European Commission

2014 – 2015 - 2016

BLUE GROWTH AND SUSTAINABLE FOOD SECURITY PROJECTS

Societal Challenge 2

Research and Innovation


European
Commission

European Commission

2014 – 2015 - 2016

Blue Growth and Sustainable Food Security projects

Societal Challenge 2

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Call for Blue Growth: Unlocking the potential of Seas and Oceans

H2020-BG-2014

Rapid technological progress in working offshore in ever-deeper waters, the need to reduce greenhouse gas emissions, and the need to look at how the 71 % of the planet that is seas and oceans can deliver human necessities such as food and energy in a sustainable way have opened up an opportunity for blue growth with the aim to harness the huge potential of Europe's oceans, seas and coasts for jobs and growth. This focus area addresses this overall challenge through five cross-cutting priority domains supporting the Blue Growth Agenda: valorising the diversity of marine life; sustainable harvesting the deep-sea resources; new offshore challenge; ocean observation technologies; and the socioeconomic dimension. The aim of the focus area is to improve the understanding of the complex interrelations between various maritime activities, technologies, including space enabled applications, and the marine environment to help boost the marine and maritime economy by accelerating its potential through R&I in a sustainable manner. It will enhance sectorial and cross-sectorial cooperation by building on major international, national and regional initiatives.

The Blue Growth economy in the EU is expected to grow to 7 million people employed by 2020. Actions in this area will support the EU 'Blue Growth' strategy and relevant EU policies (e.g. Sea Basins Strategies and Action Plans) as well as provide support for international cooperation.

To maximize the impacts of activities undertaken under this Focus Area, the 2014 WP of Horizon 2020, focuses on key priorities for the EU, so as to mobilize the necessary critical mass to tackle these large cross-cutting challenges with adequate scale and scope.

The 2014 Work – Programme under the Societal Challenge 2 (Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy) of Horizon 2020, puts emphasis on the sustainable exploitation of the diversity of marine life, on valuing and mining marine biodiversity.

In this 2014 Programme, the new offshore challenges were tackled through a support action (CSA) preparing potential further large-scale offshore initiatives and one initiative focused on sub-sea technologies. Also a large-scale initiative on improving ocean observation systems/technologies is supported in the 2014 Programme as well as one activity on acoustic and imaging technologies. Finally, several horizontal activities regarding socio-economic issues, valorising research outcomes or engaging with society as well as projects targeting SMEs were promoted in 2014.

In terms of international cooperation, the 'Blue Growth' Focus Area will support the new Atlantic Ocean Research Alliance launched by the Galway Statement in May 2013[1].

[1] **Galway Statement on Atlantic Ocean Cooperation Launching a Canada- European Union- United States of America Research Alliance (Galway, 24th of May 2013)**

AORAC-SA

Ocean Research Alliance Coordination and Support Action

At a glance

Acronym: AORAC-SA

Title: Atlantic Ocean Research Alliance Coordination and Support Action

Call: H2020-BG-2014-2

Topic: BG-14-2014

Instrument: Coordination & support action

Start date: 01/03/2015

End date: 29/02/2020

Duration: 60 months

Total Cost: € 4,295,137.50

EC Contribution: € 3,447,000.00

Consortium: 9 partners

Project Coordinator: Marine Institute, IE

Abstract

The Atlantic Ocean Research Alliance Coordination and Support Action (AORAC-SA) is designed to provide scientific, technical and logistical support to the European Commission in developing and implementing trans-Atlantic Marine Research Cooperation between the European Union, the United States of America and Canada.

The Coordination and Support Action (CSA) is carried out within the framework of the Atlantic Ocean Research Alliance as outlined in the Galway Statement on Atlantic Ocean Cooperation (May 2013). Recognising the evolving nature of the Atlantic Ocean Research Alliance, the hallmark of this action is that it is flexible, responsive, inclusive, efficient, innovative, value-adding and supportive.

The CSA, reporting to the Commission representatives of the Atlantic Ocean Research Alliance, will be responsible for the organisation of expert and stakeholder meetings, workshops and conferences required by the Atlantic Ocean Research Alliance and related to identified research priorities (e.g. marine ecosystem-approach, observing systems, marine biotechnology, aquaculture, ocean literacy, seabed and benthic habitat mapping), support actions (e.g. shared access to infrastructure, dissemination and knowledge transfer, establishment of a knowledge sharing platform) and other initiatives as they arise, taking into account related Horizon 2020 supported trans-Atlantic projects (e.g. BG1Atlantic marine ecosystems, BG8 Atlantic Ocean observation and BG13 Ocean literacy) and on-going national and EU collaborative projects (e.g. FP7).

To support the Commission in negotiations with the USA and Canada on trans-Atlantic Ocean Research Cooperation, the AORAC-SA support and governance structure comprises a Secretariat and Management Team, guided by a high-level Operational Board, representative of the major European Marine Research Programming and Funding Organisations as well as those of the USA and Canada. This structure is further able to draw on significant marine research expertise and experience through its partner organisations.

Project's Participants List

AORAC-SA

Ocean Research Alliance Coordination and Support Action

Project's partners	Name	Country
1	MARINE INSTITUTE (MARINE INSTITUTE)	IE
2	INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA (ICES)	DK
3	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	FR
4	CONSORCIO PARA EL DISENO, CONSTRUCCION, EQUIPAMIENTO Y EXPLOTACION DE LA PLATAFORMA OCEANICA DE CANARIAS (PLOCAN)	ES
5	CIENCIA VIVA-AGENCIA NACIONAL PARA A CULTURA CIENTIFICA E TECNOLOGICA	PT
6	WOC - WORLD OCEAN LIMITED	UK
7	HAVFORSKNINGSINSTITUTTET	NO
8	THE ICELANDIC CENTRE FOR RESEARCH (RANNIS)	IS
9	MINISTERIO DA CIENCIA E TECNOLOGIA (MCTI)	BR

At a glance

Acronym: AtlantOS

Title: Optimizing and Enhancing the Integrated Atlantic Ocean Observing System

Call: H2020-BG-2014-2

Topic: BG-08-2014

Instrument: Research and Innovation action

Start date: 01/04/2015

End date: 30/06/2019

Duration: 51 months

Total Cost: € 20,652,921.00

EC Contribution: € 20,652,921.00

Consortium: 62 partners

Project Coordinator: Helmholtz Zentrum Fur Ozeanforschung Kiel (GEOMAR), DE

AtlantOS

Optimising and Enhancing the Integrated Atlantic Ocean Observing System

Abstract

The overarching objective of AtlantOS is to achieve a transition from a loosely-coordinated set of existing ocean observing activities to a sustainable, efficient, and fit-for-purpose Integrated Atlantic Ocean Observing System (IAOOS), by defining requirements and systems design, improving the readiness of observing networks and data systems, and engaging stakeholders around the Atlantic; and leaving a legacy and strengthened contribution to the Global Ocean Observing System (GOOS) and the Global Earth Observation System of Systems (GEOSS).

