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Coláiste na hOllscoile Corcaigh



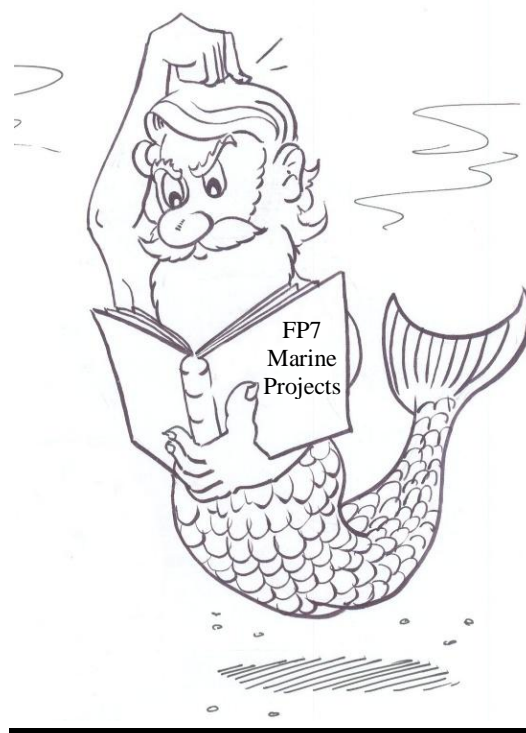
The 7<sup>th</sup> EU Framework Programme  
2007 – 2013



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## Irish participation in EU FP7 (2007-2013) funded competitive marine research projects

# 2009 Supplement



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**January 2010**

**O'Sullivan, G. & S. Twomey.**  
**Marine Institute – International Co-Operation Team**



## ABSTRACT

The EU Framework Research Programme (FP), and in the current context the 7<sup>th</sup> Framework Programme (FP7: 2007-2013), continues to be a major source of competitive R & D funding for Irish marine researchers.

The 2009 Supplement provides information on new FP7 research awards granted in 2009 to Irish marine researchers and up-dates the 2007-2008 Report published in June 2009.

Seventeen research projects are profiled including three 2008 awards (STANDPOINT, WAVETRAN II and AIRSEA) and fourteen 2009 awards bringing total participation in FP7 over the period 2007 to 2009 to 43 projects worth over €17.5 million in grant-aid. This figure is already in excess of the €10.6m (59) projects won in the FP6 (2002-2006) Programme and represents 11.5% of the total Irish drawdown to-date (FP7: 2007-2009) of €152.7million.

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Cover cartoon by *Sci-Art*.

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# Introduction

The EU Framework Research Programme (FP), and in the current context the 7<sup>th</sup> Framework Programme (FP7: 2007-2013), continues to be a major source of competitive R & D funding for Irish marine researchers.

This 2009 Supplement provides information on new FP7 research awards granted in 2009 to Irish marine researchers and up-dates the 2007-2008 Report published in June 2009<sup>1</sup>.

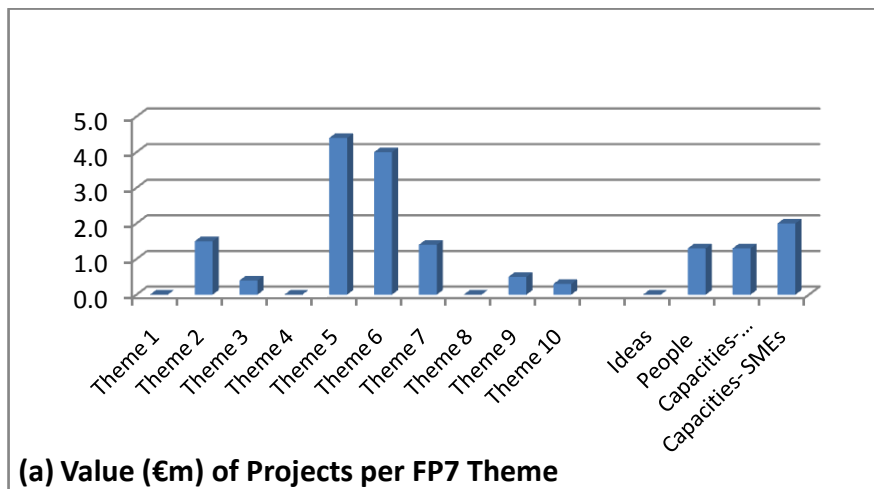
Seventeen new marine research projects are profiled including:

- One Energy Project (STANDPOINT) and two 2008 People Programme Awards (WAVETRAIN II and AIRSEA) and omitted from the 2007-2008 Report (total grant-aid: €2.37 million).
- Fourteen new 2009 awards spanning six sub-programmes (grant-aid: €4.26m).
- Four Research for the Benefit of SME projects are listed (omitted from the 2007-2008 Directory - €1.8 million).

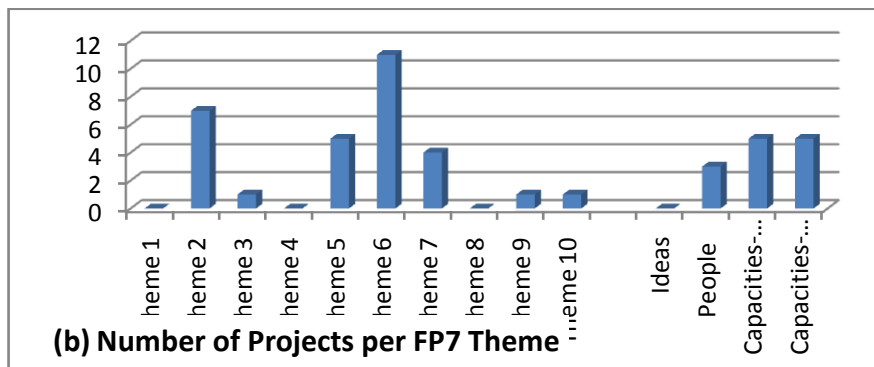
## Some Facts & Figures

- Irish researchers are currently involved in **43 FP7 collaborative marine research projects** worth over €182 million in EU grant-aid with **€17.5 million** accruing to the Irish partners.

### Participation by Sectoral Programme



(a) Value (€m) of Projects per FP7 Theme



(b) Number of Projects per FP7 Theme

Irish marine researchers:

- are performing well in Themes 5 (Energy), 6 (Environment), 2 (Food, Agriculture, Fisheries & Biotechnology) and 7 (Transport) Programme.
- are also involved in successful projects under Theme 3 (ICT), 9 (Security), 10 (Space) and the PEOPLE Programme.
- have yet to tap into Theme 1 (Health); 4 (NanoSciences), 8 (Socio-Economics) and the IDEAS Programme.
- have competed well in the **CAPACITIES Programme** winning five projects under the *Infrastructures* Sub-Programme and five under the *Research for the Benefit of SMEs* Sub-Programme

<sup>1</sup> Irish participation in EU FP7 funded competitive marine research projects during the period 2007-2008

## The Performers

- Thirty two Irish research groups are identified including: three public research institutes (Marine Institute, Geological Survey of Ireland, Central Fisheries Board); four Third Level institutions (UCC, NUIG, UL, Dundalk IT); 21 SMES and four Associations (See Annex 2).
- Irish research institutions/organizations are leading four EU FP7 marine Projects: CORES (HMRC-UCC); CORALFISH (NUIG); MABFUEL (DOMMS Ltd) and MarineTT (AquaTT).
- The breakdown of the €17.5 million grant-aid is as follows: Public Research Institutes (14%); Third Level Sector (31%); SME's (44%); Associations (11%).
- The current top performers are: University College Cork (€3.9 million - 23%); Marine Institute (€2.1m - 12%); Wavebob Ltd (€1.8m- 11%); Nautical Enterprise Centre (Cork) Ltd (€1.3 million - 8%); National University of Ireland, Galway (€1.2 million - 7%) and AquaTT (1.2 million - 7%).
  - The **Hydraulics and Maritime Research Centre (HMRC-UCC)** is performing particularly well in Renewable Ocean Energy Projects under Theme 5 (Energy) where it is leading the CORES project and is a partner four other ocean energy projects (EQUIMAR, MARINA, ORECCA, WAVETRAIN II: grant-aid: €2 million).
  - The **Coastal and Marine Resources Centre (CMRC-UCC)** is also performing well, being involved in the COEXIST, CORALFISH, MESMA, KNOWSEAS, GEO-SEAS and EELA-2 projects (Grant-aid: €1.1 million).
  - The **Nautical Enterprise Centre (Cork) Ltd.** continues to do well in Theme 6 (Transport) adding the SUPPORT project to the three they are already involved in (PROPS, SKEMA, E-Freight: Grant-aid: €1.3 million).

