but will be helpful for European stakeholders to improve their experience in volcanic risk management. The project multidisciplinary team gathers civil defence agencies, scientific teams (earth sciences, social sciences, building, soil, agriculture, Information Technologies and telecommunications) and an IT private company. The scientific work will focus on: □1) risk assessment methodology based on a multi-risk approach developed at Mt Cameroon by one of the partners in cooperation with Cameroonian institutions □2) cost efficient monitoring tools designed for poorly monitored volcanoes (satellite & gas analysis & volcano-seismology) □3) improvement in terms of vulnerability assessment (people, buildings and biosphere) □4) socio-economic surveys to enhance community resilience □5) Integrated information system (data organisation and transfers, communications) taking advantage of GEONETCast initiative □ Results will be achieved with help from local scientists and stakeholders in Africa (Cameroon, Cape Verde), in Asia (Indonesia, Philippines) and will be validated on a European volcano (Montserrat). The objectives will be reached through sharing/transfer of know-how, through scientific and technological developments, and through dissemination/training.

Partners:

N	Partner Legal Name	Country
1	BRGM	FR
2	ISTITUTO NAZIONALE DI GEOFISICA E VULCANOLOGIA	IT
3	Instituto Superior Tecnico	PT
4	UMR 8591 Laboratoire de Géographie Physique	FR
5	Norwegian Institute for Air Research	NO
6	Kell s.r.l.	IT
7	Instituto de Engenharia de Sistemas e Computadores - Investigação e Desenvolvimento em Lisboa	PT
8	Universität Hohenheim	DE
9	The Chancellor, Masters and Scholars of the University of Cambridge	UK
10	Direction de la Défense et de la Sécurité Civile	FR
11	Dipartimento della Protezione Civile	IT
12	Instituto Nacional de Meteorologia e Geofísica	CV
13	MINISTERE DE L'INDUSTRIE, MINES, DEVELOPPEMENT TECHNOLOGIQUE	CM
14	Center For Volcanology and Geological Hazard Mitigation	ID
15	Philippine Institute of Volcanology and Seismology	PH

Activity Code: ENV.2008.1.3.3.2. **Funding Scheme:** CP-FP **Duration (Months):** 42

Title: Improving Preparedness and Risk Management for flash floods and debris flow events

Proposed EC Grant: 3.280.000 €

Abstract:

The aim of IMPRINTS is to contribute to reduce loss of life and economic damage through the improvement of the preparedness and the operational risk management for Flash Flood and Debris Flow [FF/DF] generating events, as well as to contribute to sustainable development through reducing damages to the environment. To achieve this ultimate objective the project is oriented to produce methods and tools to be used by emergency agencies and utility companies responsible for the management of FF/DF risks and associated effects. Impacts of future changes, including climatic, land use and socioeconomic will be analysed in order to provide guidelines for mitigation and adaptation measures. Specifically, the consortium will develop an integrated probabilistic forecasting FF/DF system as well as a probabilistic early warning and a rule-based probabilistic forecasting system adapted to the operational use by practitioners. These systems will be tested on five selected flash flood prone areas, two located in mountainous catchments in the Alps, and three in Mediterranean catchments. The IMPRINTS practitioner partners, risk management authorities and utility company managers in duty of emergency management in these areas, will supervise these tests. The development of such systems will be carried out using and capitalising the results of previous and ongoing research on FF/DF forecasting and warning systems, in which several of the partners have played a prominent role. One major result of the project will be a operational prototype including the tools and methodologies developed under the project. This prototype will be designed under the premise of its ultimate commercialization and use worldwide. The consortium, covering all the actors involved in the complex chain of FF & DF forecasting, has been carefully selected to ensure the achievement of this. Specific actions to exploit and protect the results and the intellectual property of the partners have been also defined.

Partners:

N	Partner Legal Name	Country
1	Universitat Politècnica de Catalunya	ES
2	Federal Office of Meteorology and Climatology MeteoSwiss	CH
3	European Commission - Joint Research Centre	BE
4	Lancaster University	UK
5	Swiss Federal Institute for Forest, Snow and Landscape Research WSL	CH
6	Wageningen Universiteit	NL
7	CETAqua, Centro Tecnológico del Agua, Fundación privada	ES
8	Consorzio inter-Universitario per la previsione e prevenzione dei Grandi Rischi	IT
9	University of KwaZulu-Natal	ZA
10	Servei Meteorològic de Catalunya	ES
11	Hydrometeorological Innovative Solutions S.L.	ES
12	Service Central d'Hydrométéorologie et d'Appui à la Prévision des Inondations, Ministry of Ecology, Sustainable Development and Planning	FR
13	Agència Catalana de l'Aigua	ES
14	Department Bau und Umwelt Kanton Glarus	CH
15	Verzasca SA	CH
16	Azienda Elettrica Ticinese	CH
17	Autorità di Bacino Regionale Destra Sele	IT
18	Empresa de Gestión Medioambiental S.A.	ES

Activity Code: ENV.2007.2.1.2.2. **Funding Scheme:** CP-SICA **Duration (Months):** 36

Title: Enhancing the role of wetlands in integrated water resources management for twinned river basins in EU, Africa and South-America in support of EU Water Initiatives

Proposed EC Grant: 2.386.849 €

Abstract:

The general objective of the project is to develop a methodological framework for the sustainable management and development of freshwater wetlands with the aim to contribute to the global fight against poverty, insecurity, climate change, pollution and ecological degradation. The methodology will focus on providing solutions for: □• More sustainable local livelihood for people living on or influenced by wetlands, with emphasizes on drinking water, sanitation, security and sustainable land uses, while not deteriorating environmental functions. □• Integrating wetlands into national, international water management policies/plans. Integrating wetlands into existing or envisaged river basin management plans (RBMPs). □

• Resolving potential conflicts that might emerge among the different objectives. □The project will work on 'twinned' case study wetlands from Europe, Africa and South-America. Management solutions will be worked out for this wetlands with the aim of enhancing their drinking water supply, sanitation and livelihood functions, while sustaining (and improving if possible) their ecological values. Knowledge and experiences gained from these case studies will be summarized in general guidelines. □Stakeholder participation, capacity building and dissemination will be essential elements of the project in order to ensure the optimal utilization of project results.

Partners:

N	Partner Legal Name	Country
1	Environmental Protection and Water Management Research Institute	HU
2	Soresma NV	BE
3	Potsdam Institute for Climate Impact Research	DE
4	WasserKluster Lunz- biologische station GmbH	AT
5	UNESCO-IHE Institute for Water Education	NL
6	Stichting Wetlands International	NL
7	National Water and Sewerage Corporation, Uganda	UG
8	International Water Management Institute	LK
9	Escuela Superior Politécnica del Litoral	EC

Activity Code: ENV.2007.2.1.2.3. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Mediterranean Intermittent River Management

Proposed EC Grant: 3.499.783 €

Abstract:

The implementation of the WFD in catchments with temporary rivers presents a significant challenge for watershed managers. The MIRAGE project will, for the first time, comprehensively investigate the applicability of specific management options under the characteristic flush and drought conditions of temporary streams. Through investigations in seven basins, MIRAGE will provide a framework for managing the many Mediterranean water bodies dominated by temporary waters. MIRAGE will deploy a multi-scale approach to improve understanding of temporary river responses to hydrologic, biogeochemical and sediment transport events. The principal research and project objectives of MIRAGE are to (1) provide an applicable and transferable set of reference conditions for temporary streams, specifically linking terrestrial and aquatic ecology; (2) determine effects of dry periods on accumulation and transformation of nutrients, sediments and hazardous substances on land and in river channels, at selected sites with test catchments; (3) specify and test measures to support achieving good ecological and water quality status including the integration of up- and downstream management. This will be done initially for the two mirror basins Candelaro (Italy) and Evrotas (Greece) in close cooperation with local water management organisations; (4) support the implementation of the WFD and the development of strategies for integrated water resources management for Mediterranean river basins, generalising from the Mirror Basins on the basis of modern ecohydrology concepts, in the context of characterising runoff regimes and flood responses on a regional basis. Five other Mediterranean catchments, including one in Morocco, will be used as the primary focus for this work; The transfer of experience and the establishment of common guidelines is then seen as a significant support for WFD implementation across the region.