AtlantOS will fill existing in-situ observing system gaps and will ensure that data are readily accessible and useable.
AtlantOS will demonstrate the utility of integrating in-situ and Earth observing satellite based observations towards informing a wide range of sectors using the Copernicus Marine Monitoring Services and the European Marine Observation and Data Network and connect them with similar activities around the Atlantic.

AtlantOS will support activities to share, integrate and standardize in-situ observations, reduce the cost by network optimization and deployment of new technologies, and increase the competitiveness of European industries, and particularly of the small and medium enterprises of the marine sector.

AtlantOS will promote innovation, documentation and exploitation of innovative observing systems.

All AtlantOS work packages will strengthen the trans-Atlantic collaboration, through close interaction with partner institutions from Canada, United States, Brazil, South Africa and others from the Atlantic region. Finally, AtlantOS will promote a structured dialogue with national and regional funding bodies, including the European Commission, USA, Canada and other countries to ensure sustainability and adequate growth of integrated Atlantic Ocean Observing.

Project's Participants List

AtlantOS

Optimising and Enhancing the Integrated Atlantic Ocean Observing System

Project's partners	Name	Country
1	HELMHOLTZ ZENTRUM FUR OZEANFORSCHUNG KIEL (GEOMAR)	DE
2	NATURAL ENVIRONMENT RESEARCH COUNCIL (NERC)	UK
3	MARINE INSTITUTE (MI)	IE
4	UNIVERSITAET BREMEN (UNI-HB)	DE
5	DANMARKS METEOROLOGISKE INSTITUT (DMI)	DK
6	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)	FR
7	UNIVERSITE PIERRE ET MARIE CURIE - PARIS 6 (UPMC)	FR
8	INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA (ICES)	DK
9	KONSORTIUM DEUTSCHE MEERESFORSCHUNG e.V. (KDM)	DE
10	INSTYTUT OCEANOLOGII POLSKIEJ AKADEMII NAUK (IO PAN)	PL
11	HAVFORSKNINGSINSTITUTTET (IMR)	NO
12	UNIVERSITETET I BERGEN (UiB)	NO
13	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
14	NORSK INSTITUTT FOR VANNFORSKNING (NIVA)	NO
15	CONSORCIO PARA EL DISENO, CONSTRUCCION, EQUIPAMIENTO Y EXPLOTACION DE LA PLATAFORMA OCEANICA DE CANARIAS (PLOCAN)	ES
16	SIR ALISTER HARDY FOUNDATION FOR OCEAN SCIENCE (SAHFOS)	UK
17	DANMARKS TEKNISKE UNIVERSITET (DTU)	DK
18	THE SCOTTISH ASSOCIATION FOR MARINESCIENCE LBG (SAMS)	UK
19	IMAR- INSTITUTO DO MAR (IMAR)	PT
20	STICHTING NIOZ, KONINKLIJK NEDERLANDS INSTITUUT VOOR ONDERZOEK DER ZEE (NIOZ)	NL
21	MET OFFICE (MET O)	UK
22	ALFRED-WEGENER-INSTITUT HELMHOLTZ- ZENTRUM FUER POLARUND MEERESFORSCHUNG (AWI)	DE
23	HAVSTOVAN (HAV)	FO
24	THE UNIVERSITY OF EXETER (UNEXE)	UK
25	INSTITUT DE RECHERCHE POUR LE DEVELOPPEMENT (IRD)	FR
26	EUMETNET GROUPEMENT D'INTERET ECONOMIQUE (EUMETNET)	BE
27	COLLECTE LOCALISATION SATELLITES SA (CLS)	FR
28	CENTRO EURO-MEDITERRANEO SUI CAMBIAMENTI CLIMATICI SCARL	IT
29	VLAAMS INSTITUUT VOOR DE ZEE VZW (VLIZ)	BE
30	CIIMAR - Centro Interdisciplinar de Investigação Marinha e Ambiental (CIIMAR)	PT
31	IEEE FRANCE SECTION (IEEE)	FR

Project's partners	Name	Country
32	FONDATION EUROPEENNE DE LA SCIENCE (EMB-ESF)	FR
33	UNIVERSITY OF PLYMOUTH (UOP)	UK
34	UNIVERSIDADE DO ALGARVE (UALG)	PT
35	INSTITUTO ESPANOL DE OCEANOGRAFIA (IEO)	ES
36	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER (IFREMER)	FR
37	MERCATOR OCEAN (MERCATOR)	FR
38	ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA (UNIBO)	IT
39	UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION - UNESCO (UNESCO)	FR
40	EURO-ARGO ERIC (EURO-ARGO ERIC)	FR
41	EUROGOOS AISBL (EUROGOOS AISBL)	BE
42	EUROPEAN CENTRE FOR MEDIUM-RANGE WEATHER FORECASTS (ECMWF)	UK
43	PLYMOUTH MARINE LABORATORY (PML)	UK
44	DAITHI O'MURCHU MARINE RESEARCH STATION LTD (DOMMRS)	IE
45	SEASCAPE CONSULTANTS LTD (SEASCAPE)	UK
46	BRUNCIN (BRUNCIN)	HR
47	RIBOCON GMBH (RIBOCON)	DE
48	DEVELOGIC GMBH (DSS)	DE
49	NKE INSTRUMENTATION SARL (NKE)	FR
50	CONTROS SYSTEMS & SOLUTIONS GMBH (CONTROS)	DE
51	ACRI-ST SAS (ACRI-ST)	FR
52	T.E. LABORATORIES LIMITED (TELABS)	IE
53	ETT SPA (ETT SPA)	IT
54	MARIENE INFORMATIE SERVICE MARIS BV (MARIS)	NL
55	BLUE LOBSTER IT LIMITED (BLIT)	UK
56	CLU SRL (CLU SRL) SRL	IT
57	MAX PLANCK GESELLSCHAFT ZUR FOERDERUNG DER WISSENSCHAFTEN E.V. (MPG)	DE
58	DALHOUSIE UNIVERSITY (DAL)	CA
59	MEOPAR INCORPORATED (MEOPAR)	CA
60	MINISTERIO DA CIENCIA E TECNOLOGIA (MCTI)	BR
61	WOODS HOLE OCEANOGRAPHIC INSTITUTION (WHOI)	US
62	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH (CSIR)	SA