## New Entrants:

- **AquaTT**, an aquaculture training and technology transfer network established by UCC and NUI-Galway (<http://www.aquatt.ie>), brings its expertise in outreach and communications to four FP7 projects (COEXIST, AQUAMED, Aqualnova, Marine TT) securing grant-aid of over €1.2m.
- The **Tyndall National Institute (UCC)** is participating for the first time in a marine project in the Theme 3 (ICT) project on the development of robotic fish for pollution monitoring (SHOAL).
- The Galway-based **Marine Law and Ocean Policy Research Centre Services Ltd** has secured funding (€393,744) in relation to marine ecosystem management under the ODEMM project.

## Pushing the geographical frontiers!

- AquaTT is providing outreach and communications services to the Mediterranean Sea project AQUAMED, while the CMRC-UCC is providing IT and database management expertise to the South American EELA-2 project.

## Areas needing improvement

- Three Cooperative Research Themes: Theme 1 (Health); Theme 4 (NanoSciences) and Theme 8(Socio-Economics) have yet to be tapped by the Irish marine research community.
- The **PEOPLE** (Marie Curie) Programme, particularly as it supports bottom up research, provides great opportunities for marine research. To-date in FP7, while Irish researchers have had great success (97 projects - €27 million in grant-aid to Irish researchers), only three involve Irish marine researchers (WAVETRAIN II, MABFUEL, AIRSEA: grant-aid: €1.3 million).
- To-date, no marine project with Irish participation has succeeded under the **IDEAS** (European Research Council) Programme (or to our knowledge has one been submitted).

## Overall Performance

Over the period 2007 to 2009, Irish marine researchers are involved in **43 marine projects** drawing down grant-aid in excess of **€17.5million**.

This figure is already in excess of the €10.6m (59 marine projects) won in the FP6 (2002-2006) Programme<sup>2</sup> and represents over 11.5% of the total Irish drawdown to-date (2007-2009) across all sectors of €152.7million<sup>3</sup>.

## Useful References.

Marine Institute (2009). Irish participation in EU FP7 funded competitive marine research projects during the period 2007-2008. Marine Institute (June 2009). 35pp.

Marine Institute (2007). Oceans of Opportunity II: Review of Irish participation in EU FP6 Marine Research Projects 2002-2006. Marine Institute (April 2007). 76pp.

The above reports are available in PDF from:

[www.marine.ie/home/publicationsdata/publications/Special+Reports.htm](http://www.marine.ie/home/publicationsdata/publications/Special+Reports.htm)

## Other Sources of Information.

CORDIS FP7 Projects Database: [http://cordis.europa.eu/fp7/projects\\_en.html](http://cordis.europa.eu/fp7/projects_en.html)

EU FP7 Open Calls Web:

<http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.FP7CallsPage&rs>

EuroOCEAN EU Projects Database: <http://www.mapinfobase.eurocean.org/>

Marine Institute International Funding Web-site:

<http://www.marine.ie/home/funding/InternationalFunding/>

National FP7 Support Office: <http://www.fp7ireland.com/contacts.aspx>

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<sup>2</sup> Marine Institute (2009). Irish participation in EU FP7 funded competitive marine research projects during the period 2007-2008. Marine Institute (June 2009). 35pp

<sup>3</sup> Fourth Amalgamated Results of Irish participation in FP7. Irish FP7 Support Office (December 2009).





# STANDPOINT- Standardisation of Point Absorber Wave Energy Convertors by Demonstration

## Project Details

Funding Programme:	7 <sup>th</sup> Framework Programme (FP7)
Sub-Programme:	Cooperation, Theme 5: Energy
Funding Scheme:	Collaborative project
Project Duration:	2008- 2011
Total Project Value:	€ 8,499,534
EU Grant-Aid:	€ 5,096,653
Funding to Ireland:	€ 2,053,012
Website:	Not currently available



## Project Description

In contrast to other renewable energy sources, wave energy conversion is currently at a stage of evolution where it is being demonstrated using a wide range of very diverse technologies and a *de facto* standard approach is yet to emerge.

A fully functional, but reduced scale (5.5m diameter) prototype Wavebob wave energy converter (WEC) has already been deployed in the Atlantic Ocean for in excess of 3000 hours. **STANDPOINT** will seek to demonstrate this WEC technology at full size for a further long term Atlantic Ocean deployment, 18 months of which will occur within the timeframe of the **STANDPOINT** project. Unlike its smaller-scale predecessor, it is intended that this pre-commercial WEC will be grid-connected. The intended location for the deployment is off the Portuguese coast. The indicative dimensions of the WEC for a full-scale deployment in this part of the Atlantic are 18m diameter, 40m draft. The WEC will have an output of 1.2MW from 4 power take-off (PTO) sets: three using proven hydraulic technology and one using a newly developed and innovative linear generator technology.

There are 12 partners from 7 member states, including a Certification Body who will develop and disseminate rules and guidelines from wave energy convertors. Innovative SMEs (including the coordinator) will demonstrate recently patented technology, in which they lead the state-of-the-art. A large power generation company, wave energy research organizations and naval architects will work together to implement this ambitious full-scale demonstration. The aim is to establish the offshore tuneable-resonance point absorber as the winning wave energy conversion technique by demonstrating the superiority of its power take-off technology, adaptability to changing sea conditions, reliability and survivability.

Project Partners	
Project Coordinator	Wavebob Ltd, Ireland
Spain	WEDGE GLOBAL, Madrid
Portugal	Genenerg GND, Lisbon
Germany	Germanischer Lloyd Industrial Services GMBH, Hamburg Hydac System GMBH, Sulzbach
Sweden	Vattenfall AB, Stockholm

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## WAVETRAIN II - Initial training network for wave energy research professionals

### Project Details

Funding Programme:	7 <sup>th</sup> Framework Programme (FP7)
Sub-Programme:	People Programme
Funding Scheme:	Multinational Training Network
Project Duration:	2008 - 2012
Total Project Value:	€ 3,580,000
EU Grant-Aid:	€ 3,580,000
Funding to Ireland:	€ 223,197
Website:	<a href="http://www.wavetrain2.eu">www.wavetrain2.eu</a>



### Project Description

The WAVETRAIN II action builds strongly upon the logics of its predecessor the FP6 WAVETRAIN I project. The overall objective is to create a pool of specialised wave energy research professionals to support an emerging industry in a field with a very strong anticipated growth and no dedicated existing training curriculum. Although most jobs can be done with a trained engineer in one of the adjacent fields, the existence of interdisciplinary skilled researchers trained in direct connection to the technology development is vital for successful development.

In the predecessor, almost all research fellows were immediately absorbed by industrial players in the field or continued research in the host institution. The work plan for WAVETRAIN 2 research fellows is specifically directed towards a wide range of challenges that industrial-scale wave energy implementation faces in the present situation, with some bias towards technical issues, from hydrodynamic and PTO (Power-Take-Off) design, to instrumentation issues and energy storage and cost reduction show to be critical for successful deployment.