Partners:

N	Partner Legal Name	Country
1	Leibniz Universität Hannover	DE
2	TECHNICAL UNIVERSITY OF CRETE	EL
3	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE	BE
4	Consiglio Nazionale delle Ricerche	IT
5	Consejo Superior de Investigaciones Cientificas	ES
6	Universitat de Barcelona	ES
7	UNIVERSIDAD DE MURCIA	ES
8	Université de Montpellier 2	FR
9	University of Leeds	UK
10	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
11	Eidgenössische Anstalt für Wasserversorgung, Abwasserreinigung und Gewässerschutz	CH
12	IMAR-INSTITUTO DO MAR	PT
13	Hellenic Centre for Marine Research	EL
14	Faculty of Sciences and Technology	MA
15	Autorità di Bacino della Puglia	IT
16	PREFECTURE OF LAKONIA	EL

Activity Code: ENV.2008.2.1.3.1. **Funding Scheme:** CSA-SA **Duration (Months):** 36

Title: Prevention and Restoration Actions to Combat □Desertification. An Integrated Assessment.

Proposed EC Grant: 976.965 €

Abstract:

The general objective of PRACTICE is to link S & T advances and traditional knowledge on prevention and restoration practices to combat desertification with sound implementation, learning and adaptive management, knowledge sharing, and dissemination of best practices. □Specific objectives are:□1. To create an international platform of long-term monitoring sites for assessing and investigating practices to combat desertification. □2. To develop integrated evaluation tools to assess the cost-effectiveness of practices to combat desertification, taking into account changes in both biophysical and socio-economic properties, by synergistically exploiting the recent advances on assessment and evaluation methodologies and approaches.□3. To assess prevention and restoration practices to combat desertification for croplands, rangelands and woodlands, considering the impacts on socio-economic status, soil functions, biodiversity, and ecosystem services.□4. To identify and document best practices to combat desertification considering multiple purposes at different spatial (local to global) scales, and to establish cost-effective thresholds for the various management alternatives.□5. To develop education material and translational science strategies, and implement innovative participatory approaches to link science to society, to share and transfer evaluation methods and best practices, addressing and involving stakeholders at all levels, from farmers to local organisations, to national and international bodies.

Partners:

N	Partner Legal Name	Country
1	FUNDACION CENTRO DE ESTUDIOS AMBIENTALES DEL MEDITERRANEO	ES
2	UNIVERSIDAD DE ALICANTE	ES
3	Università degli Studi di Sassari. Centro interdepartamentale di Ateneo-NRD Nucleo Ricerca Desertificazione	IT
4	Remote Sensing Department, FB VI Geography/Geosciences, University of Trier	DE
5	Centro Euro-Mediterraneo per i Cambiamenti Climatici S.c.a.r.l.	IT
6	Aristotle University of Thessaloniki	EL
7	University of Aberdeen	UK
8	Fundación Universidad Empresa de la Región de Murcia	ES
9	Dryland Research Center at BioCEenter Klein Flottbeck, University Hamburg	DE
10	Liga a para Protecção da Natureza	PT
11	Ben-Gurion University of the Negev	IL
12	North-West University	ZA
13	Northeast Normal University	CN
14	INSTITUTO DE ECOLOGIA Y BIODIVERSIDAD	CL
15	UNIVERSIDAD AUTONOMA DE NUEVO LEON	MX

Activity Code: ENV.2009.2.1.3.2. **Funding Scheme:** CP-SICA **Duration (Months):** 36

Title: Land and Ecosystem Degradation and Desertification: Assessing the Fit of Responses

Proposed EC Grant: 3.062.042 €

Abstract:

LEDDRA aims to advance the comprehensive study of the socio-environmental fit of responses to land and ecosystem degradation and desertification (LEDD) in various contexts. It adopts the ecosystem approach and an integrated methodology with continuous feedbacks between theory, methods and applications. It focuses on response assemblages (combinations of response types and prevailing environmental, socio-economic and institutional conditions that contribute to or detract from sustainable land management and societal welfare), the associated costs and benefits to diverse stakeholders, barriers to and opportunities for adoption, and knowledge transfer processes. Optimal response assemblages comprise coordinated, mutually supportive and complementary measures that preserve the ecological and the community resilience of affected areas. LEDDRA develops the theory of responses to LEDD, in general, and in cropland, grazing land and forests/shrubland, in particular, and the study of knowledge transfer for diverse stakeholder types. It negotiates the links between land degradation, ecosystem services decline and biodiversity change, the links between biophysical and human determinants, welfare impacts, and responses to drought (drought preparedness). It improves existing and develops new integrated methodologies for assessing the impacts and fit of various types of responses to LEDD and the socio-ecological vulnerability of affected regions, and for identifying response assemblages in different European and other cultural-institutional contexts drawing on applications in selected sites in EU and ICPC countries. It analyzes the policy context to offer recommendations for policy and land management actions at the international, EU and national levels. To better organize, show case, disseminate and add value to project results, a web-based information system will be developed to make findings accessible to a wide range of stakeholders with different levels of expertise.

Partners:

N	Partner Legal Name	Country
1	University of the Aegean-Research Unit	EL
2	AGRICULTURAL UNIVERSITY OF ATHENS	EL
3	3D - Environmental Change	NL
4	UNIVERSITY OF PLYMOUTH	UK
5	Osservatorio MEDES - Osservatorio Mediterraneo per lo studio delle Soluzioni dei Problemi Economici delle Aree a Rischio Desertificazione	IT
6	UNIVERSITA DEGLI STUDI DELLA BASILICATA	IT
7	ECOLOGIC - INSTITUT FUER INTERNATIONALE UND EUROPAEISCHE UMWELTPOLITIK gGmbH	DE
8	CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
9	Changjiang River Scientific Research Institute	CN
10	INSTITUT AGRONOMIQUE ET VETERINAIRE HASSAN II	MA
11	UNIVERSITAT DE VALENCIA	ES

Activity Code: ENV.2007.2.1.4.3. **Funding Scheme:** CP-SICA **Duration (Months):** 30

Title: Hunting for Sustainability

Proposed EC Grant: 2.929.304 €

Abstract:

Biodiversity conservation increasingly takes place outside protected areas in multiple-use landscapes. Success in achieving biodiversity objectives is closely linked to the extent to which conservation can be integrated with the cultural, social and economic objectives and aspirations of people. Beliefs, perceptions, attitudes and preferences about biodiversity are central to the decisions made by individuals and groups about natural resource management. In this project we will use hunting as a "lens" through which to examine the wider issue of how people interact with biodiversity. Hunting provides a valuable case study in the use of biodiversity because it involves tens of millions of people globally, it is conducted across a wide range of land tenure and use systems, and it is an important source of revenue and protein, particularly in developing countries. Hunting is embedded in social structures and cultural patterns and has a key role in conflicts over natural resource management around the world. Our multidisciplinary team will assess the social, cultural, economic and ecological functions and impacts of hunting across a range of contexts in Europe and Africa. Our study systems fall across economic gradients from the richest to the poorest countries and encompass environments from the Arctic to the Equator. We seek to understand what influences attitudes to hunting, how these attitudes influence and determine individual and societal behaviour in relation to hunting, and finally, how hunting behaviour influences biodiversity. Consequently, we will integrate social, economic and ecological scientific disciplines and engage with a diverse selection of stakeholders to develop novel approaches to the mitigation of natural resource conflicts involving hunting. Finally, our results will be interpreted in respect to current and future EU policy on hunting and biodiversity conservation and contribute to the global debate about the sustainable use of biodiversity.

Partners:

N	Partner Legal Name	Country
1	Macaulay Land Use Research Institute	UK
2	Frankfurt Zoological Society	DE
3	Tanzania Wildlife Research Institute	TZ
4	Oromia Agriculture and Rural Development Bureau	ET
5	Universitat Autònoma de Barcelona	ES
6	Consejo Superior de Investigaciones Científicas	ES
7	University of Ljubljana	SI
8	University of Zagreb	HR
9	Norsk Institutt for Naturforskning	NO
10	Umeå University	SE
11	Imperial College of Science, Technology and London	UK
12	University of Stirling	UK

Activity Code: ENV.2007.2.1.4.3. **Funding Scheme:** CP-SICA **Duration (Months):** 36

Title: Sustainable Livelihoods and Biodiversity in Riparian Areas in Developing Countries

Proposed EC Grant: 2.418.160 €

Abstract:

LiveDiverse (LD) will develop new knowledge on the interactions between human livelihood and biodiversity in riparian and aquatic contexts in four developing countries (Vietnam, India, South Africa, Costa Rica). It has a strong emphasis on dissemination and the constructive engagement of a broad selection of social groups and their governmental and non-governmental representatives. The analysis of biodiversity values, sustainable use and livelihoods (biodiversity governance) within the project adopts vulnerability as a unifying concept, taking the point of departure in the concepts of biodiversity and livelihood vulnerability. Vulnerability will be considered from a combination of bio-physical, socio-economic and cultural/spiritual perspectives, where human ability to conserve and husband biodiversity while at the same time achieving sustainable livelihoods is of vital importance. The analyses of areas will analyse vulnerability in terms of biophysical, socio-economic- legal, and cultural/spiritual issues. Maps of these three perspectives will then be constructed in each case study and incorporated into a GIS system. These maps will identify biodiversity and livelihood 'hot-spots', that is, places where there is a high risk (according to natural science criteria), and a low capability (according to the socio-economic, law and policy criteria). Finally, biodiversity and livelihood scenarios will be developed. These scenarios will take into account the main perspectives; biological diversity risk, socio economic ability and cultural perceptions to cope with effects of this risk. Working in a 15-year perspective, the scenarios will examine future possible trends, threats and developments in order to formulate strategies and policy to meet the needs of both biodiversity and livelihoods.