Third Parties Involved	Name	Country
1	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)	US
2	ÉCOLE NORMALE SUPERIEURE (ENS) PARIS	FR
3	UNIVERSIDAD DE LAS PALMAS DE GRAN CANARIA (ULPGC)	ES
4	METEO-FRANCE	FR
5	UNIVERSITY OF HAMBURG (UHAM)	DE
6	MARINE SCOTLAND SCIENCE (MSS)	UK
7	UNI RESEARCH AS (UniRES)	NO
8	MARINE RESEARCH INSTITUTE (MRI)	IS

BRIDGES

Bringing together Research and Industry for the Development of Glider Environmental Services

At a glance

Acronym: BRIDGES

Title: Bringing together Research and Industry for the Development of Glider Environmental Services

Call: H2020-BG-2014-2

Topic: BG-06-2014

Instrument: Research & Innovation action

Start date: 01/03/2015

End date: 28/02/2019

Duration: 48 months

Total Cost: € 7,791,810.00

EC Contribution: € 7,791,810.00

Consortium: 19 partners

Project Coordinator: Association pour la Recherche et le Développement des Méthodes et Processus Industriels - ARMINES, FR

Abstract

BRIDGES (Bringing together Research and Industry for the Development of Glider Environmental Services) will provide a necessary tool for further understanding, improved monitoring, and responsible exploitation of the marine environment while assuring its long-term preservation. This new tool, a robust, cost-effective, re-locatable, versatile and easily-deployed ocean glider, will support autonomous, long-term in-situ exploration of the deep ocean at large spatio-temporal scales. The sole European underwater glider: SeaExplorer will be modularized, new sensors will be developed, and the operational methodology will be modified, such that new horizons of service will be opened. It will be improved by: 1) adapting for deep basins (up to 5000 m), 2) implementing a novel payload architecture to increase autonomy and to accommodate the range of sensing capabilities needed, and 3) integrating the associated control support system for single and networked operations (mission behaviour, data management, planning, communications). The glider's sensing capabilities will be enhanced. The main modules are planned for: 1) environmental monitoring for facilitating the effective implementation of an ecosystem-based management under the Marine Strategy Framework Directive, 2) the oil and gas industry, and 3) the deep sea mining industry. In order to achieve the technological objectives and meet service requirements, an open dialogue between stakeholders will be developed. The basic premises of the present call "Delivering sub-sea technologies for new services at sea-BG-06-2014," are answered thoroughly: the ability to execute unmanned underwater operations, to operate in the deep ocean, and to assess the environmental impact of the maritime economy. In addition, this project will realize and promote the creation of collaborations among sensor and platform manufacturers, oil and gas and mining companies, public health and safety departments, and scientific and engineering experts.

BRIDGES

Project's Participants List

Bringing together Research and Industry for the Development of Glider Environmental Services

Project's partners	Name	Country
1	ASSOCIATION POUR LA RECHERCHE ET LE DEVELOPPEMENT DES METHODES ET PROCESSUS INDUSTRIELS (ARMINES)	FR
2	UNIVERSITY OF CYPRUS (UCY)	CY
3	ALSEAMAR (ALSEAMAR)	FR
4	NATURAL ENVIRONMENT RESEARCH COUNCIL (NERC)	UK
5	UNIVERSITE PIERRE ET MARIE CURIE - PARIS 6 (UPMC)	FR
6	CYPRUS SUBSEA CONSULTING AND SERVICE C.S.C.S. LIMITED (CSCS)	CY
7	OCEANSCAN - MARINE SYSTEMS & TECHNOLOGY LDA (MST)	PT
8	UNIVERSIDADE DO PORTO (UPORTO)	PT
9	ALBATROS MARINE TECHNOLOGIES SL (ALBATROS MARINE TECHNOLOGIES SL)	ES
10	ENITECH ENERGIETECHNIK - ELEKTRONIK GMBH (ENITECH GmbH)	DE
11	52°North Initiative for Geospatial Open Source Software GmbH (52°North GmbH)	DE
12	CHRISTIAN MICHELSEN RESEARCH AS (CMR)	NO
13	INTERNATIONAL RESEARCH INSTITUTE OFSTAVANGER AS (IRIS)	NO
14	THE HEBREW UNIVERSITY OF JERUSALEM (THE HEBREW UNIVERSITY OF JERUSALEM)	IL
15	UNIVERSITY OF SOUTHAMPTON (SOUTHAMPTON)	UK
16	BMT ISIS LIMITED (BMT Isis)	UK
17	HYDROPTIC SARL (HYDROPTIC)	FR
18	ECORYS NEDERLAND B.V. (ECORYS)	NL
19	SOCIETY FOR UNDERWATER TECHNOLOGY (Society for Underwater Technology)	UK

COLUMBUS

Monitoring, Managing and Transferring Marine and Maritime Knowledge for Sustainable Blue Growth

At a glance

Acronym: COLUMBUS

Title: Monitoring, Managing and Transferring Marine and Maritime Knowledge for Sustainable Blue Growth

Call: H2020-BG-2014-1

Topic: BG-11-2014

Instrument: Coordination & support action

Start date: 01/03/2015

End date: 28/02/2018

Duration: 36 months

Total Cost: € 3,997,488.00

EC Contribution: € 3,997,488.00

Consortium: 26 partners

Project Coordinator: Bord Iascaigh Mhara (BIM), Ireland

Project Strategic and Operational Leader: AquaTT, IE

Abstract

We are standing at the dawn of a century that will be largely affected by how we as a society are able to manage our oceans and their resources. Marine and Maritime Research has a critical role to play in developing our understanding of the seas and advanced technology so that we can develop their economic potential in a sustainable manner.

The COLUMBUS project intends to capitalise on the EC's significant investment in marine research by ensuring accessibility and uptake of research Knowledge Outputs by end-users (policy, industry, science and wider society). COLUMBUS will ensure measurable value creation from research investments contributing to sustainable Blue Growth within the timeframe of the project. Adopting proven methodologies and building on significant past work, COLUMBUS will first identify end-user needs and priorities. It will then set about identifying and collecting "Knowledge Outputs" from past and current EC projects. Rigorous analysis will take place to identify specific applications and end-users. Transfer will be achieved and measured through tailor-made knowledge transfer. All knowledge collected will be made accessible through the pre-existing Marine Knowledge Gate (www.kg.eurocean.org).