<b>Project Partners</b>	
Project Coordinator	Wave Energy Centre, Lisbon - (Centro de Energia das Ondas), Portugal
Ireland	HMRC-University College Cork
Denmark	Aalborg University Spok Consult
Netherlands	Delft University of Technology
Portugal	Higher Technical Institute of Lisbon
Spain	Robotiker Foundation
UK	Wave Dragon Ltd. AWS Ocean Energy Ltd. Queen's University Belfast The University of Edinburgh

### Irish Contact

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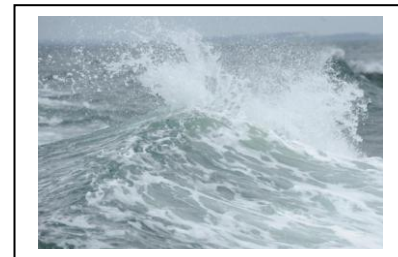
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[www.hmrc.ucc.ie](http://www.hmrc.ucc.ie)



# AIRSEA - Air-sea fluxes of climatically relevant gases in the marine atmospheric boundary layer

## Project Details

Funding Programme: 7<sup>th</sup> Framework Programme (FP7)  
 Sub Programme: People Programme  
 Funding Scheme: Reintegration Grant  
 Project Duration: 2008- 2012  
 Total Project Value: € 100,000  
 EU Grant-Aid: € 100,000  
 Funding to Ireland: € 100,000  
 Website: Not currently available



## Project Description

Climate change is one of the greatest environmental challenges today with the potential to significantly alter how we live. It is largely attributable to human activity where greenhouse gases (GHG) are released into the atmosphere. The oceans exert a considerable influence on the atmosphere by absorbing a large fraction of GHGs, but there remain large uncertainties in the GHG budget. This underscores the importance of conducting research concerned with air-sea gas fluxes in order to work toward a reduction in these uncertainties.

The scientific objectives of this reintegration grant are to simultaneously measure the fluxes of climatically relevant compounds in both the coastal and oceanic marine atmospheric boundary layer. The proposed species are carbon dioxide, methane, nitrous oxide, and carbon monoxide. All species will be detected at 1-10 Hz, which will allow for fluxes to be directly determined using the eddy correlation method. This proposed method takes advantage of recently-developed trace gas analyser (TGA) technology. The TGA will be deployed at the Mace Head Research Station where a time series over several years will be acquired. The system will also be deployed periodically on research vessels to compare the magnitude of the fluxes in the coastal regions with open ocean data. This measurement will be one of the first of its kind deployed in the marine atmospheric boundary layer and will provide an invaluable time series of the fluxes over an extended period.

The Returning Research Fellow (Dr Brian Ward) has spent the previous 7 years as a fulltime researcher in the field of air-sea exchange in the USA, where he has established a level of excellence in conducting research in this field. Funding from the IRG programme will facilitate the establishment of a similar research programme in Europe.

<b>Project Partners</b>	
Project Coordinator	National University of Ireland, Galway (Ireland)

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# ECOKNOWS- Effective use of ecosystems and biological knowledge in fisheries

## Project Details

Funding Programme: 7<sup>th</sup> Framework Programme (FP7)  
 Sub-Programme: Theme 2: Food, Agriculture, Fisheries and Biotechnology  
 Funding Scheme: Small or medium-integrated project  
 Project Duration: 2009-2013  
 Total Project Value: € 3,731,381  
 EU Grant-Aid: € 2,993,621  
 Funding to Ireland: € 119,637  
 Website: Not currently available



## Project Description

The general aim of the ECOKNOWS project is to improve knowledge in fisheries science and management. The lack of appropriate calculus methods and fear of statistical over partitioning in calculations, because of the many biological and environmental influences on stocks, has limited reality in fisheries models. This reduces the biological credibility perceived by many stakeholders. ECOKNOWS will solve this technical estimation problem by using an up-to-date methodology that supports more effective use of data. The models will include important knowledge about biological processes. The applied statistical inference methods will allow this knowledge to be integrated when updating stock assessments and importantly calculate the probability of the assessment. The project will use basic biological data (such as growth, maturity, fecundity, maximum age and recruitment data sets) to estimate general probabilistic dependencies in fish stock assessments. In particular it will seek to improve the use of large existing biological and environmental databases, published papers and survey data sets provided by EU data collection regulations and stored by ICES and EU member countries and the extensive information present in FishBase ([www.fishbase.org](http://www.fishbase.org)). Bayesian inference will form the methodological backbone of the project and will enable realistic estimations of uncertainty. The developed methodology will be of importance for implementation of the Ecosystem Approach to Fisheries Management. This has been a difficult challenge for species with long data series, and now the same challenge is given for new and poorly studied species. A Bayesian approach, which enables the incorporations of biological knowledge with data analysis, will improve ways of finding generic and understandable biological reference points, such as the required number of spawning times per fish, and supports management needs in the developing countries. Target species including Clupeoids in the Baltic and Atlantic, Atlantic and Baltic Salmon, Anchovy in the Western Mediterranean and adjacent Atlantic, European hake and shrimp of the Baltic and Norwegian Deep.

<b>Project Partners</b>	
Project Coordinator	University of Helsinki (Finland)
Ireland	Marine Institute
Canada	Fisheries and Oceans Canada
Denmark	International Council for the Exploration of the Sea (ICES)
Finland	Finnish Game and Fisheries Research Institute
	Abo Akademi University
	University of Turku
Greece	Aristotle University of Thessaloniki
Philippines	FishBase Information & Research Group Inc.
Spain	Spanish National Research Council

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Sweden	Swedish Board of Fisheries
United Kingdom	Imperial College of Science, Technology and Medicine



# COEXIST - Interaction in Coastal Waters: A Roadmap to sustainable integration of aquaculture and fisheries

## Project Details

Funding Programme: 7<sup>th</sup> Framework Programme (FP7)  
 Sub-Programme: Theme 2: Food, Agriculture, Fisheries and Biotechnology  
 Funding Scheme: Small to medium integrated project  
 Project Duration: 2009-2012  
 Total Project Value: € 3,747,473  
 EU Grant-Aid: € 2,995,500  
 Funding to Ireland: € 642,024  
 Website: Not currently available



## Project Description

Coastal areas are subject to an increase in competing activities and protection (Natura 2000, Marine Strategy Framework Directive) and are a source of potential conflict for space allocation. COEXIST is a broad, multidisciplinary approach to evaluate these interactions with the ultimate goal of providing a roadmap to better integration, sustainability and synergies among different activities in the coastal zone. The COEXIST project will:

2. Study the interactions between capture fisheries and aquaculture and evaluate mutual benefits and possible bottlenecks for concomitant development of these activities in the coastal zone within the context of the ecosystem approach to management.
3. propose, develop and evaluate the efficiency of spatial management tools (zoning, closed area, etc.) to promote different forms of coastal aquaculture and fisheries at different scales and will exploit mutual opportunities such as artificial reefs, protected areas, wind farms and tourism within a context of competition for space by multiple users.
4. Address differences in acceptance of activities including fisheries, aquaculture, and other uses of the coastal zone by the society.
5. Provide a detailed strategy for communication and involvement of stakeholders and for the dissemination of results to general and targeted audiences.

By these actions, COEXIST will support the new European Integrated Maritime Policy and spatial planning of coastal areas. Case studies, supported by national projects, will be used to provide data for further analysis through the integrated work packages. This will include detailed comparative analyses and integrated models for the regional seas, as well as a synthesis on the European Scale. COEXIST will address interactions on a biological, biogeochemical, and socio-economic level, as well as the governance and legal aspects.