Partners:

N	Partner Legal Name	Country
1	Linköpings universitet	SE
2	National Institute for Agricultural Planning and Projection	VN
3	Society for Promoting Participative Ecosystem Management	IN
4	South African Council for Science and Industrial Research	ZA
5	Universidad Nacional Costa Rica	CR
6	Institute for Environmental Studies - Vrije Universiteit Amsterdam	NL
7	University of Dundee	UK
8	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE	BE

Activity Code: ENV.2009.2.2.1.4. **Funding Scheme:** CP-SICA **Duration (Months):** 48

Title: People for Ecosystem Based Governance in Assessing Sustainable Development of Ocean and Coast

Proposed EC Grant: 6.999.684 €

Abstract:

Many efforts have been deployed for developing Integrated Coastal Zone Management in the Mediterranean and the Black Sea. Both basins have, and continue to suffer severe environmental degradation. In many areas this has led to unsustainable trends which have impacted on economic activities and human well being. An important progress has been made with the launch of the ICZM Protocol for the Mediterranean Sea in January 2008. The ICZM Protocol offers, for the first time in the Mediterranean, an opportunity to work in a new way, and a model that can be used as a basis for solving similar problems elsewhere, such as in the Black Sea. The aim of PEGASO is to build on existing capacities and develop common novel approaches to support integrated policies for the coastal, marine and maritime realms of the Mediterranean and Black Sea Basins in ways that are consistent with and relevant to the implementation of the ICZM Protocol for the Mediterranean. PEGASO will use the model of the existing ICZM Protocol for the Mediterranean and adjust it to the needs of the Black Sea through three innovative actions: □- Constructing an ICZM governance platform as a bridge between scientist and end-user communities, going far beyond a conventional bridging. The building of a shared scientific and end users platform is at the heart of our proposal linked with new models of governance. □- Refine and further develop efficient and easy to use tools for making sustainability assessments in the coastal zone (indicators, Accounting methods and models, scenarios). They will be tested and validated in a multi-scale approach for integrated regional assessment. □- Implementation of a Spatial Data Infrastructure (SDI), following INSPIRE Directive, to organize and standardize spatial data to support information sharing on an interactive visor, to make it available to the ICZM Platform, and to disseminate all results of the project to all interested parties.

Partners:

N	Partner Legal Name	Country
1	UNIVERSITAT AUTONOMA DE BARCELONA	ES
2	UNIVERSIDAD PABLO DE OLAVIDE	ES
3	PLAN BLEU POUR L'ENVIRONNEMENT ET LE DEVELOPPEMENT EN MEDITERRANEE	FR
4	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	FR
5	ACRI Etudes et Conseils	MA
6	UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION -UNESCO	FR
7	Priority Actions Programme Regional Activity Centre	HR
8	INTERNATIONAL UNION FOR CONSERVATION OF NATURE	ES
9	THE UNIVERSITY OF NOTTINGHAM	UK
10	VLAAMS INSTITUUT VOOR DE ZEE VZW	BE
11	UNIVERSITA CA' FOSCARI DI VENEZIA	IT
12	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
13	UNIVERSITE DE GENEVE	CH
14	HELLENIC CENTRE FOR MARINE RESEARCH	EL
15	AKDENIZ KIYI VAKFI	TR
16	INSTITUTUL NATIONAL DE CERCETARE DEZVOLTARE DELTA DUNARII	RO
17	University Mohammed V-Agdal	MA
18	Association de Réflexion, d'Echanges et d'Actions pour l'Environnement et le Développement	DZ
19	National Institute of Oceanography and Fisheries	EG
20	UNIVERSITY OF BALAMAND	LB
21	MARINE HYDROPHYSICAL INSTITUTE - UKRAINIAN NATIONAL ACADEMY OF SCIENCES	UA
22	Institut National des Sciences et Technologies de la Mer	TN
23	Fondation Sansouïre	FR
24	National Authority for Remote Sensing and Space Sciences	EG

Important notice: Provisional data based on evaluation results and subject to modification (see Disclaimer)

Activity Code: ENV.2009.3.1.3.1. **Funding Scheme:** CSA-CA **Duration (Months):** 24
Title: INTEGRATED WASTE MANAGEMENT IN WESTERN AFRICA

Proposed EC Grant: 999.917 €

Abstract:

Most of African countries are struggling towards development and improving their living conditions. An appropriate waste management structure at a national and regional level is a milestone that must be achieved in order to improve living standards, health and environment. The situation in many countries is that the obvious lack of a functional waste management system brings perennial garbage problems such as inefficient garbage collection, poor public compliance to waste segregation, uncontrolled open burning, and tolerated presence of open dumpsites. Furthermore valuable resources are lost due to inefficient or non-existing recycling systems. The establishment of an efficient waste management and recycling system contributes to enhancing the resource efficiency of these countries and thus supports a sustainable development in the long-term. The present Coordination Action will seek the establishment of Integrated Solid Waste Management systems (ISWM) in Western Africa. ISWM systems combine waste streams, waste collection, treatment and disposal methods, with the objective of achieving environmental benefits, economic optimization and societal acceptability. For the achievement of the project objectives, a solid waste management expert and research co-ordination platform will analyze the current situation in the targeted countries (Ghana, Nigeria, Senegal and Ivory Coast), identifying main gaps and constraints of any type (technological, sociological, organisational, etc.) and selecting suitable management systems. According to the results obtained, including inputs from authorities and policy makers in participatory workshops, the consortium will provide valuable guidelines and recommendations to be used in the future implementation of developed strategies such as National and Regional Action Plans on solid waste management. The project will also build local capacities through workshops and seminars where relevant stakeholders must be involved.

Partners:

N	Partner Legal Name	Country
1	VEREIN ZUR FOERDERUNG DES TECHNOLOGIETRANSFERS AN DER HOCHSCHULE BREMERHAVEN E.V.	DE
2	BIOAZUL	ES
3	EIDGENOESSISCHE MATERIALPRUEFUNGS- UND FORSCHUNGSANSTALT	CH
4	SVERIGES LANTBRUKSUNIVERSITET	SE
5	OEKO-INSTITUT E.V. - INSTITUT FUER ANGEWANDTE OEKOLOGIE	DE
6	FUNDACION GAIKER	ES
7	TECHNISCHE UNIVERSITAET BERLIN	DE
8	UNITED NATIONS UNIVERSITY INSTITUTE FOR ENVIRONMENT AND HUMAN SECURITY	DE
9	ENDA Tiers Monde	SN
10	Commune de Matam	SN
11	Institut Africain de Gestion Urbaine	SN
12	Zoomlion Ghana Ltd	GH
13	United nation University-Institute for natural Resources in Africa	GH
14	Kwame Nkrumah University of Science and Technology	GH
15	Basel Convention Regional Coordinating Centre fro Africa	NG
16	Environmental Law Research Institute	NG
17	Global Digital Solidarity Fund	NG
18	Universite Abobo-Adjame	CI
19	CENTRE FOR ENVIRONMENT AND DEVELOPMENT FOR THE ARAB REGION AND EUROPE	EG
20	Influential Inputs cc T/A Icando	ZA

Activity Code: ENV.2007.3.2.1.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Technologies and Tools to prioritize assessment and diagnosis of air pollution impact on immovable and movable Cultural Heritage

Proposed EC Grant: 1.650.000 €

Abstract:

Most buildings of cultural/historical interest are located in urban environments. They undergo a number of different external forcings, which need to be addressed separately. It is important to consider local-scale variations of the urban environment, such as changes in pollutants, temperature field, relative humidity cycles, wind field, urban heat island effect etc. The most important challenge at the present time is to understand the different types of damage to cultural heritage that environmental changes will cause. In fact, the available scenarios of multi-pollutants trends in Europe and the world indicate that the effects of industrial, civil and transport emissions on corrosion and soiling will constitute a serious threat to cultural heritage. Such effects require improved methods of quantification to arrive at a more accurate damage assessment, diagnosis and monitoring of the movable and immovable cultural heritage. □The high costs of preventive conservation and maintenance of the built cultural environment urgently impose the prioritization of air pollution monitoring in order to ensure a sustainable protection. For the purpose of attaining these goals, ad hoc devices and tools are necessary to identify and monitor the changing damage processes affecting immovable and moveable cultural heritage. This will be reached with TeACH developing its objectives. Among these, the main ones are: identify the multi-pollutants and prioritize the principal ones; Identify ways of improving the more reliable and efficient among existing technologies and tools, developing new devices and tools, particularly a new a compact and economical kit of instruments; deliver guidelines for the future prioritization of air pollution and disseminate the results.