A network of 9 Competence Nodes, each with a "Knowledge Fellow" and support team across Europe will provide the necessary critical mass (470pm of effort) to ensure full thematic and spatial coverage. COLUMBUS will also carry out strategic actions to enhance the visibility and impact of research to stakeholders and European Citizen's. Furthermore working with funding agencies and stakeholders, COLUMBUS will examine the feasibility of improved systems and processes to ensure measurable value creation from research.

To achieve the above, COLUMBUS has brought together a multi-disciplinary, multi-stakeholder team representing all aspects of the research value chain from funding agencies to end-users. Key strategic initiatives and networks further strengthen and provide a strong vehicle for project legacy.

European Commission

COLUMBUS

Monitoring, Managing and Transferring Marine and Maritime Knowledge for Sustainable Blue Growth

Project's Participants List

Project's partners	Name	Country
1	BORD IASCAIGH MHARA (BIM)	IE
2	AquaTT UETP Ltd (AquaTT) LTD	IE
3	FUNDACAO EUROCEAN (EUROCEAN)	PT
4	DANMARKS TEKNISKE UNIVERSITET (DTU)	DK
5	FORSCHUNGSZENTRUM JUELICH GMBH (Juelich) GMBH	DE
6	MARINE SOUTH EAST (MARINE SOUTH EAST)	UK
7	PANAGIOTIS CHRISTOFILOGIANNIS - IOANA TAVLA (AQUARK) OE	EL
8	SMARTBAY IRELAND LIMITED (SMARTBAY IRELAND LIMITED)	IE
9	CONSORCIO PARA EL DISENO, CONSTRUCCION, EQUIPAMIENTO Y EXPLOTACION DE LA PLATAFORMA OCEANICA DE CANARIAS (PLOCAN)	ES
10	SOCIEDAD PARA EL FOMENTO DE LA INNOVACION TECNOLOGICA S.L. - INNOVATEC (INNOVATEC) SL	ES
11	VLAAMS INSTITUUT VOOR DE ZEE VZW (VLIZ) VZW	BE
12	THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS (CEFAS)	UK
13	EUROGOOS AISBL (EuroGOOS AISBL)	BE
14	CENTRO TECNOLOGICO DEL MAR - FUNDACION CETMAR (CETMAR)	ES
15	AQUATERA LIMITED (Aquatera) LTD	UK
16	SEASCAPE CONSULTANTS LTD (SEASCAPE CONSULTANTS LTD)	UK
17	European Council for Maritime Applied R&D Association (ECMAR) VZW	BE
18	EUROPEAN AQUACULTURE SOCIETY (EAS)	BE
19	UNIVERSITE PIERRE ET MARIE CURIE - PARIS 6 (UPMC)	FR
20	NATURAL ENVIRONMENT RESEARCH COUNCIL (NERC)	UK
21	Europas Maritime Udviklingscenter (MDCE)	DK
22	SOCIETE D'EXPLOITATION DU CENTRE NATIONAL DE LA MER (NAUSICAA)	FR
23	NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU (NTNU)	NO
24	Unitatea Executiva pentru Finantarea Invatamantului Superior, a Cercetarii, Dezvoltarii si Inovarii (UEFISCDI)	RO
25	CENTER OF MARITIME TECHNOLOGIES EV (CMT) EV	DE
26	INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA (ICES)	DK

At a glance

Acronym: DexROV

Title: Dexterous ROV: effective dexterous ROV operations in presence of communication latencies

Call: H2020-BG-2014-2

Topic: BG-06-2014

Instrument: Research & Innovation action

Start date: 01/03/2015

End date: 31/08/2018

Duration: 42 months

Total Cost: € 5,336,006.25

EC Contribution: € 4,631,182.50

Consortium: 7 partners

Project Coordinator: Space Applications Services NV (SPACEAPPS), BE

DexROV

Dexterous ROV: effective dexterous ROV operations in presence of communication latencies

Abstract

Underwater operations (e.g. oil industry, off shore renewable energies, geology, archaeology, etc.) are demanding and costly activities for which ROV based setups are often deployed in addition to deep divers – contributing to operations risks and costs cutting. However the operation of a ROV requires significant off-shore dedicated manpower – such a setup typically requires a crew consisting of:
(1) an intendant, (2) an operator, and (3) a navigator. This is a baseline, and extra staffing is often provisioned.
Furthermore, customers' representatives often wish to be physically present at the off-shore location in order to advise on, or to observe the course of the operations. Associated costs are high. In order to reduce the burden of operations, DexROV will work out more cost effective and time efficient ROV operations, where manned support is in a large extent delocalized onshore (i.e. from a ROV control centre), possibly at a large distance from the actual operations - thus with latencies in the communication. As a main strategy to mitigate them, DexROV will develop a real time simulation environment to accommodate operators' requests on the onshore side with no delays. The simulated environment will exploit cm accuracy 3D models of the environment built online by the ROV, using data acquired with underwater sensors (3D sonar and vision based). A dedicated cognitive engine will analyse user's control requests as done in the simulated environment, and will turn them into primitives that the ROV can execute autonomously in the real environment, despite the communication latencies. Effective user interfaces will be developed for dexterous manipulation, including a double advanced arm and hand force feedback exoskeleton. The ROV will be equipped with a pair of new force sensing capable manipulators and dexterous end-effectors: they will be integrated within a modular skid. The outcomes of the project will be integrated and evaluated in a series of tests and evaluation campaigns, culminating with a realistic deep sea offshore trial.