<b>Project Partners</b>	
Project Coordinator	Institute of Marine Research (IMR), Bergen, Norway
Ireland	University College Cork - CMRC Aqua TT Ltd.
Denmark	Technical University of Denmark
Finland	Finnish Game and Fisheries Research Institute (FGFRI)
France	French Research Institute for the Exploration of the Sea (IFREMER)
Germany	Johann Heinrich Von Thuenen Institute-, Federal Research Institute for Rural Areas, Forestry and Fisheries

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Netherlands	Agricultural Economics Research Institute B.V.
Portugal	National Institute of Biological Resources (INRB) Institute of Marine Research
Sweden	National Board of Fisheries
United Kingdom	The Secretary of State for Environment, Food and Rural Affairs (DEFRA)



# AQUAMED- The future of research on aquaculture in the Mediterranean region

## Project Details

Funding Programme: 7<sup>th</sup> Framework Programme (FP7)  
 Sub-Programme: Theme 2: Food, Agriculture, Fisheries and Biotechnology  
 Funding Scheme: Coordination and Support Action  
 Project Duration: 2009-2012  
 Total Project Value: € 996,854  
 EU Grant-Aid: € 996,854  
 Funding to Ireland: € 132,894  
 Website: Not currently available



## Project Description

The fast development of the Mediterranean freshwater and marine aquaculture sector is confronted with a set of difficulties including, inadequate production systems and competitiveness, interaction and space competition with other users and the need for proper integration in the coastal zones, as well as possible negative impacts on the environment and a negative image of the product quality. Aquaculture development in this region is contrasted in terms of the importance of the sector, domestic market demand, typology of the industry, research and development structures and capacities. Consequently, there is a need for a knowledge-based development strategy for this activity to be implemented using a flexible and concerted approach. In order to deliver practical results, the AQUAMED project will be based on a four-step process consisting of: (1) mapping and setting a database of all relevant information (including policies, research, socio-economics) in each partner country, (2) identifying common situations and constraints between countries, (3) grouping countries confronted by similar driving forces in order to foster information exchanges and formulate more focused science-based recommendations, and (4) setting up a multi-stakeholder platform to promote a research organization and a revolving implementation plan aimed at the sustainable development of aquaculture. The platform will be organized to be self-sustainable after the end of the project. It will be instrumental to rationalizing research programming in order to avoid duplication, fragmentation and dispersion of research efforts, and to stimulate a long-term cooperation and coordination among policy makers, the aquaculture industry and the RTD performers in the region. The project consortium, covering most of the situations of the aquaculture sector in the Mediterranean, will put the emphasis on the participatory approach, the dissemination of the outcomes of the AQUAMED activities and the sustainability of the multi-stakeholder platform.

<b>Project Partners</b>	
Project Coordinator	European Fisheries and Aquaculture Research Organisation (EFARO), France
Ireland	Aqua TT Ltd
Algeria	University of Annaba- Research Laboratory of Marine Bioresources
Croatia	Institute of Oceanography and Fisheries
Egypt	National Institute of Oceanography and Fisheries
France	National Centre for Scientific Research (CNRS)
Israel	The Agricultural Research Organisation of Israel- The Volcan Centre
Lebanon	Institute of Oceanography and Fisheries

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Morocco	National Institute for Fisheries Research (NHRI)
Tunisia	National Institute of Science and Technology of the Sea
Turkey	Ministry of Agriculture and Rural Affairs-General Directorate of Agricultural Research, Central Fisheries Research Institute



# Aqualnova- Supporting governance and multi-stakeholder participation in aquaculture research and innovation

## Project Details

Funding Programme: 7<sup>th</sup> Framework Programme (FP7)  
 Sub-Programme: Theme 2: Food, Agriculture & Fisheries and Biotechnology  
 Funding Scheme: Coordination and Support Action  
 Project Duration: 2009- 2012  
 Total Project Value: € 989,281  
 EU Grant-Aid: € 989,281  
 Funding to Ireland: € 179,455  
 Website: Not currently available



## Project Description

The Aqualnova Project seeks to establish an operational framework for dialogue (based on best governance practices) between the aquaculture industry, the research community and policy makers, focusing on exploiting the potential for innovation and technological development in the European aquaculture value chain. It will actively promote the exploitation, dissemination and communication of Community aquaculture RTD research actions and results, looking to improve the manner in which the knowledge generated is efficiently and effectively managed, disseminated and transferred. This will be achieved using expert groups working on different thematic areas of aquaculture and developing innovative methodologies for gap analysis and problem solving. These will be supported by sectoral benchmarking documents. Draft Vision Documents and Strategic Research Agendas will be the subject of multi-stakeholder consultation in regional workshops. Dissemination materials will include new technical summaries on Community RTD and an interactive assessment of the benefits of RTD projects. Active dissemination actions will include consumer organizations, CSOs and the professional and research communities. Improving knowledge transfer and uptake is a core component, applying effective communication channels, tools and resources for maximum impact. Aqualnova will develop and provide a structured and operational platform that will facilitate networking and consultation, while providing consensus on the associated Vision Documents, Strategic Research Agendas and Action Plans for implementation.

<b>Project Partners</b>	
Project Coordinator	European Aquaculture Technology and Innovation Platform, Belgium
Ireland	Aqua TT Ltd.

## Irish Contacts

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# SHOAL - Search and Monitoring of Harmful contaminants, other pollutants and leaks in vessels in port using a swarm of robotic fish

## Project Details

Funding Programme: 7th Framework Programme (FP7)  
 Sub-Programme: Theme 3: ICT Programme  
 Funding Scheme: Collaborative project  
 Project Duration: 2009- 2012  
 Total Project Value: € 4,230,000  
 EU Grant-Aid: € 2,750,000  
 Funding to Ireland: € 442,863  
 Website: Not currently available



Underwater detectives on the hunt for pollutants  
 Photo: UPPA

## Project Description

The aim of the SHOAL project is to develop robotic fish that can monitor pollution in ports. The robotic fish will be equipped with chemical sensors to find pollutants in the water and modems to create an ad hoc network for communication with a shoal of fish. This will allow the shoal of fish to build up a broad map of pollutants moving through the port in real-time, whilst adapting to changes in environmental conditions in the port. The established methods for the detection of pollutants in waters are based on sampling and analysis of discrete water samples. The analysis is performed in laboratories located remotely away from the sampling sites and frequently the chemical analysis is personnel-dependent, time-consuming and expensive. Specific aims within SHOAL are to explore and develop novel chemical sensor subsystems which can be integrated with the overall robot concept being developed. Thus miniaturized sensors and sensor arrays as well as novel membrane strategies for provision of chemical sensitivity and anti-fouling behaviour are being examined. Given that the state-of-the-art is all lab-based methods, the proposed suggestions will go far beyond the state-of-the-art by implementing these lab-based methods *in situ* on board the robotic fish.

<b>Project Partners</b>	
Project Coordinator	BMT Group LTD., UK
Ireland	Molecular Microsystems, Tyndall National Institute
France	Thales Safari
Spain	Port Authority of Gijon
United Kingdom	University of Essex University of Strathclyde

## Irish Contacts

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# MARINA Platform- Marine Renewable Integrated Application Platform

## Project Details

Funding Programme: 7<sup>th</sup> Framework Programme (FP7)  
 Sub-Programme: Theme 5: Energy  
 Funding Scheme: Large scale integrated project  
 Project Duration: 2009-2013  
 Total Project Value: € 12,865,513  
 EU Grant-Aid: € 8,733,066  
 Funding to Ireland: € 789,750  
 Website: Not currently available



## Project Description

The MARINA project is a pan-European project dedicated to bringing offshore renewable energy applications closer to the market by creating new infrastructures for both offshore wind and ocean energy converters. It addresses the need for creating a cost-efficient technology development basis to kick-start growth of the nascent European marine renewable energy (MRE) industry in the deep offshore - a major future global market. The project combines deep-water engineering experience from European oil and gas developments during the last 40 years, state-of-the-art concepts for offshore wind energy and the most promising concepts in today's R&D pipeline on wave energy and other marine renewable.