Partners:

N	Partner Legal Name	Country
1	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
2	Istituto Cooperativo per l'Innovazione	IT
3	Tecno Penta	IT
4	Fundacion Labein	ES
5	ACCIONA INFRAESTRUCTURAS S.A.	ES
6	University of Antwerp	BE
7	Norwegian Institute for Air Research	NO
8	Belhadh Enterprise	DZ
9	University of Ljubljana	SI
10	Metropolitankapitel der Hohen Domkirche Köln - Dombauverwaltung	DE
11	National Museum in Krakow	PL

Activity Code: ENV.2008.3.2.1.1. **Funding Scheme:** CP-IP **Duration (Months):** 60

Title: Damage risk assessment, macroeconomic impact and mitigation strategies for sustainable preservation of cultural heritage in the times of climate change

Proposed EC Grant: 4.964.866 €

Abstract:

Climate change is one of the most critical global challenges of our time which also threatens cultural heritage. As a non-renewable important resource to the European identity, sustainable adaptation strategies are required for long term preservation. For this purpose and for the first time ever, the CLIMATE FOR CULTURE project will couple completely new high resolution (10x10km) climate change evolution scenarios with whole building simulation models to identify the risks for specific regions. The innovation lies in the elaboration of a more reliable damage assessment by connecting the future climate data with whole building simulation models and new damage assessment functions. In situ measurements at UNESCO sites throughout Europe will allow a much more precise and integrated assessment of the real damage impact of climate change on cultural heritage. Appropriate sustainable mitigation/adaptation strategies, also from previous projects, are further developed and applied on the basis of these findings simultaneously. All these results will be incorporated into an assessment of the economic impacts. In order to ensure an efficient use of resources, this project will build on the results of already concluded EU research projects (Noah's Ark). Techniques from FP5/6 projects will be reassessed for their applicability in future scenarios at different regions in Europe and Mediterranean to fully meet sustainability criteria. The proposed project will thus be able to estimate more systematically the damage potential of climate change on European cultural heritage. The team consists of 27 multidisciplinary partners from all over Europe and Egypt including the world's leading institutes in climate modelling and whole building simulation. The final achievement of the project will be a macro-economic impact report on cultural heritage in the times of climate change akin to the STERN report which would be a truly European contribution to future IPCC Reports.

Partners:

N	Partner Legal Name	Country
1	Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V.	DE
2	Czech Technical University in Prague	CZ
3	Consiglio Nazionale delle Ricerche	IT
4	Faculty of Civil Engineering University of Zagreb	HR
5	FOUNDATION FOR RESEARCH AND TECHNOLOGY HELLAS	EL
6	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	DE
7	Technische Universität München	DE
8	Eindhoven University of Technology	NL
9	Univerza v Ljubljani Univerza v Ljubljani	SI
10	Gradbeni inštitut ZRMK	SI
11	Gotland University	SE
12	Andreas Weiß freelance conservator restorer	DE
13	Engeneering Consulting & Software Development	PL
14	Krah & Grote Messtechnik	DE
15	Kaeferhaus GmbH	AT
16	Haftcourt Limited	UK
17	ACCIONA INFRAESTRUCTURAS, S.A	ES
18	Bayerische Schloesserverwaltung	DE
19	Doerner Institut	DE
20	The National Trust for England, Wales and Northern Island	UK
21	Kybertec, s.r.o.	CZ
22	Glasgow Caledonian University	UK
23	Center for documentation of Cultural & Natural Heritage	EG
24	Jonathan Ashley-Smith	UK
25	Imperial College London	UK
26	Fondazione Salvatore Maugeri	IT
27	Institute National du Patrimoine	FR

Important notice: Provisional data based on evaluation results and subject to modification (see Disclaimer)

Activity Code: ENV.2009.3.2.1.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: NEW INTEGRATED KNOWLEDGE BASED APPROACHES TO THE PROTECTION OF CULTURAL HERITAGE FROM EARTHQUAKE-INDUCED RISK

Proposed EC Grant: 2.736.114 €

Abstract:

The project proposal tackles the problem of earthquake-impact on Cultural Heritage assets starting from basic consideration that efficient protection, with substantial guarantee of compatibility and low-intrusivity, can only be achieved with 'minimum intervention' approach. This requires that potentialities of existing materials and components are as much as possible exploited in terms of strength and energy dissipation, and candidate interventions are validated and optimized on specific, real application conditions. At the project start, earthquake-induced failure mechanisms, construction types and materials, intervention and assessment techniques will be cross-correlated with the aim of developing new integrated methodologies with a systemic approach. Traditional materials will be enhanced by innovative industrial processes (e.g., nano-limes or micro-silica for injection), and new high-performance (e.g. dissipative) elements will be developed. Novel collaborative combinations of them will be tested on structural components (walls, pillars, floors, vaults) and on structural connections (wall-, floor- and roof-to-wall), which converge the behaviour of single strengthened elements into the global structural response. The envisaged techniques will be also validated on model buildings and substructures. Advanced numerical studies will allow parameterizing the results and deriving simple and optimized design procedures. Early warning techniques for intelligent interventions and advanced monitoring techniques for knowledge based assessment and progressive implementation of interventions will be also developed. This bottom-up approach will bring to new integrated materials, technologies and tools for systemic improvement of seismic behaviour of CH assets. The new solutions will be condensed into guidelines for end-users. The large participation of research centres, SME, and end-user from various countries, including ICPC and MPC, ensures increased impact of the research.

Partners:

N	Partner Legal Name	Country
1	UNIVERSITA DEGLI STUDI DI PADOVA	IT
2	BUNDESANSTALT FUER MATERIALFORSCHUNG UND -PRUEFUNG	DE
3	USTAV TEORETICKE A APLIKOVANE MECHANIKY, AKADEMIE VED CESKE REPUBLIKY VEREJNA VYZKUMNA INSTITUCE	CZ
4	NATIONAL TECHNICAL UNIVERSITY OF ATHENS	EL
5	POLITECNICO DI MILANO	IT
6	UNIVERSIDADE DO MINHO	PT
7	UNIVERSITAT POLITECNICA DE CATALUNYA	ES
8	UNIVERSITY OF BATH	UK
9	GAZI UNIVERSITY	TR
10	Ecole Nationale d'Architecture	MA
11	conservation department-cairo university	EG
12	Israel Antiquities Authority	IL
13	Bozza Legnami S.r.l.	IT
14	Peter James	UK
15	Interprojekt d.o.o.	BA
16	S&B Industrial Minerals S.A.	EL
17	ZRS Architekten Ingenieure Bürogemeinschaft	DE
18	Monumenta	PT

Activity Code: ENV.2009.3.2.1.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Performance-based approach to the earthquake protection of cultural heritage in European and Mediterranean countries

Proposed EC Grant: 2.237.475 €

Abstract:

PERPETUATE intends to develop European Guidelines for evaluation and mitigation of seismic risk to cultural heritage assets, with innovative techniques for the seismic strengthening of historical buildings and the preservation of artworks (frescos, stucco-works, statues, battlements, banisters, ...). The main deliverable of the project will be made by a main document, which outlines the safety and conservation conceptual approach and the overall methodology, and other specific documents, describing the different components of the risk analysis. Two different problems are considered: a) assessment of a single cultural heritage asset (hazard analysis; soil foundation problems; investigations for the building knowledge; seismic analysis; SHM and strengthening interventions); b) policy initiatives for seismic risk mitigation (simplified vulnerability and risk analysis at territorial scale). Other important deliverables will come out from the application and validation of the methodology in two case studies, the Citadel of Algiers and the historical centre of Rhodes, both in the UNESCO list of the World Cultural Heritage. □The call asks for the development of "integrated methodologies and innovative tools" for "protection .. of the main cultural heritage assets as regards the impact of earthquakes" and makes expressly reference to the contribution for improved regulation and standards. The recommendations recently issued by the Italian Ministry of Culture represent the framework for the development of European Guidelines, applicable in the European and the other Mediterranean countries. □The methodology proposed in PERPETUATE will use a displacement-based approach for the vulnerability evaluation and the design of interventions; the use of safety verification in terms of displacement, rather than strength, orients to new strengthening techniques and helps in the comprehension of the interaction between structural elements and unmovable artistic assets.