DexROV

Project's Participants List

Dexterous ROV: effective dexterous ROV operations in presence of communication latencies

Project's partners	Name	Country
1	SPACE APPLICATIONS SERVICES NV (SPACEAPPS)	BE
2	COMPAGNIE MARITIME D'EXPERTISES SA (COMEX)	FR
3	UNIVERSITA DEGLI STUDI DI GENOVA (UNIGE-ISME)	IT
4	JACOBS UNIVERSITY BREMEN GGMBH (JACOBS)	DE
5	FONDATION DE L'INSTITUT DE RECHERCHE IDIAP (IDIAP)	CH
6	GRAAL TECH SRL (GT)	IT
7	EJR-QUARTZ BV (EQ)	NL

EU-PolarNet

Connecting Science with Society

At a glance

Acronym: EU-PolarNet

Title: Connecting Science with Society

Call: H2020-BG-2014-1

Topic: BG-15-2014

Instrument: Coordination & support action

Start date: 01/03/2015

End date: 29/02/2020

Duration: 60 months

Total Cost: € 2.174.503,75

EC Contribution: € 2.174.503,25

Consortium: 22 partners

Project Coordinator: Alfred-Wegener-Institut Helmholtz- Zentrum Fuer Polar- Und Meeresforschung, DE

Abstract

The rapid changes occurring in the Polar Regions are significantly influencing global climate with consequences for global society. EU-PolarNet will develop a joint European research plan to make optimal use of European and Trans-Atlantic expertise and infrastructure.

European polar research has contributed critical knowledge to identifying the processes behind these rapid changes but, in contrast to lower latitudes, datasets from the Polar Regions are still insufficient to fully understand and more effectively predict the effects of change on our climate and society. This situation can only be improved by a more holistic integrated scientific approach, a higher degree of coordination of polar research and closer cooperation with all relevant actors on an international level as requested in the Horizon 2020 work programme.

The objectives of EU-PolarNet are to establish an ongoing dialogue between policymakers, business and industry leaders, local communities and scientists to increase mutual understanding and identify new ways of working that will deliver economic and societal benefits. The results of this dialogue will be brought together in a plan for an Integrated European Research Programme that will be co-designed with all relevant stakeholders and coordinated with the activities of many other polar research nations beyond Europe, including Canada and the United States, with which consortium partners already have productive links. This consortium brings together well-established, world-class, multi-disciplinary research institutions whose science programmes are internationally recognised for excellence.

Alongside these scientific capabilities, the national programmes represented in this proposal possess a unique array of infrastructure and operational expertise to support science in both Polar Regions. The consortium is uniquely well positioned to significantly enhance Europe's capabilities to undertake state of the art science and cost-efficiently operate infrastructure in the hostile polar environments.

Project's Participants List

EU-PolarNet

Connecting Science with Society

Project's partners	Name	Country
1	ALFRED-WEGENER-INSTITUT HELMHOLTZ- ZENTRUM FUER POLAR- UND MEERESFORSCHUNG	DE
2	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	FR
3	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
4	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
5	POLARFORSKNINGSSEKRETARIETET	SE
6	INSTITUT POLAIRE FRANCAIS PAUL EMILE VICTOR	FR
7	INSTITUTO DE GEOGRAFIA E ORDENAMENTO DO TERRITORIO DA UNIVERSIDADE DE LISBOA	PT
8	RIJKSUNIVERSITEIT GRONINGEN	NL
9	NORGES FORSKNINGSRAD	NO
10	MINISTERIO DE ECONOMIA Y COMPETITIVIDAD	ES
11	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
12	UNIVERSITAET WIEN	AT
13	BULGARSKI ANTARKTICHESKI INSTITUT ASSOCIATION	BG
14	GEOLOGICAL SURVEY OF DENMARK AND GREENLAND	DK
15	VRIJE UNIVERSITEIT BRUSSEL	BE
16	OULUN YLIOPISTO	FI
17	INSTITUT ROYAL DES SCIENCES NATURELLES DE BELGIQUE	BE
18	INSTYTUT GEOFIZYKI POLSKIEJ AKADEMII NAUK	PL
19	TALLINNA TEHNIKAULIKOOL	EE
20	ARCTIC MONITORING AND ASSESSMENT PROGRAMME SECRETARIAT	NO
21	WOC - WORLD OCEAN LIMITED	UK
22	GRONLANDS NATURINSTITUT	GL

INMARE

Industrial Applications of Marine Enzymes: Innovative screening and expression platforms to discover and use the functional protein diversity from the sea

At a glance

Acronym: INMARE

Title: Industrial Applications of Marine Enzymes: Innovative screening and expression platforms to discover and use the functional protein diversity from the sea

Call: H2020-BG-2014-2

Topic: BG-04-2014

Instrument: Innovation action

Start date: 01/04/2015

End date: 31/03/2019

Duration: 48 months

Total Cost: € 7.396.689,65

EC Contribution: € 5.999.557,13

Consortium: 24 partners

Project Coordinator: Bangor University, UK

Abstract

It is widely appreciated that biological resources from the marine environment represent a largely untapped potential for industrial enzymes. However, today only a very small fraction of marine enzymes have made it to industrial biocatalysis and commercialisation stage. The collaborative research project INMARE aims to address this by streamlining and shortening the pathways from discovery of new marine enzymes and bioactive compounds towards the development and commercialisation of industrial applications for targeted production of fine chemicals, drugs and in environmental clean-up.

INMARE stands for "Industrial Applications of Marine Enzymes: Innovative screening and expression platforms to discover and use the functional protein diversity from the sea" and brings together multidisciplinary expertise and facilities of academic and industry partners. The companies involved in the project are market leaders in enzyme production and biocatalysis processes designed to efficiently deliver safer (pharmaceuticals) cheaper (agriculture) and biobased (biopolymers) products. They also have an impressive track record in environmental clean-up technologies and are committed to promoting public understanding, awareness and dissemination of scientific research. To reach its objectives, the project will integrate following core activities: advanced technologies to access and sample unique marine biodiversity hotspots; state-of-the art technologies for construction of metagenomic libraries; innovative enzyme screening assays and platforms; cutting-edge sequence annotation pipelines and bioinformatics resources; high-end activity screening technology; bioanalytical and bioprocess engineering facilities and expertise, nanoparticle-biocatalysts; high-quality protein crystallization and structural analysis facilities and experts in IP management for biotechnology. While the project does not have a specific trans-Atlantic focus, marine genetic resources will be drawn among others from unique environments in the Atlantic (notably the Porcupine Bank in North Atlantic). Moreover, one of the global top contributors of protein structural data, the Faculty of Chemical Engineering from the University of Toronto (Canada), is one of the key partners involved in research activities across the INMARE project (via in kind contributions without EC funding). Finally, the international CLIB2021 cluster of companies and universities (including from Brazil, Canada and the US) will be playing an important role in disseminating the results of INMARE even broader across the Atlantic.