Project Coordinator	Acciona Energy S.A., Spain
Ireland	HMRC- University College Cork.
Belgium	1-Tech s.p.r.l
Denmark	DONG Energy Power A/S Technical University of Denmark
France	Technip France Ecole Centrale de Nantes
Greece	National University of Athens
Italy	Progeco S.r.l.
Netherlands	Corrosion & Water-Control bv
Norway	Norwegian University of Science and Technology (NTNU) StatoilHydro ASA
Portugal	University of Algarve
Spain	Robotiker Foundation
United Kingdom	The University of Edinburgh

### Irish Contact

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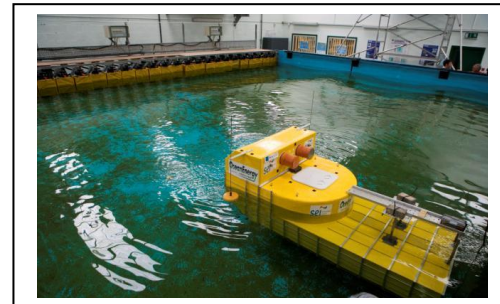
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# ORECCA- Off-shore Renewable Energy Conversion platforms- Coordination Action

## Project Details

Funding Programme: 7<sup>th</sup> Framework Programme (FP7)  
 Sub-Programme: Theme 5: Energy  
 Funding Scheme: Small to medium integrated project  
 Project Duration: 2009-2011  
 Total Project Value: €1,599,621  
 EU Grant-Aid: €1,599,621  
 Funding to Ireland: € 84,000  
 Website: Not currently available



## Project Description

The ORECCA project aims to create a framework for knowledge sharing and to develop a research roadmap for activities in the context of offshore renewable energy (RE). In particular, the project will stimulate collaboration in research activities leading towards innovative, cost efficient and environmentally benign offshore RE conversion platforms for wind, wave and other ocean energy resources, for their combined use as well as for the complementary use such as aquaculture and monitoring of the sea environment. ORECCA will overcome the knowledge fragmentation existing in Europe and stimulate the key experts to provide useful inputs to industries, research organizations and policy makers (stakeholders) on the necessary next steps to foster the development of the ocean energy sector in a sustainable and environmentally friendly way.

<b>Project Partners</b>	
Project Coordinator	Fraunhofer Institute for Wind Energy and Wind Technology, Germany
Ireland	HMRC- University College Cork.
Canada	University of Waterloo
Denmark	Technical University of Denmark
Italy	ERSE- ENEA Research on the Electrical Systems Enel Produzione. S.P.A. Polytechnic Foundation of Milan Trevi S.p.A Ciaotech Srl Rina Industry S.p.A. National Energy Technology Cluster
Netherlands	Blue H Technologies BV Ecofys International BV Netherlands Energy Research Foundation (ECN)
Norway	Fred. Olsen Ltd. National University of Science and Technology
Portugal	National Laboratory for Energy and Geology
Spain	Facilities Inabensa, S.A.

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	<p>Institute of Technology and Renewable Energy</p> <p>University of Oviedo</p> <p>Lyse Produksjon AS</p> <p>Energy Institute of Galicia</p>
U.S.A.	National Renewable Energy Laboratory
United Kingdom	<p>Offshore Wave Energy Ltd.</p> <p>Environmental Research Institute, North Highland College</p> <p>Garrad Hassan and Partners Ltd.</p> <p>IT Power Ltd.</p> <p>The University of Edinburgh</p>



# MarineTT- European Marine Research Knowledge Transfer and Uptake of Results

## Project Details

Funding Programme: 7<sup>th</sup> Framework Programme (FP7)  
 Sub-Programme: Theme 6: Environment (including Climate Change)  
 Funding Scheme: Coordination and Support Action  
 Project Duration: 2009-2011  
 Total Project Value: € 919,977  
 EU Grant-Aid: € 919,977  
 Funding to Ireland: € 593,455  
 Website: Not currently available



## Project Description

MarineTT is premised on the concept that knowledge is a major source of competitive advantage in business. Much potentially valuable knowledge, locked into inaccessible or non-user-friendly contexts, is unused because key stakeholders are not aware of its existence. Marine TT is primarily concerned with marine environmental research, but the approach used will facilitate coverage of other themes (e.g. climate change, biodiversity, earth observation, and urban development) and important sub-topics (such as fisheries and aquaculture) to be included, given their relevance to the key area of the impacts of economic growth leading to environmental degradation and the current ecosystem management approach supported by the EC.

MarineTT will use the existing EurOcean ([www.eurocean.org](http://www.eurocean.org)) Info-base of European marine research funded projects as its initial basis, extending its functionality by introducing critical missing fields, making it a more efficient tool, focusing on knowledge outputs rather than a simple listing of research projects. The profiles will be updated to include stated aims and objectives versus actual outputs, research performers, research outcomes, research methodologies (effective and/or ineffective), products, and other relevant information. This knowledge can then be discharged through encouraging and accelerating commercial application of research results, through facilitating the transfer of knowledge for policy and senior decision makers and through the promotion of research results to the public at large.

MarineTT will make a real contribution to the call for improved access to EU research results for industry, multipliers, the civil society, and policy-makers. The project is divided into three phases: (1) Collect and Understand: refining and improving databases (2) Analyse (cost and benefit) and Consult with key stakeholders; and (3) Transfer and Connect: effective knowledge transfer.

<b>Project Partners</b>	
Project Coordinator	Aqua TT Ltd., Ireland
Portugal	EurOcean

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# ODEMM- Options for Delivering Ecosystem-Based Marine Management

## Project Details

Funding Programme:	7 <sup>th</sup> Framework Programme (FP7)
Sub-Programme:	Theme 6: Environment (including Climate Change)
Funding Scheme:	Large scale integrated project
Project Duration:	2009- 2013
Total Project Value:	€ 8,889,821
EU Grant-Aid:	€ 6,997,694
Funding to Ireland:	€ 519,435
Website:	Not currently available



## Project Description

The overall aim of the ODEMM project is to develop a set of fully-costed ecosystem management options that would deliver the objectives of the Marine Strategy Framework Directive (MSFD), the Habitats Directive (HD), the European Commission Blue Book and the Guidelines for the Integrated Approach to Maritime Policy.

This will be achieved by: (i) providing a comprehensive knowledge base to support policy for the development of sustainable and integrated management of European marine ecosystems; (ii) developing Operational Objectives to achieve the High-Level Policy Objectives set by the MSFD and HD, and with reference to the proposed Maritime Policy; (iii) identifying Management Options (individual management tools and combinations of tools) to meet the Operational Objectives; (iv) providing a risk assessment framework for the evaluation of Management Options to assess the risk associated with different options; (v) conducting a cost-benefit analysis of a range of Management Options using appropriate techniques; (vi) identifying stakeholder opinions on the creation of governance structures directed towards implementation of the ecosystem approach and to elaborate different scenarios for changing governance structures and legislation to facilitate the gradual transition from the current fragmented approach towards fully integrated ecosystem management; (vii) documenting the steps necessary for the transition from the current fragmented management scheme to a mature and integrated approach and providing a toolkit that could be used to evaluate options for delivering ecosystem-based management; and (viii) communicating and consulting on the outcomes of the project effectively with policy makers and other relevant user groups.