Partners:

N	Partner Legal Name	Country
1	UNIVERSITA DEGLI STUDI DI GENOVA	IT
2	Ente per le Nuove tecnologie, l'Energia e l'Ambiente	IT
3	BUREAU DE RECHERCHES GEOLOGIQUES ET MINIERES	FR
4	ARISTOTELIO PANEPISTIMIO THESSALONIKIS	EL
5	NATIONAL TECHNICAL UNIVERSITY OF ATHENS	EL
6	UNIVERZA V LJUBLJANI	SI
7	UNIVERSITY OF BATH	UK
8	USTHB/LBE	DZ
9	Gradbeni inštitut ZRMK d.o.o.	SI
10	Entreprise de Travaux de Bâtiment Mekhati	DZ

Activity Code: ENV.2008.3.2.1.2. **Funding Scheme:** CSA-CA **Duration (Months):** 36

Title: European Cultural Heritage Identity Card

Proposed EC Grant: 998.502 €

Abstract:

Aim: To collect data in a systematic way on heritage buildings across Europe and neighboring countries; and introduce the Identity Card concept to European Cultural Heritage. It will help in sustainable maintenance, preservation and rehabilitation of historic sites and monuments through the development of strategies and assessment of efficient and user-friendly systems for the screening of alteration of heritage building over time. **Methods:** The 6 work packages (WP) will be carried out by a multi-disciplinary consortium of highly qualified experts in conservation, architecture, construction and natural and social sciences. WP1 will coordinate the project; WP2 will review and document current methodologies; WP3 will develop criteria and indicators for risk assessment; WP4 will develop methods and tools to collect and store data for the evaluation of changes of heritage assets over time; WP5 will consolidate recommendations and strategies; and WP6 will disseminate results through appropriate professional and public channels. **Project** will carry out a consortium of 13 partners in 12 countries: Slovenia, Austria, Belgium, Czech Republic, Germany, Greece, Italy, Poland, Spain, Croatia, Egypt and Israel. The consortium will act by coordinating activities on a national and international level. It will also act to increase the level of information and awareness in society, as well as the level of professional education & vocational training in order to minimize the harmful impact of ignorance, lack of knowledge and vandalism. Project partners, including an Advisory Network, will establish and maintain rapport with local authorities responsible for CH safeguarding and other stakeholders involved in heritage protection. **Conclusion:** EU CHIC will facilitate development of a universal cultural heritage identity card that will demonstrate significant benefit for CH managers & owners, and for society, promoting effective preservation of our shared cultural heritage.

Partners:

N	Partner Legal Name	Country
1	Univerza v Ljubljani	SI
2	Schloss Schönbrunn Kultur- und Betriebsges mBH.	AT
3	Belgian Building Research Institute	BE
4	Zagora – Zagorje d.o.o.	HR
5	Ústav teoretické a aplikované mechaniky Akademie věd České republiky, v.v.i.	CZ
6	Center for documentation of Cultural & Natural Heritage	EG
7	Fraunhofer Gesellschaft zur Foerderung der angewandten Forschung e.V.	DE
8	National Technical University of Athens	EL
9	Technion – Israel Institute of Technology	IL
10	University of Bologna	IT
11	University of Ferrara	IT
12	Institute of Fundamental Technological Research	PL
13	Fundacion Labein	ES

Activity Code: ENV.2009.3.2.1.2. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Fire Detection and Management through a Multi-Sensor Network for the Protection of Cultural Heritage Areas from the Risk of Fire and Extreme Weather Conditions

Proposed EC Grant: 2.697.092 €

Abstract:

The proposed project aims to develop an automatic early warning system to remotely monitor areas of archaeological and cultural interest from the risk of fire and extreme weather conditions. Since these areas have been treasured and tended for very long periods of time, they are usually surrounded by old and valuable vegetation or situated close to forest regions, which exposes them to an increased risk of fire. Additionally, extreme weather conditions (such as storms and floods) pose great risks for these sites. The proposed system will take advantage of recent advances in multi-sensor surveillance technologies, using a wireless sensor network capable of monitoring different modalities (e.g. temperature) and optical and infrared cameras, as well as local weather stations on the deployment site. The signals collected from these sensors will be transmitted to a monitoring center, which will employ intelligent computer vision and pattern recognition algorithms as well as data fusion techniques to automatically analyze sensor information. The proposed system will be capable of generating automatic warning signals for local authorities whenever a dangerous situation arises. Detecting the starting position of a fire is only the first step in fire fighting. After detecting a wildfire, the main focus should be the estimation of the propagation direction and speed in order to help forest fire management. FIRESENSE will provide real-time information about the evolution of fire using wireless sensor network data. Furthermore, it will estimate the propagation of the fire based on the fuel model of the area and other important parameters such as wind speed, slope, and aspect of the ground surface. Finally, a 3-D Geographic Information System (GIS) environment will provide visualisation of the predicted fire propagation. Demonstrator deployments will be operated in selected sites in Greece, Turkey and Tunisia.

Partners:

N	Partner Legal Name	Country
1	CENTRE FOR RESEARCH AND TECHNOLOGY HELLAS	EL
2	Bilkent Universitesi	TR
3	Ecole Supérieure des Communications	TN
4	XenICs nv	BE
5	Stichting Centrum voor Wiskunde en Informatica	NL
6	MARAC ELECTRONICS, S.A	EL
7	Bogazici Universitesi	TR
8	MINISTRY OF CULTURE, IX EPHORATE FOR PREHISTORIC AND CLASSICAL ANTIQUITIES	EL
9	TITAN BUILDING SYSTEMS TECHNOLOGY, INDUSTRY AND TRADE LIMITED COMPANY	TR

Activity Code: ENV.2009.3.3.2.2. **Funding Scheme:** CP **Duration (Months):** 48

Title: EUROpean multilevel integrated BIOREFinery design for sustainable biomass processing

Proposed EC Grant: 21.474.836 €

Abstract:

The development and implementation of bio-refinery processes is an absolute necessity and the key to meet the vision towards bio-based economy. The EuroBioRef concept is an integrated, sustainable and diversified bio-refinery involving all biomass value chain stakeholders. The latter will allow large-scale research, testing, optimisation and demonstration of processes in the production of a wide range of products with the dual aim to use all fractions of various biomasses and exploit their potential to produce the highest value possible in an eco-efficient and sustainable way. Moreover, the project attempts to overcome the efforts fragmentation of the whole biomass value chain requiring greater networking, coordination and cooperation among a large variety of actors from biochemical and chemical industry, SMEs, scientific knowledge chain, and European organisations. The new concept will adopt a flexible and a modular process design adapted to large- but also small-scale production units easier to install in various European areas. The overall efficiency of this approach will clearly exceed existing pathways and will consider sustainable options in order to: □- Produce and use a high diversity of sustainable biomasses adapted for European regions □- Produce high specific energy bio-jet fuels (42 MJ/kg) □- Produce multiple products (chemicals, polymers, materials) in a flexible and optimised way that take advantage of the differences in biomass components and intermediates □- Improve cost-efficiency by 30% through improved reaction and separation effectiveness, reduced capital investments, improved plant and feedstock flexibility, reduction of production time and logistics □- Reduce by 30% the energy □- Produce zero waste and rationalise use of raw materials □The impact of the project in terms of environment, social and economic benefits is important and could give a serious advantage for European bio-industry.