European Commission

INMARE

Project's Participants List

Industrial Applications of Marine Enzymes: Innovative screening and expression platforms to discover and use the functional protein diversity from the sea

Project's partners	Name	Country
1	BANGOR UNIVERSITY	UK
2	UNIVERSITAET HAMBURG	DE
3	HEINRICH-HEINE-UNIVERSITAET DUESSELDORF	DE
4	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
5	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
6	BAYER TECHNOLOGY SERVICES GMBH	DE
7	NOVOZYMES A/S	DK
8	UNIVERSITETET I BERGEN	NO
9	UNIVERSITY COLLEGE CORK, NATIONAL UNIVERSITY OF IRELAND, CORK	IE
10	VILNIAUS UNIVERSITETAS	LT
11	JACOBS UNIVERSITY BREMEN GGMBH	DE
12	PHARMAMAR, S.A.U.	ES
13	THE RESEARCH COMMITTEE OF THE TECHNICAL UNIVERSITY OF CRETE	EL
14	ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA	IT
15	ASSOCIACAO DO INSTITUTO SUPERIOR TECNICO PARA A INVESTIGACAO E DESENVOLVIMENTO	PT
16	EVOCATAL GMBH	DE
17	INOFEA AG	CH
18	FACHHOCHSCHULE NORDWESTSCHWEIZ	CH
19	LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE	UK
20	CLUSTER INDUSTRIELLE BIOTECHNOLOGIE 2021 E.V.	DE
21	SEASCAPE CONSULTANTS LTD	UK
22	UNI RESEARCH AS	NO
23	UNIVERSITA DEGLI STUDI DI MILANO	IT
24	THE GOVERNING COUNCIL OF THE UNIVERSITY OF TORONTO	CA

LAkHsMI

Sensors for LArge scale HydrodynaMic Imaging of ocean floor

Abstract

LAkHsMI will develop a new bio-inspired technology to make continuous and cost-effective measurements of the near-field, large-scale hydrodynamic situation, for environmental monitoring in cabled ocean observatories, marine renewable energy and port/harbor security. We will design, manufacture, and field test prototype smart sensor cables that measure differential pressure and temperature on the ocean floor and enable high resolution imaging of the surrounding volume in space and time, is simple, inexpensive and has very low power consumption. The cables can be connecting with existing cabled ocean observatories. The technology is inspired by the biophysics of fish hydrodynamic sensing. The technology is scalable from meters to possibly hundreds of kilometres and allows a high sampling frequency. LAkHsMI will also develop innovative methods for hydrodynamic imaging. It produces several continuous on-line information products for interdisciplinary oceanography and seismic geophysics but also for other applications including tracking fish and fish schools or (sub) surface traffic in harbours. Software interfaces developed in the course of the project will be integrated with existing observatory systems (such as EUROGOOS). LAkHsMI will design and implement the sensor cables on small large scales. Tests will be conducted in a tank, a pool, an in ocean observatory.

At a glance

Acronym: LAkHsMI

Title: Sensors for LArge scale HydrodynaMic Imaging of ocean floor

Call: H2020-BG-2014-2

Topic: BG-09-2014

Instrument: Research & Innovation action

Start date: 01/04/2015

End date: 31/03/2019

Duration: 48 months

Total Cost: € 3,040,221.25

EC Contribution: € 3,040,221.25

Consortium: 6 partners

Project Coordinator: Tallinna Tehnikaulikool (TUT), EE

LAkHsMI

Sensors for LArge scale HydrodynaMic Imaging of ocean floor

Project's Participants List

Project's partners	Name	Country
1	TALLINNA TEHNIKAULIKOOL (TUT)	EE
2	RIJKSUNIVERSITEIT GRONINGEN (RUG)	NL
3	HERIOT-WATT UNIVERSITY (HWU)	UK
4	HYDRO BOND ENGINEERING LIMITED (HBE) LTD	UK
5	AQUATERA LIMITED (AT) LTD	UK
6	OU ELIKO TEHNOLOOGIA ARENDUSKESKUS (ELIKO)	EE

MARIBE

Marine Investment for the Blue Economy

At a glance

Acronym: MARIBE

Title: Marine Investment for the Blue Economy

Call: H2020-BG-2014-1

Topic: BG-05-2014

Instrument: Coordination & support action

Start date: 01/03/2015

End date: 31/08/2016

Duration: 18 months

Total Cost: € 1,977,951.25

EC Contribution: € 1,977,951.25

Consortium: 10 partners

Project Coordinator: University College Cork, National University of Ireland, Cork (UCC), IE

Abstract

The primary aim of the MARIBE project is to unlock the sustainable growth and jobs potential of Blue Growth (BG). This aim will be fulfilled by identifying the most promising business models in the BG economy (in particular multi-purpose platforms). Plans will be developed to overcome their challenges, propose how these models can be advanced to large scale pilot stage and test the feasibility of the recommended business models. The pilots will be enabled by securing support from the investment community and liaising with the EC to implement the outcomes of the project and continue funding support via H2020. The project will produce toolkits and guidelines for BG stakeholders and the investment community with regards to the BG socio-economic trends and technical and non-technical challenges as well as reports on best business models for BG.

The MARIBE consortium has connections to H2-Ocean, TROPOS and MERMAID but has the desired degree of independence and impartiality to ensure neutral business model assessment. The partnership comprises the full spectrum of academic and SME partners, including expertise from all relevant BG sectors. It includes the Food and Agriculture Organisation of the United Nations as a key global partner to secure a Trans-Atlantic pilot and Business Models Inc. as the business model expert. Business models will first be mapped according to best practice methodology, cognisant of their value chains. The technical and non-technical challenges of the business will be measured based on their life cycle stage and proposals made for their mitigation. Key stakeholders from all sectors of Blue Economy to BG will be engaged, as well as key investors. Following these reviews and engagements, four Think Tank workshops will be organised to envision innovative new business models, in particular considering multipurpose platforms. A final workshop will then define implementation plans for best business model for each of the four basins.