<b>Project Partners</b>	
Project Coordinator	University of Liverpool, UK
Ireland	Marine Law and Ocean Policy Research Services Ltd.
Bulgaria	Institute of Oceanology, Bulgarian Academy of Sciences
Denmark	Aalborg University
Finland	Finnish Environment Institute
Greece	Hellenic Centre for Marine Research University of Thessaly
Israel	National Institute of Oceanography- Israel Oceanographic & Limnological Research
Poland	Sea Fisheries Institute
Romania	National Institute for Marine Research and Development "Grigore Antipa"

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The Netherlands	Institute for Marine Resources & Ecosystem Studies(IMARES) , Wageningen Wageningen University
Turkey	Institute of Marine Sciences- Middle East Technical University
Ukraine	A.O. Kovalevskiy Institute of Biology of Southern Seas
United Kingdom	Scottish Agricultural College The Secretary of State for Environment, Food and Rural Affairs (DEFRA)



# CLAMER- Climate Change and Marine Ecosystem Research Results

## Project Details

Funding Programme: 7<sup>th</sup> Framework Programme (FP7)  
 Sub-Programme: Theme 6: Environment (including Climate Change)  
 Funding Scheme: Coordination and Support Action  
 Project Duration: 2009- 2011  
 Total Project Value: € 1,160,771  
 EU Grant-Aid: € 991,365  
 Funding to Ireland: € 7,945  
 Website: Not currently available



## Project Description

Although there is no certainty regarding the precise nature and rate of future climate change, even the most moderate scenarios predict a continuing change of the marine environment, with associated major environmental and social impacts. To prepare society for the necessary mitigation and adaptation measures, the awareness of citizens to research results, both certainties and uncertainties, in this specific area should be raised. During the last years, much new information has been gathered in large EU-funded research, but to-date this information has not been synthesized nor has it become an important part of public knowledge.

The aim of the CLAMER project is to make a synthesis of EU research results on the impacts of climate change on the marine environment and to make this knowledge and its socio-economic consequences better known to European citizens and society at large. Together with expert representatives of major Networks of Excellence, large EU projects and research networks, CLAMER will produce a state-of-the-art overview of European research results on the effects of climate change on the marine environment. An up-to-date overview of public knowledge and perception on the effects of climate change on marine environments and their socio-economic consequences will be produced by means of polls and questionnaires. The results will be used to identify the main issues to be addressed and the best practices to be used during the outreach activities. Enhancement of public knowledge on climate change impacts on the marine environment, including the socio-economic consequences, will be achieved by means of challenging and innovative tools such as an interactive Pan-European conference at the end of 2010 and a high-quality internet-based portal within an e-learning platform. These outreach activities will build upon recent experience as has been gathered within EU-funded research to communicate with European citizens on impacts of climate change on marine ecosystems.

<b>Project Partners</b>	
Project Coordinator	Netherlands Institute for Marine Research
Ireland	National University of Ireland, Galway
Belgium	Flemish Coastal Zone Institute
Denmark	Danish Meteorological Institute
France	Marine Board- European Science Foundation
	Sopab, Brest University of Western Brittany (UBO)
Greece	Hellenic Centre for Marine Research
Italy	Marche Polytechnic University

## Irish Contact

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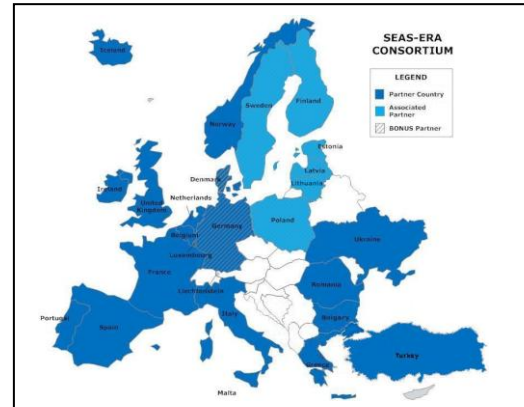
Netherlands	Royal Dutch Academy of Sciences (KNAW)
Norway	University of Tromso
Spain	Spanish National Research Council (CSIC)
United Kingdom	<p>The Secretary of State for Environment, Food and Rural Affairs (CEFAS)</p> <p>Plymouth Marine Laboratory</p> <p>Natural Environment Research Council (NERC)</p> <p>University of East Anglia</p> <p>Sir Alister Hardy Foundation for Ocean Science (SAHFOS)</p>



# SEAS ERA- Towards integrated European marine research strategy and programmes

## Project Details

Funding Programme: 7<sup>th</sup> Framework Programme (FP7)  
 Sub-Programme: Theme 6: Environment including Climate Change.  
 Funding Scheme: ERA-NET / Integrating Activities  
 Project Duration: 2010-2013  
 Total Project Value: € 1,999,934  
 EU Grant-Aid: € 1,999,934  
 Funding to Ireland: Re-imburement of T&S  
 Website: Not currently available



## Project Description

The SEAS ERA project will establish a European Network of Marine Research Funding Organisations with a view to increased co-operation and the consolidation of the European Research Area (ERA). SEAS ERA consists of 21 partners from 19 Member and Associated Member States located along the European seaboard in the Atlantic, Mediterranean and Black Sea. Co-operation with Baltic States is ensured via co-operation with the BONUS (Baltic Sea Science Network).

Co-operation will be organised on a vertical or Regional (basin) scale (e.g. Atlantic, Mediterranean, Black Sea and Baltic Sea) with each region deciding its own priorities. A number of horizontal initiatives are also envisaged: preparation of regional Strategic Research Agendas (SRA); Common Programmes and Joint Calls; Improved Infrastructures; Capacity Building and Dissemination.

The Marine Institute (Ireland) will lead the work package preparing a Strategic Research Agenda for the North Atlantic (including co-operation with the USA and Canada).

SEAS ERA builds on the experience of the previous FP6 MarinERA project ([www.marinera.net](http://www.marinera.net)) which involved 16 partners from 13 countries and which organized a joint €5million call for proposals.

<b>Project Partners</b>	
Project Coordinator	Ministry for Science and Innovation, Spain
Ireland	Marine Institute
Belgium	Belgian Federal Public Planning Service (Science Policy) BELSPO
Bulgaria	Ministry of Education and Science.
Denmark	Danish Food Industry Agency (DFIA)
France	French National Agency of Research (ANR)
Georgia	Georgia National Science Foundation (GNSF)
Germany	Julich Research Centre
Greece	General Secretariat for Research and Technology (GSRT)
Iceland	Icelandic Centre for Research (RANNIS)
Italy	Ministry of Education, University and Research

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Malta	Malta Council for Science and Technology (MCST)
Netherlands	Netherlands Organisation for Scientific Research (NWO)
Norway	Research Council of Norway (RCN)
Portugal	Portuguese Foundation for Science and Technology (FCT)
Romania	National Centre for Programme Management (NCPM)
Turkey	Scientific and Technological Research Council of Turkey (TUBITAK)
Ukraine	Kyiv State Centre for Scientific, Technical and Economic Information
United Kingdom	Department of Environment, Food and Rural Affairs (DEFRA) - Centre for Environment, Fisheries, Aquaculture Science (CEFAS)
United Kingdom	Natural Environment Research Council (NERC)
International	Marine Board-ESF (Ostend, Belgium)



# SUPPORT- Security Upgrade for PORTs

## Project Details

Funding Programme: 7<sup>th</sup> Framework Programme (FP7)  
 Sub-Programme: Theme 7, Transport.  
 Funding Scheme: Large scale integrated project  
 Project Duration: 2009-2013  
 Total Project Value: € 9,920,607  
 EU Grant-Aid: € 9,920,607  
 Funding to Ireland: € 516,120  
 Website: Not currently available



## Project Description

Port security remains of paramount importance for Europe both due to potential threats to passenger life and the potential for crippling economic damage arising from intentional unlawful attacks on port facilities. Challenges arise due to the complexity of operational modalities of sea and hinterland traffic and the lack of efficient organizational and technological interfaces linking ports to border control authorities, the police and other intervention forces, and transport-logistics operators.

Considerable progress with port security has been achieved in recent years primarily associated with the adoption of the International Ship and Port Facility (ISPS) Code. SUPPORT is aimed at building on these achievements by engaging representative stakeholders to guide the development of next generation solutions for upgraded preventative and remedial security capabilities in European ports. The overall benefit will be the secure and efficient operation of European ports enabling uninterrupted flows of cargo and passengers while suppressing illegal immigration and trafficking of drugs, weapons and illicit substances all in line with the efforts of FRONTEX and EU member states.