Partners:

N	Partner Legal Name	Country
1	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)	FR
2	ARKEMA France	FR
3	BORREGAARD INDUSTRIES LIMITED	NO
4	Novozymes A/S	DK
5	METABOLIC EXPLORER SA	FR
6	Center for Renewable Energy Sources	EL
7	Haldor Topsøe A/S	DK
8	Institute for Solid Fuels and Applications / Centre of Research and Technology	EL
9	Process Design Center GmbH	DE
10	ECOINT - Life cycle systems	CH
11	European Biomass Industry Association	BE
12	Danish Technological Institute	DK
13	TECHNISCHE UNIVERSITAET DORTMUND	DE
14	Merck KGaA	DE
15	Faculdade de Engenharia da Universidade do Porto	PT
16	Rheinisch-Westfälische Technische Hochschule Aachen	DE
17	Consorzio Interuniversitario per la Reattività Chimica e la Catalisi	IT
18	Wytownia Sprzeto Komunikacyjnego "PZL-Rzeszow" S.A.	PL
19	Ośrodek Badawczo-Rozwojowy Przemysłu Rafineryjnego Spółka Akcyjna (Research & Development Centre for Petroleum Industry S.A.)	PL
20	STIFTELSEN SINTEF	NO
21	Société Agricole de Befandriana-Sud & Partners Sarl	MG
22	UMICORE AG & CO KG	DE
23	Nykomb Synergetics AB	SE
24	ALMA CONSULTING GROUP SAS	FR
25	ORGACHIM JSC	BG
26	Imperial College for Science, Technology and Medicine	UK
27	Oleon NV	BE

Important notice: Provisional data based on evaluation results and subject to modification (see Disclaimer)

Activity Code: ENV.2007.4.1.1.2. **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: European Biodiversity Observation Network; a project to design and test a biodiversity observation system integrated in time and space

Proposed EC Grant: 2.701.987 €

Abstract:

The key challenge addressed in the present proposal is to develop a biodiversity observation system that is transmissible, cost effective and provides added value to the currently independent data sources of in situ data and EO. There are three requirements: the production of protocols to enable extant data to be placed on a common framework for analysis; the provision of a sound scientific conceptual basis for the system that will provide a robust statistical structure for analytical tests and for the eventual estimates of stock and change and the provision of a system for estimating past change and monitoring as well as enabling forecasting of future options so that policy makers can generate appropriate strategies for mitigation. □The present consortium has a major advantage in that the framework is based on existing institutional collaboration which has been developed in the EU project ALTERNET. This framework will ensure continuity of recording and shows an existing commitments of the institutes concerned to long term monitoring. It will also provide the necessary structure for integration of available data.. This network already has long term data sets for biodiversity indicators eg butterflies and birds but the ambition is to convert these from site specific measures through inter-calibration to the wider European picture, using tried and tested statistical procedures. The key work package will involve inter-calibration between EO and in situ data, which will involve habitats that can be linked to specific biodiversity indicators. These will be identified using a conceptual framework developed in another work package. The target is to provide a basis for up and down scaling that can be tested to show the added value of integration. Other work packages will provide protocols to place data onto a common framework tests of validation and stratification procedures for assessing the consistency of data coverage. A further work package will provide a

Partners:

N	Partner Legal Name	Country
1	Alterra Wageningen UR	NL
2	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
3	Helmholtz-Centre for Environmental Research - UFZ	DE
4	European Community represented by the European Commission – Directorate General Joint Research Centre	BE
5	Umweltbundesamt GmbH	AT
6	University of Bucharest	RO
7	Centre d'Etude du Machinisme Agricole et du Génie Rural des Eaux et Forêts	FR
8	RESEARCH INSTITUTE FOR NATURE AND FOREST	BE
9	The University of Edinburgh	UK
10	Israel Nature and Parks Authority	IL
11	Stiftelsen Norsk institutt for naturforskning	NO
12	Institute of Landscape Ecology of the Slovak Academy of Sciences	SK
13	Aristotle University of Thessaloniki	EL
14	Eesti Maaülikool	EE
15	Universidad Politecnica de Madrid	ES
16	University of Stellenbosch, Dept. of Botany & Zoology	ZA
17	Sveriges Lantbruksuniversitet	SE

Activity Code: ENV.2009.4.1.3.1. **Funding Scheme:** CP-IP **Duration (Months):** 36

Title: Earth Observation and ENVironmental modelling for the mitigation of HEAlth risks

Proposed EC Grant: 6.273.434 €

Abstract:

EO2HEAVEN contributes to a better understanding of the complex relationships between environmental changes and their impact on human health. The project will monitor changes induced by human activities, with emphasis on atmospheric, river, lake and coastal marine pollution. EO2HEAVEN will follow a multidisciplinary and user-driven approach involving public health stakeholders who will work closely with technology and service providers in both the earth observation and in-situ environmental monitoring domain. The result of this collaboration will be the design and development of a GIS based upon an open and standards-based Spatial Information Infrastructure (SII) envisaged as a helpful tool for research of human exposure and early detection of infections. □The key factors of the EO2HEAVEN system will be 1) an enhanced integration of remotely sensed and in-situ environmental measurements, and 2) the development of models to relate these environmental data to exposure and health data. Both factors will directly address current goals of GEOSS such that the resulting system will be integrated into the GEOSS infrastructure after successful validation already during the course of the project. □Throughout the life span of the project the stakeholder requirements from three different use cases (in Europe and Southern Africa) will be assessed and the technical solutions proposed by EO2HEAVEN will be evaluated through an iterative process, thus ensuring that the solutions can be applied on a global scale. EO2HEAVEN will specify and implement the SII as an open architecture based upon international standards and adaptive geospatial Web services in alignment with the large-scale initiatives INSPIRE and GMES. The SII will include bridging capabilities at the syntactic and semantic levels to and between environmental and health systems. Ongoing and recently completed research projects in the ICT, environmental and health domains will be studied and used in an integrative approach.

Partners:

N	Partner Legal Name	Country
1	ATOS ORIGIN SOCIEDAD ANONIMA ESPANOLA	ES
2	TECHNISCHE UNIVERSITAET DRESDEN	DE
3	52°North Initiative for Geospatial Open Source Software GmbH	DE
4	UMWELTBUNDESAMT	DE
5	SPOT IMAGE (SI) SA	FR
6	NEVANTROPIC	FR
7	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
8	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH	ZA
9	OPEN GEOSPATIAL CONSORTIUM (EUROPE) LIMITED	UK
10	FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	DE
11	BUREAU DE RECHERCHES GEOLOGIQUES ET MINIERES	FR
12	STICHTING INTERNATIONAL INSTITUTE FOR GEO-INFORMATION SCIENCE AND EARTH OBSERVATION	NL
13	UNIVERSITY OF KWAZULU-NATAL	ZA
14	ICT Policy Implementation Technical Unit	MZ

Activity Code: ENV.2007.4.1.3.2. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Integration and enhancement of key existing European deep-ocean observatories

Proposed EC Grant: 3.499.568 €

Abstract:

At present there are a number of fixed point observatories that autonomously measure biological, chemical and physical variables in the oceans around Europe. These operate at various levels of sophistication but in a largely uncoordinated and fragmented manner. There is no agreed set of basic variables and common data protocols are not followed. EuroSITES has two main objectives: 1: To enhance the existing deep ocean observatories thus forming a coherent European network. This will then provide a clear and relevant description of the time varying properties of the ocean system. 2: To perform a small number of specific science missions that will, in the future, form the basis for greatly improved and novel monitoring capability. The work we propose addresses directly and explicitly the vision of GEOSS. We will address this in the context of the time changing properties of the ocean interior, seafloor and sub seafloor around Europe. EuroSITES will promote links with other international observation networks such as the network envisioned under the U.S. National Science Foundation's Ocean Observatories Initiative (OOI). Long-term time-series data offer some of the most important insights into the ways our oceans are changing. Crucially important processes occur on time scales that can not be observed by ships and in the deep parts of the ocean that are outside the reach of satellites. Sustained in situ observations are therefore required to provide high quality data on climatically and ecologically relevant variables at a few key locations. EuroSITES is the means to achieve this.