MARIBE

Marine Investment for the Blue Economy

Project's Participants List

Project's partners	Name	Country
1	UNIVERSITY COLLEGE CORK, NATIONAL UNIVERSITY OF IRELAND, CORK (UCC)	IE
2	STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK (DLO)	NL
3	ECOAST RESEARCH CENTRE OSTEND BVBA (ECOAST) BVBA	BE
4	SWANSEA UNIVERSITY (PRIFYSGOL ABERTAWE)	UK
5	HERIOT-WATT UNIVERSITY (HWU)	UK
6	UNIVERSIDAD DE CANTABRIA (UC)	ES
7	AQUABIOTECH LIMITED (ABT) LTD	MT
8	FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO)	IT
9	BUSINESS MODELS INC BV (BMINC.) BV	NL
10	BVG ASSOCIATES LIMITED (BVG Associates Ltd.)	UK

At a glance

Acronym: MARISURF

Title: Novel, Sustainable Marine Bio-Surfactant / Bio-Emulsifiers For Commercial Exploitation

Call: H2020-BG-2014-2

Topic: BG-03-2014

Instrument: Research & Innovation action

Start date: 01/09/2015

End date: 31/08/2020

Duration: 60 months

Total Cost: € 4,749,647.50

EC Contribution: € 4,749,647.50

Consortium: 12 partners

Project Coordinator: Heriot-Watt University (HWU), UK

MARISURF

Novel, Sustainable Marine Bio-Surfactant / Bio-Emulsifiers For Commercial Exploitation

Abstract

Surfactants and emulsifiers constitute an important class of chemical agents that are widely used in almost every sector of modern industry. The huge market demand is currently met almost exclusively by synthetic, mainly petroleum-based, chemical products, which are usually non-biodegradable and mostly toxic or GM plant based products (used in foods), which are undesirable by some end-users. Their biologically produced counterparts (i.e. bio-surfactants and bio-emulsifiers) offer more green sustainable alternatives. This has led to a number of manufactures looking for ways to increase competitiveness through searching for underexploited sources such as the marine environment. Our objectives are to develop (1) innovative approaches in discovering, characterising and producing novel marine-derived bio-surfactants and bio-emulsifiers from a large bacterial collection (greater than 500 strains) housed at Heriot-Watt University, originally isolated from various coastal and open ocean waters around the world, (2) novel, economic, and eco-friendly end-products with commercial applications in order to replace synthetic counterparts, and (3) to demonstrate the functionality of new product development for commercial exploitation. Our collection consists of novel bacterial species, originally isolated for their ability to degrade oils, with proven promise in this respect.

For this reason, our consortium (consisting of academic institutions, industrial companies and end users) offering a wide range of expertise, will address the technical bottlenecks for meeting our objectives, namely those of marine resource identification, sustainable supply, discovery pipeline and efficient production in biological systems. The relevance of our proposal to the work programme is underlined by its expected impact in increasing efficiency of discovery pipelines, the development of more economic and eco-friendly end-products and finally in contributing to the implementation of the objectives of the EU Blue Growth.

MARISURF

Project's Participants List

Novel, Sustainable Marine Bio-Surfactant / Bio-Emulsifiers For Commercial Exploitation

Project's partners	Name	Country
1	HERIOT-WATT UNIVERSITY (HWU)	UK
2	UNIVERSITY OF ULSTER (ULster)	UK
3	DEMOCRITUS UNIVERSITY OF THRACE (DUTH)	EL
4	BIO BASE EUROPE PILOT PLANT VZW (BBEPP)	BE
5	EcoTechSystems Srl (ETS)	IT
6	ACONDICIONAMIENTO TARRASENSE ASSOCIACION (LEITAT)	ES
7	APIVITA KALLYNTIKA DIAITITIKA FARMAKA ANONYMI EMPORIKI KAI VIOTECHNIKIETAIREIA (APIVITA)	EL
8	MARLOW FOODS LIMITED (Marlow Foods)	UK
9	MACPHIE OF GLENBERVIE LTD (MACPHIE)	UK
10	NANOIMMUNOTECH SL (NIT)	ES
11	UNIVERSITY OF PATRAS (PANEPISTIMIO PATRON UPAT)	EL
12	NOVA-INSTITUT FUR POLITISCHE UND OKOLOGISCHE INNOVATION GMBH (nova-Institut GmbH)	DE

NOMORFILM

Novel marine biomolecules against biofilm – Application to medical devices

Abstract

Microalgae are a source of secondary metabolites useful as new bioactive compounds. Activity of these compounds against bacterial pathogens and biofilm formation has not been determined yet. Biofilm formation is especially important in infections and tissue inflammation related to implants and catheters. These problems finally cause a release of the implant, which must be removed and replaced by a new one, entailing an increase in antibiotic consumption, together with a health costs of about 50,000-90,000 € per infection episode.

Taking both problems in account, the search of new antimicrobial agents that will be effective against the bacteria in their two ways of life, planktonic and biofilm stage, is a priority need in the clinical practice.

For this reason, the overall objective of NOMORFILM project is to search for antibiofilm compounds isolated from microalgae that will be useful in the treatment of this kind of infections and could be incorporated in the manufacturing of medical prosthetic devices. For this purpose, 4,000 microalgae species will be deeply screened specifically for new antibacterial and antibiofilm molecules. Structural elucidation of bioactive compounds from these extracts will assure that only new chemical entities, therefore with anticipated new mechanisms of action, will arise to further project stages, those including toxicity tests and animal models.

Most industrially interesting antibiofilm molecules will be incorporated into nanoparticles in order to develop manufacturing methodologies able to incorporate these compounds into real prosthetic devices matrixes. Marketing of results are assured by the presence of diverse SMEs along the manufacture and distribution of prosthetic devices, and the corresponding consortium agreements with respect to IPRs.

At a glance

Acronym: NOMORFILM

Title: Novel marine biomolecules against biofilm - Application to medical devices

Call: H2020-BG-2014-2

Topic: BG-03-2014

Instrument: Research & Innovation action

Start date: 01/04/2015

End date: 31/03/2019

Duration: 48 months

Total Cost: € 7,651,315.75

EC Contribution: € 7,651,315.75

Consortium: 15 partners

Project Coordinator: Fundacio Centre de Recerca en Salut International de Barcelona, ES