SUPPORT will deliver public formal specifications and open standards based tools that will aid security upgrade in EU ports and will be complementary to and usable by other EU projects and initiatives in this area. Emphasis will be given to bring together advances from research on security with results from the main EU projects in maritime and intermodal transport, specifically those concerned with security and interoperability issues. Thus, SUPPORT will address 'total' port security upgrade solutions encompassing legal, organizational, technology and human factors perspectives. These solutions should provide substantial improvements in the performance, reliability, speed and cost of European port security which will be demonstrated during the course of the project.

<b>Project Partners</b>		<b>Irish Contact</b>
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Ireland	Nautical Enterprise Centre Ltd. Cork.	
Austria	University of Innsbruck	
Cyprus	eBos Technologies Ltd.	
Finland	Governmental Technical Research Centre of Finland (VTT)	
France	National Institute for Research in Computer Science and Control	
Greece	Marac Electronics, S.A.	
	Piraeus Port Authority	

Latvia	Maritime Administration of Latvia
Norway	Marlo A.S. Norwegian Marine Technology Research Institute
Spain	Europhar Geie-Aeie
Sweden	Defence Research Agency Securitas Sweden Stena Line Scandinavia
The Netherlands	Port of Amsterdam Ecoports Foundation
United Kingdom	INLECOM Systems Ltd.



# GEO-SEAS- Pan-European Infrastructure for Management of Marine and Ocean Geological and Geophysical Data

## Project Details

Funding Programme:	7 <sup>th</sup> Framework Programme (FP7)
Sub-Programme:	Capacities Programme.
Funding Scheme:	Infrastructures: Integrating Activities
Project Duration:	2009-2013
Total Project Value:	€ 6,497,326
EU Grant-Aid:	€ 4,976,476
Funding to Ireland:	€ 348,062
Website:	Not currently available



## Project Description

The overall objective of the GEO-SEAS project is to offer a major and significant improvement in the overview and access to marine geological and geophysical data and data-products from national geological surveys and research institutes in Europe by upgrading and interconnecting their present infrastructures.

The GEO-SEAS partnership has taken a strategic decision to adopt the SeaDataNet interoperability principles, architecture and components wherever possible. This approach allows the GEO-SEAS upgrading to gain instant traction and momentum whilst avoiding wasteful duplicative effort. It is envisaged that the SeaDataNet infrastructure will provide a core platform that will be adaptively tuned in order to cater for the specific requirements of the geological and geophysical domains. A range of additional activities for developing and providing new products and services is also undertaken in order to fulfill the diverse needs of end-user communities

<b>Project Partners</b>	
Project Coordinator	Natural Environment Research Council (NERC), UK.
Ireland	University College Cork- CMRC Geological Survey of Ireland (GSI)
Belgium	University of Gent
Bulgaria	Institute of Oceanology
Denmark	Geological Survey of Denmark and Greenland
Estonia	Geological Survey of Estonia
France	French Research institute for Exploitation of the Sea (IFREMER) Bureau of Geological and Mining Research National Centre for Scientific Research (CNRS) Hydrographic and Oceanographic Department of the Navy
Germany	Federal Office of Navigation and Hydrography (BSH)
Greece	Institute of Geology and Mineral Exploration National Observatory Athens

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Italy	National Institute of Oceanography and Experimental Geophysics (OGS)
Lithuania	Institute of Geology and Geography
Netherlands	Netherlands Organisation for Applied Scientific Research EU-CONSULT Consultancy in Project Management and Project Coordination
Norway	Geological Survey of Norway
Poland	Polish Geological Institute
Portugal	National Institute of Engineering, Technology and Innovation
Spain	Geological and Mining Institute of Spain University of Barcelona
United Kingdom	Construction Industry Research and Information Association Centre for Environment, Fisheries & Aquaculture (CEFAS)



# EELA-2- E-Science Grid Facility for Europe and Latin America

## Project Details

Funding Programme: 7<sup>th</sup> Framework Programme (FP7)  
 Sub-Programme: Capacities Programme  
 Funding Scheme: Infrastructures : Integrating Activities  
 Project Duration: 2009-2011  
 Total Project Value: € 4,593,000  
 EU Grant-Aid: € 2,093,000  
 Funding to Ireland: € 12,000  
 Website: Not currently available



## Project Description

EELA-2 aims to build, on the FP6 EELA e-Infrastructure, to establish a high capacity, production-quality, scalable Grid Facility providing round-the-clock, worldwide access to distributed computing, storage and network resources for a wide spectrum of applications from European and Latin American scientific communities.

EELA-2 will provide an empowered Grid Facility with versatile services fulfilling application requirements and ensure the long-term sustainability of the e-Infrastructure beyond the term of the project. The specific EELA-2 objectives are to (1) building a Grid Facility, (2) expand the current EELA e-Infrastructure to consist of more production sites mobilising more computing nodes and more storage space at the start of the project and to further grow storage over the duration of the project, (3) provide, in collaboration with related projects (e.g. EGEE), the full set of Grid services needed by all types of scientific applications, (4) support applications various types (from classical off-line data processing up to control and data acquisition of scientific instruments), selected against well defined criteria (including grid added value, suitability for Grid deployment, outreach/ potential impact), (5) ensure the Grid Facility sustainability, through the already established and new contacts with policy/decision makers, collaborating with RedCLARA and NRENs and supporting the ongoing creation of e-Science Initiatives and/or National Grid Initiatives (NGI), (6) build the support of the e-Infrastructure to provide a complete set of Global Services from a Central Operations Centre and to pave the way for creation of Regional Operation Centres in Latin America, (7) attract new applications, (8) make available knowledge of EELA-2 Grid Facility to all potential users, developers, and decision makers through an extensive Training and Dissemination program, (9) create knowledge repositories federated with the EGEE ones.

<b>Project Partners</b>	
Project Coordinator	Centre for Energy, Environment and Technology, Spain
Ireland	University College Cork - CMRC
Argentina	New Computing Technologies Laboratory Institute- National University of Plata
Chile	REUNA- National Academic Network International Academic Network
Colombia	University of the Andes
Cuba	Centre for Information Management and Energy Deployment
Ecuador	Technical University of Loja
France	HLP Development SA National Institute of Physics and Nuclear Physics
Italy	National Institute of Nuclear Physics

## Irish Contact

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Mexico	National Autonomous University of Mexico (UNAM)
Peru	National Service of Meteorology and Hydrology of Peru
Spain	Federal University of Rio De Janeiro
Uruguay	Latin American Cooperation of Advanced Networks (CLARA)
Venezuela	University of the Andes



## Research for the Benefit of SMEs

Four additional *Research for SME* Projects (2007-2009) have been identified.  
No project profiles are yet available.

***HYFFI: Hydrocolloids as functional food ingredients for gut health.***

Irish participants: Cybercolloids Ltd / Marigot Ltd.

Grant-Aid to Irish Partners: €328,323.

Call: FP7-SME-2007-1.

***SETTLE: Bivalve conditioning and settlement – keys to competitive hatchery production***

Irish participant: Cartron Point Shellfish Ltd

Grant-Aid to Irish partners: €193,950

Call: FP7-SME-2007-1

***OYSTERECOVER: Establishing the scientific bases and technical procedures and standards to recover the European flat oyster production through strategies to tackle the main constraint, bonamiosis.***

Irish Participants: University College Cork  
Clew Bay Marine Forum Ltd.  
Clew Bay Oyster Cooperative Society Ltd.  
Atlantic Shellfish Ltd

Grant Aid to Irish partners: € 1,105,789

Call: FP7-SME-2008-2

***MusselsAlive: Development of best practice and new technology for grading, handling, transportation, conditioning and storage of mussels for SMEs in the European mussel industry.***

Irish Participant: Irish Farmer's Association.

Grant Aid to Irish partners: €206,587.