Partners:

N	Partner Legal Name	Country
1	Natural Environment Research Council	UK
2	Universitetet i Bergen	NO
3	Hellenic Centre for Marine Research	EL
4	Istituto Nazionale di Oceanografia e di Geofisica Sperimentale	IT
5	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
6	Leibniz-Institut für Meereswissenschaften an der Universität Kiel	DE
7	The University Court of The University of Aberdeen	UK
8	Centre National de la Recherche Scientifique	FR
9	Institut français de recherche pour l'exploitation de la mer	FR
10	SOPAB/Océanopolis	FR
11	Instituto Canario de Ciencias Marinas	ES
12	Instituto Nacional de Desenvolvimento das Pescas	CV
13	UNIVERSIDAD DE LAS PALMAS DE GRAN CANARIA	ES

Activity Code: ENV.2009.4.1.3.2. **Funding Scheme:** CP-SICA **Duration (Months):** 36

Title: Earth Observation for Monitoring and Observing Environmental and Societal Impacts of Mineral Resources Exploration and Exploitation

Proposed EC Grant: 3.124.015 €

Abstract:

European Commission Vice President Günter Verheugen, responsible for enterprise and industry policy declared "European industries need predictability in the flow of raw materials and stable prices to remain competitive. We are committed to improve the conditions of access to raw materials, be it within Europe or by creating a level playing field in accessing such materials from abroad." The global dimension of access to raw materials was on the agenda of the G8 Summit on June 2007. On that occasion a Declaration on "Responsibility for raw materials: transparency and sustainable growth" was adopted. Several national and international initiatives, both from the private or the institutional sectors, arised to address the sustainable development of the extractive industry and the reduction of its environmental footprint. Meanwhile, the extractive industry is facing increasing environmental and societal pressures, being regulatory or not, during all phases of a project, from exploration to exploitation and closure. The social acceptability of a project is among the major key issues to be dealt with. EO-MINERS scientific and technical objectives are to: - assess policy requirements at macro (public) and micro (mining companies) levels and define environmental, socio-economic, societal and sustainable development criteria and indicators to be possibly dealt using EO - use existing EO knowledge and carry out new developments on demonstration sites to further demonstrate the capabilities of integrated EO-based methods and tools in monitoring, managing and contributing reducing the environmental and societal footprints of the extractive industry during all phases of a mining project, from the exploration to the exploitation and closure stages - contribute making available reliable and objective information about affected ecosystems, populations and societies, to serve as a basis for a sound "dialogue" between industrialists, governmental organisations and stakeholder

Partners:

N	Partner Legal Name	Country
1	BUREAU DE RECHERCHES GEOLOGIQUES ET MINIERES	FR
2	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
3	TEL AVIV UNIVERSITY	IL
4	DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV	DE
5	WUPPERTAL INSTITUT FUR KLIMA, UMWELT, ENERGIE GMBH.	DE
6	GEOLOSKI ZAVOD SLOVENIJE	SI
7	Mineral Industry Research Organisation	UK
8	COUNCIL FOR GEOSCIENCE	ZA
9	Anglo Operation Ltd	ZA
10	UNIVERSITE DE VERSAILLES SAINT-QUENTIN-EN-YVELINES.	FR
11	CESKA GEOLOGICKA SLUZBA	CZ
12	Sokolovská uhelná, právní nástupce, a.s.	CZ
13	Anglo American plc	UK
14	Anglo American Chile Ltda	CL

Activity Code: ENV.2007.4.1.3.3. **Funding Scheme:** CP-FP **Duration (Months):** 42

Title: Regional pilot platform as EU contribution to a Global Soil Observing System

Proposed EC Grant: 2.600.000 €

Abstract:

Soil and land information are often inaccessible, incomplete, or out of date. e-SOTER addresses the felt need for a global soil and terrain database. It will deliver a web-based regional pilot platform with data, methodology, and applications, using remote sensing to validate, augment and extend existing data. Technical barriers include: quantitative mapping of landforms; soil characterization and pattern recognition by remote sensing; standardization of measures to convert legacy data. Major research thrusts involve: 1) improvement of the current SOTER methodology at scale 1:1 million in four windows in Europe, China and Morocco, using optical remote sensing and legacy data; 2) within 1:250 000-scale pilot areas, advanced remote sensing applications. Airborne radiometrics and electromagnetics, and image spectrometry together with field spectrometry will also be applied in a single, data-rich super site to link with field measurements. Advances beyond the state of the art include: transformation of pre-existing data and addition of new information with remote sensing and DEM; interpretations of the e-SOTER database that address threats defined in the EU Soil Thematic Strategy and comparing the results with current assessments; and delivery through a web service of a data portal. e-SOTER will deliver a Pilot Platform and a portal that provides open access to: 1) a methodology to create 1:1 million-scale SOTER databases, and an enhanced soil and terrain database at scale 1:1 million for the four windows; 2) an artifact-free 90m digital elevation model; 3) methodologies to create 1:250 000-scale enhanced SOTER databases, and the databases themselves for four pilot; 4) advanced remote sensing techniques to obtain soil attribute data; 5) validation and uncertainty propagation analysis; 6) dedicated applications related to major threats to soil quality and performance.

Partners:

N	Partner Legal Name	Country
1	International Soil Reference and Information Centre	NL
2	Miskolci Egyetem	HU
3	Bundesanstalt für Geowissenschaften und Rohstoffe	DE
4	European Commission - DG Joint Research Centre, Institute for Environment and Sustainability - Land Management and Natural Hazards Unit – Action SOIL	IT
5	Cranfield University	UK
6	Alterra b.v.	NL
7	Szent Istvan University	HU
8	scilands GmbH - Gesellschaft zur Bearbeitung digitaler Landschaften	DE
9	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE	FR
10	University of Nottingham	UK
11	Ceska zemedelska universita v Praze	CZ
12	Institute of Soil Science, Chinese Academy of Sciences	CN
13	Ecole Nationale d'Agriculture de Meknès	MA
14	Wageningen Universiteit	NL

Activity Code: ENV.2007.4.1.4.1. **Funding Scheme:** CSA-SA **Duration (Months):** 30

Title: African-European Georesources Observation System

Proposed EC Grant: 1.930.996 €

Abstract:

Africa, the largest single component of the African Caribbean Pacific (ACP) Group of States, despite its huge potential for development through both human and georesources, suffers in many places from poverty and underdevelopment. The sustainable use of its resources is a key issue, not only for development of the African countries, but also for the world's future. Over the coming decades, these issues are likely to play an ever-increasing role due to the world's growing population, rapid urban development and the rising demand for better infrastructure and services. □The sustainable use of georesources requires a knowledge based on data, information and expertise. Thus, the availability, traceability, accessibility and processing using GIS technologies of heterogeneous data from multiple sources is essential. Such processing requires a qualified and experienced personnel and the definition of strategies for capacity building and training. In view of this situation, a recognised need has emerged for a shared, distributed, Internet-linked georesources observation system, based on open standards and interoperability developments, as a contribution to the sustainable development of African countries. □The Support Action is the preparatory phase needed to design the African-European Georesource Observation System (AEGOS) capable of hosting and providing access to Africa's geological resources, including groundwater, energy, raw materials and mineral resources. Its objectives are to define: i) operational procedures for data management (Spatial Data Infrastructure, metadata and data specification), ii) user-oriented products and services including the preparation of innovative spin off projects based on AEGOS and an evaluation of the input of Interoperability and interdisciplinary in support of GEOSS iii) the African- European partner network, iv) a geoscience contribution to GEOSS, in the context of INSPIRE

Partners:

N	Partner Legal Name	Country
1	BRGM	FR
2	Groupement Nature	BE
3	Czech Geological Survey	CZ
4	GEOLOGICAL SURVEY OF FINLAND	FI
5	centre international pour la formation et les échanges en géosciences	FR
6	Institut de Recherche pour le Développement	FR
7	Federal Institute for Geosciences and Natural Resources	DE
8	Beak Consultants GmbH	DE
9	Natural Environment Research Council	UK
10	Polish Geological Institute	PL
11	Netherlands Organisation of Applied Scientific Research	NL
12	Instituto Nacional de Engenharia, Tecnologia e Inovação, I.P.	PT
13	European Community represented by the European Commission - Directorate General Joint Research Centre	BE
14	The Southern and Eastern African Mineral centre	TZ
15	UNION ECONOMIQUE ET MONETAIRE OUEST AFRICAINE	BF
16	Geological Survey of Namibia	NA
17	COUNCIL FOR GEOSCIENCE	ZA
18	Geological Survey and Mines	UG
19	Direction des Mines et de la Geologie	SN
20	Geology Department, School of Mines, University of Zambia	ZM
21	Geological Survey of Ethiopia	ET
22	Institute of Resource Assessment	TZ

Important notice: Provisional data based on evaluation results and subject to modification (see Disclaimer)

Activity Code: ENV.2009.4.1.4.1. **Funding Scheme:** CSA-SA **Duration (Months):** 36

Title: GEO Network for Capacity Building

Proposed EC Grant: 999.992 €

Abstract:

The purpose of the GEO Network for Capacity Building (GEO-Net-CaB) project is to create the conditions for the improvement and increase of the GEO capacity building activities and framework, with special emphasis on developing countries, new EU member states (and EU neighbouring states) and climate monitoring and will serve the bigger goal of improved effectiveness and efficiency of GEO capacity building for application in the GEO societal benefit areas. Coinciding with this purpose, successful brokerage with (potential) clients for earth observation products and services will be facilitated. □□The project will deliver the following output: □1. □Capacity building needs in earth observation are identified (at a generic and global level, but with emphasis on the target regions). □2. □Specifications for earth observation capacity buildings are described. □3. □Resource providers are identified. □4. □Sustainable brokerage between stakeholders (including resource providers) is established. □5. □A mechanism to facilitate cooperation between stakeholders and providers is established. □6. □A global base of technical expertise for education and training in earth observation is established (with emphasis on developing countries, new EU member states and climate monitoring). □7. □Monitoring and evaluation mechanisms for determining the efficacy of GEO capacity building efforts are established. □□To achieve maximum impact demonstration projects will be carried out in Southern Africa, the French-speaking African region, Czechia and Poland, with spin-offs to EU neighbouring countries and Latin America and Asia. The project (with a duration of three years) will be carried out by a strong consortium of partners from the Netherlands, France, South Africa, Morocco, Czechia and Poland, supervised by an advisory board with worldwide representation and strong connections to GEO.

Partners:

N	Partner Legal Name	Country
1	STICHTING INTERNATIONAL INSTITUTE FOR GEO-INFORMATION SCIENCE AND EARTH OBSERVATION	NL
2	Centre National d'Etudes Spatiales	FR
3	INSTITUT DE RECHERCHE POUR LE DEVELOPPEMENT	FR
4	CENTRUM BADAN KOSMICZNYCH POLSKA AKADEMIA NAUK	PL
5	Karlova Universita, Přírodovědecká fakulta v Praze	CZ
6	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH	ZA
7	Centre Régional Africain des Sciences et Technologies de l'Espace - LF	MA
8	Umvoto Africa pty ltd	ZA

Activity Code: ENV.2007.4.1.4.3. **Funding Scheme:** CSA-SA **Duration (Months):** 36

Title: GEONETCast for and by Developing countries

Proposed EC Grant: 1.852.546 €

Abstract:

The DevCoCast project aims at involving Developing Countries in the GEONETCast initiative. Many Developing Countries are exposed to serious environmental risks and their need for adequate information is high. Unfortunately, reliable and continuous access to real time environmental information is often lacking. The GEONETCast concept overcomes existing telecommunication limitations and is able to provide reliable and fast access to environmental information. The DevCoCast project will

1. disseminate existing environmental added-value datasets (both in-situ and satellite based) from various sources in Africa, South- and Central America and Europe in (near) real time and at no cost via GEONETCast to a broad range of user communities in Developing Countries and
2. promote and support the use of these products.

By utilizing the existing EUMETCast dissemination system, we can directly take benefit from the operational infrastructures and from a well developed user base in Africa and South-America. This enables us to focus our effort on the support of the use of the data and building up and maintaining the capacity in Developing Countries which includes training, workshops, networking and outreach. The project sets up a number of pilot cases in Africa, South- and Central America and Asia and is conceived to have a big impact with a limited budget, by building upon existing production (SPOT-VEGETATION a.o.) and dissemination infrastructures (EUMETCast, FengYunCast), existing research projects (GEOLAND, VGT4AFRICA, MERSEA, GOOS, YEOS a.o.) and servicing all relevant environmental end-user communities. The ultimate ambition is to introduce and embed the GEONETCast data in a systematic manner into reporting systems in support of planning and decision making processes. This effort will enable authorities in Developing Countries in fulfilling their increasing monitoring and reporting obligations and help them to better manage their natural resources.

Partners:

N	Partner Legal Name	Country
1	Vlaams Instituut voor Technologisch Onderzoek NV	BE
2	African Centre of Meteorological Applications for Development	NE
3	Centre Régional Agrhymet	NE
4	Companhia Nacional de Abastecimento	BR
5	Centro de Relevamiento y Evaluación de Recursos Agrícolas y Naturales, Universidad Nac. de Cordoba	AR
6	CSIR	ZA
7	Danish Meteorological Institute	DK
8	Brazilian Agriculture Research Corporation	BR
9	European Organisation for the Exploitation of Meteorological Satellites	DE
10	Instituto Nacional de Pesquisas Espaciais	BR
11	Instituto Nacional de Tecnología Agropecuaria	AR
12	International Institute for Geo-Information Science and Earth Observation	NL
13	European Community represented by the European Commission - Directorate General Joint Research Centre	BE
14	University of Cape Town	ZA
15	MEDIAS	FR
16	Natural Environment Research Council	UK
17	Plymouth Marine Laboratory	UK
18	Southern Africa Development Community (SADC)	BW
19	UNIVERSIDADE ESTADUAL DE CAMPINAS	BR

Activity Code: ENV.2007.4.2.3.2. **Funding Scheme:** CSA-CA **Duration (Months):** 24

Title: Integrating civil, scientific and stakeholder knowledge towards African sustainable energy policy

Proposed EC Grant: 548.832 €

Abstract:

Sustainable development is closely linked to the issues of Environment and Energy and their interdependencies. Sustainable economic growth and social development are only possible if secure, constant and equal access to energy sources is guaranteed. However, intensive energy use is likely to present serious implications for the environment and the climate. Especially in developing countries, promotion of sustainable energy options is necessary to tackle these challenges. In Africa, Civil Society Organisations (CSO) have been particularly active in addressing sustainable development and energy management within the last 15 years. While presenting important representatives for social needs and concerns, their effective impact on research policy agenda setting has however been considerably low yet. In line with the EU's commitments to strengthening civil participation and to promoting a global approach to the issue of sustainable development, SustainergyNet aims at promoting the engagement of CSOs in Africa in the field of research policy agenda setting concerning sustainable and efficient energy management. In this perspective, the project will elaborate and suggest ways on how to encourage and facilitate the cooperation between CSOs and RTD performers. This will be based on the assessment of current settings and frameworks that already exist, the formulation of recommendations and best practices and the presentation of a specific facility ("CSO Involvement Net") that shall support CSOs towards actively contributing to research and policy processes.

Partners:

N	Partner Legal Name	Country
1	Organisation for International Dialogue and Conflict Management	AT
2	Groupe de recherche et d'échanges technologiques (GRET)	FR
3	Österreichisches Institut für Internationale Politik	AT
4	Technische Universität Dresden	DE
5	AFREPREN/FWD Energy , Environment and Development Network for Africa	KE
6	Cairo University/ Institute of African Research and Studies	EG
7	Université de Yaoundé II/Faculté de Sciences Juridiques et Politiques/ Département de Science Politique	CM

Activity Code: ENV.2009.5.1.0.2. **Funding Scheme:** CSA-SA **Duration (Months):** 49

Title: KNOWledge from Science to SOcieties

Proposed EC Grant: 868.500 €

Abstract:

KNOSSOS seeks to address the gap between science and society in the field of environmental research with a focus on policy makers and civil society, who are the main recipients of the project. We propose to take stock of available research results that are useful for policy-making. KNOSSOS will then add a knowledge management system, with innovative tools to guarantee fast and easy access to relevant information. This initial phase will also yield collaborative workshops on evidence-based policy making and training for policy makers in the field of environmental research. KNOSSOS puts an emphasis on disseminating research findings beyond Europe: through a number of 'Knowledge Fairs' as side events of international conferences, but also by including DG Research findings in one of the world's largest collections of Environmental Science Research, the Online Access to Research in the Environment (OARE). In order to ensure swift uptake of European environmental research into policy making, KNOSSOS, with its partner The Club of Rome, will issue monthly policy briefs for European, national and international policy makers. Aiming for enhanced visibility of European environmental science, KNOSSOS will appoint Environmental Science Ambassadors to the EU member states, endowed with a mission to raise public awareness about emerging environmental issues. KNOSSOS' strength lies in the composition of its consortium: UNEP, the world's leading environmental authority, joins forces with the Club of Rome, a renowned think tank with an strong reputation in giving policy advice; and with GLOBE EU/Europe, an excellent partner in training policy-makers and disseminating deliverables. KNOSSOS will have an impact on both policy makers and civil society in and beyond Europe. Our goal is to make European environmental science not only understandable, but also actionable and a preferred reference for all who seek information to pressing ecological questions of our time.

Partners:

N	Partner Legal Name	Country
1	United Nations Environment Programme	KE
2	The Club of Rome - European Support Centre	AT
3	GLOBE EU	BE
4	GLOBE Europe	BE