Call: FP7-SME-2008-2

**For further information on the *Research for SMEs* Programme contact:**

Mr Sean Burke – National Contact Point (NCP), Enterprise Ireland, Shannon, Co. Limerick.

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# ANNEX 1.

## FP7 marine Projects (2007 - 2008) with Irish participation

Acronym	Title	Irish partner(s)
<b>COOPERATIOON PROGRAMME</b>		
<b>Theme 2: Food, Agriculture, Fisheries &amp; Biotechnology</b>		
MEFEPO	Making the European Fisheries Ecosystem Operational	Marine Institute
Prevent Escape	Assessing the causes and developing measures to prevent the escape of fish from sea-cage aquaculture	Marine Institute
DeepFishMan	Management and Monitoring of Deep-Sea Fisheries and Stocks	Marine Institute
<b>Theme 5: Energy</b>		
CORES	Components for Ocean Renewable Energy Systems	University College Cork - HMRC University of Limerick Marine Computation Services Ltd. Ocean Energy Ltd
EQUIMAR	Equitable Testing and Evaluation of Marine Energy Extraction Devices in terms of Performance, Cost and Environmental Impact	University College Cork - HMRC
<b>Theme 6: Environment including Climate Change</b>		
CORALFISH	Assessment of the interaction between corals, fish and fisheries, in order to develop monitoring and predictive modelling tools for ecosystem based management in the deep waters of Europe and beyond	National University of Ireland, Galway University College Cork O'Malley Fisheries
EELIAD	European Eels in the Atlantic: Assessment of Their Decline	Marine Institute Central Fisheries Board
MIDTAL	Microarrays for the Detection of Toxic Algae	National University of Ireland, Galway
SALSEA-MERGE	Advancing understanding of Atlantic salmon at Sea: Merging genetics and ecology to resolve stock-specific migration and distribution patterns	Marine Institute University College Cork
HERMIONE	Hotspot Ecosystem Research and Man's Impact on European Seas	National University of Ireland, Galway University College Cork
MESMA	Monitoring and Evaluation of Spatially Managed Areas	University College Cork - CMRC
KNOWSEAS	Knowledge-based Sustainable Management for Europe's Seas	University College Cork - CMRC
<b>Theme 7: Transport</b>		
PROPS	Promotional Platform for Short Sea Shipping and Intermodality	Nautical Enterprise Ltd Irish Exporters Association
SKEMA	Sustainable Knowledge Platform for the European Maritime and Logistics Industry	Nautical Enterprise Ltd Irish Exporters Association Dublin Port Company
AZIPILOT	Intuitive operation and pilot training when using marine azimuthing control devices	Transas Group Ltd
E-freight	European E-freight Capabilities for Co-	Nautical Enterprise Ltd

	Modal Transport	Chartered Institute of Logistics and Transport
<b>Theme 10: Space</b>		
MYOCEAN	Development pre-operational validation of upgraded GMES Marine Core Services and Capacities	TechWorks Marine Ltd

<b>CAPACITIES PROGRAMME</b>		
<b>Research Infrastructures</b>		
Euro Argo	Euro Argo	Marine Institute
EMSO	European Multidisciplinary Seas Observation	Marine Institute
EUROFLEETS	Towards an Alliance of European Research fleets	Marine Institute
<b>Research for SMEs</b>		
SUDEVAB	Sustainable development of European SME's engaged in abalone aquaculture	National University of Ireland, Galway Jersey Sea Farms(Ireland) Ltd Tower Aqua Products Ltd
OYSTERCOVER	Establishing the scientific bases, technical procedures and standards to recover the European flat oyster production through strategies to tackle the main constraint, bonamiosis	University College Cork Clew Bay Marine Forum Ltd Clew Bay Oyster Cooperative Society Ltd Atlantic Shellfish Ltd
MusselsAlive	Sustainable development of European SMEs engaged in abalone aquaculture	Irish Farmer's Association
SETTLE	Bivalve conditioning and settlement- keys to competitive hatchery production	Cartron Shellfish Limited
HYFFI	Hydrocolloids as functional food ingredients for gut health	Cybercolloids Ltd/Marigot Ltd
<b>PEOPLE PROGRAMME</b>		
MABFUEL	Marine Algae as Biomass for Biofuel	Daithi O'Murchu Marine Research Station Ltd. Green Biofuels Ireland Ltd Dundalk Institute of Technology

A profile of each of the above projects (with the exception of Research for the Benefit of SME Programme projects) is available in:

Marine Institute (2009). Irish participation in EU FP7 funded competitive marine research projects during the period 2007-2008. Marine Institute (June 2009). 35pp.

Downloadable in PDF version from :

[www.marine.ie/home/publicationsdata/publications/Special+Reports.htm](http://www.marine.ie/home/publicationsdata/publications/Special+Reports.htm)



## ANNEX 2. Irish Participants in FP7 Marine Projects (2007-2009)

Participant	2009	2008	2007
<b>Public Research Institutes</b>			
Central Fisheries Board	-	-	1
Geological Survey of Ireland	1	-	-
Marine Institute	2	3	5
<b>Third Level Institutes</b>			
Dundalk Institute of Technology	-	1	-
National University of Ireland, Galway	1	3	2
University College Cork	6	5	4
University of Limerick	-	-	1
<b>SMEs</b>			
Atlantic Shellfish Ltd	-	1	-
Cartron Point Shellfish Limited	-	-	1
Clew Bay Marine Forum Ltd	-	1	-
Clew Bay Oyster Cooperative Society Ltd	-	1	-
Cybercolloids Ltd	-	-	1
Daithi O'Murchu Marine Station Ltd	-	1	-
Dublin Port Company	-	-	1
Green Biofuels Ireland Ltd	-	1	-
Jersey Sea Farms (Ireland) Ltd	-	1	-
Marigot Ltd	-	-	1
Marine Computation Services Ltd	-	-	1
Marine Law & Ocean Policy Research Centre Services Ltd	1	-	-
Nautical Enterprise Ltd	1	1	2
O'Malley Fisheries Ltd	-	-	1
Ocean Energy Ltd	-	-	1
Port of Cork	-	1	-
TechWorks Marine Ltd	-	-	-
Tower Aqua Products Ltd	-	1	1
Transas Ltd	-	-	1
Wavebob	-	1	-
<b>Associations</b>			
Aqua TT Ltd	4	-	-
Chartered Institute of Logistics & Transport	-	1	-
Irish Exporters Association	-	-	1
Irish Farmer's Association	-	1	-



## ANNEX 3. FP7 Marine Project Grant-Aid (2007-2009) to Ireland

<b>FP7 Summary Table</b>			
	No. of Projects	EU Grant Aid €	Funding to Ireland €
FP7 2007	15	75,542,881	6,100,909
FP7 2008	14	59,508,691	7,021,396
FP7 2009	14	46,956,441	4,389,036
<b>TOTAL:</b>	43	182,008,013	17,511,341

<b>FP7 Theme</b>	No. of Projects	Funding to Irish marine projects (€)	%
<b>COOPERATION</b>			
Theme 1 (Health)	0	0	0
Theme 2 (Food)	7	1,577,330	9
Theme 3 (ICT)	1	442,863	2
Theme 4 (NanoScience)	0	0	0
Theme 5 (Energy)	5	4,484,124	26
Theme 6 (Environment)	11	4,041,843	23
Theme 7 (Transport)	4	1,440,266	8
Theme 8 (Socio-Economics)	0	0	0
Theme 9 (Security)	1	516,120	3
Theme 10 (Space)	1	287,600	2
<b>IDEAS</b>			
	0	0	0
<b>PEOPLE</b>			
	3	1,338,047	8
<b>CAPACITIES - Infrastructure</b>			
	5	1,382,449	8
<b>CAPACITIES - SMEs</b>			
	5	2,000,699	11
<b>TOTAL:</b>	43	17,511,341	







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