European Commission

NOMORFILM

Novel marine biomolecules against biofilm – Application to medical devices

Project's Participants List

Project's partners	Name	Country
1	FUNDACIO CENTRE DE RECERCA EN SALUT INTERNATIONAL DE BARCELONA (CRESIB)	ES
2	UNIVERSIDADE DE COIMBRA (UNIVERSIDADE DE COIMBRA)	PT
3	UNIVERSIDAD DE OVIEDO (UNIOVI)	ES
4	KAROLINSKA INSTITUTET (KI)	SE
5	UNIVERSITA DEGLI STUDI DI FIRENZE (UNIFI)	IT
6	UNIVERSIDAD DE ALMERIA (UNIVERSIDAD DE ALMERIA)	ES
7	KOBENHAVNS UNIVERSITET (UCPH)	DK
8	THE PROVOST, FELLOWS, FOUNDATION SCHOLARS & THE OTHER MEMBERS OF BOARD OF THE COLLEGE OF THE HOLY & UNDIVIDED TRINITY OF QUEEN ELIZABETH NEAR DUBLIN (TRINITY COLLEGE DUBLIN)	IE
9	Fotosintetica & Microbiologica S.r.l. (F&M)	IT
10	NANOMEDPHARMA LTD (NMP)	UK
11	KTEDOGEN SRL (KTEDOGEN SRL)	IT
12	MBA INCORPORADO SL (MBA INCORPORADO)	ES
13	PYROGENESIS SA (PYROGENESIS)	EL
14	CIIMAR - Centro Interdisciplinar de Investigação Marinha e Ambiental (CIIMAR)	PT
15	UNIVERSITE PIERRE ET MARIE CURIE - PARIS 6 (UPMC)	FR

PrimeFish

Developing Innovative Market Orientated Prediction Toolbox to Strengthen the Economic Sustainability and Competitiveness of European Seafood on Local and Global markets

At a glance

Acronym: PrimeFish

Title: Developing Innovative Market Orientated Prediction Toolbox to Strengthen the Economic Sustainability and Competitiveness of European Seafood on Local and Global markets

Call: H2020-BG-2014-2

Topic: BG-10-2014

Instrument: Research and Innovation action

Start date: 01/03/2015

End date: 28/02/2019

Duration: 48 months

Total Cost: € 5.275.426,25

EC Contribution: € 4.997.912,50

Consortium: 16 partners

Project Coordinator: MATIS OHF, IS

Abstract

Two thirds of seafood consumed in EU is imported from third countries. Although capture fisheries in Europe have declined, the aquaculture sector has not grown to meet the increased demand for seafood. Seafood producers in Europe are in fierce competition with imports; prices of seafood products fluctuate and destabilise markets; unsuitable regulations influence the competitiveness of seafood producers; some producers are unable to meet the demands and expectations of consumers and many new fish products fail on markets. These and other challenges affecting the economic sustainability of European seafood producers are addressed in PrimeFish, a four year Horizon 2020 funded research project with 14 participants from Europe. For comparative investigation outside Europe, PrimeFish has participants from Vietnam and Canada. To improve economic sustainability and competitiveness, information will be gathered and analysed to generate new knowledge and insights into the performance of European/Canadian fisheries and aquaculture sectors on local, European and international markets.

The outcome of the project will be models that can be used to compare competitiveness and to predict possible “boom and bust” price cycles, for strategic positioning within the value chain, on success analysis for new products and for innovation and price analysis for specific species. PrimeFish will assess the non-market value associated with aquaculture and captured fisheries as well as the effectiveness of regulatory systems and thereby provide a basis for improved societal decision making in the future. The implementation of the simulation and prediction models into a web-based market intelligence toolbox for seafood operators and policymakers is one of the key concepts of the project. The toolbox will provide peer comparison to fishermen, aquaculture producers and processing companies (on a supply-chain level) and to public stakeholders on a country or species level. The toolbox should also support producers in product development and in spotting market needs. By improving strategic decision making for industry players and policymakers the long term economic sustainability of EU fisheries and aquaculture sectors will be enhanced. As there is a lack of appropriate production and socio-economic data, the project will gather data not only on aggregate level obtained from publically available sources, but also from individual production companies, industry organisations, sales organisations and marketing channels. To facilitate data access for the specific case studies and to create added value, PrimeFish has a large industry reference group within Europe and Canada. PrimeFish is the ideal platform for strengthening the Trans-Atlantic alliance between EU and Canada by providing comparative studies and benchmarking on economic viability and competitiveness of the fisheries and aquaculture sectors across the Atlantic.

PrimeFish

Project's Participants List

Developing Innovative Market Orientated Prediction Toolbox to Strengthen the Economic Sustainability and Competitiveness of European Seafood on Local and Global markets

Project's partners	Name	Country
1	MATIS OHF	IS
2	AALBORG UNIVERSITET	DK
3	SP/F SYNTESA	FO
4	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE	FR
5	UNIVERSITE DE SAVOIE	FR
6	VEREIN ZUR FOERDERUNG DES TECHNOLOGIETRANSFERS AN DER HOCHSCHULE BREMERHAVEN E.V.	DE
7	HASKOLI ISLANDS	IS
8	UNIVERSITA DEGLI STUDI DI PARMA	IT
9	UNIVERSITA DEGLI STUDI DI PAVIA	IT
10	KONTALI ANALYSE AS	NO
11	NOFIMA AS	NO
12	UNIVERSITETET I TROMSOE	NO
13	CENTRO TECNOLOGICO DEL MAR - FUNDACION CETMAR	ES
14	THE UNIVERSITY OF STIRLING	UK
15	TRUONG DAI HOC NHA TRANG	VN
16	MEMORIAL UNIVERSITY OF NEWFOUNDLAND	CA

Respon-Sea-ble

Sustainable oceans: our collective responsibility, our common interest. Building on real-life knowledge systems for developing interactive and mutual learning media

At a glance

Acronym: Respon-Sea-ble

Title: Sustainable oceans : our collective responsibility, our common interest. Building on real-life knowledge systems for developing interactive and mutual learning media

Call: H2020-BG-2014-1

Topic: BG-13-2014

Instrument: Coordination & support action

Start date: 01/04/2015

End date: 31/03/2019

Duration: 48 months

Total Cost: € 3.696.644,00

EC Contribution: € 3.696.644,00

Consortium: 15 partners

Project Coordinator: ACTEON SARL, FR

Abstract

The project will develop well-targeted and sound communication material that raises awareness on our (individual and collective) responsibility and interest in ensuring the sustainability of the ocean and of its ecosystems.

The project builds on critical assessments of: (1) existing communication strategies, material and governance that focuses on the ocean; (2) the values, perceptions and understanding of the state, functioning and role of the ocean by different types of stakeholders and of the wider public; (3) the (scientific) knowledge that exist on the ocean-human relationship, in particular in terms of ecosystem services that can be delivered by ocean ecosystems and support (future) development opportunities and blue growth and of pressures that are imposed on the oceans. These critical assessments will help identifying priority target groups with key responsibilities and interests in the state of our oceans - today and in the future.

Within a participatory process involving the stakeholders of the knowledge creation & sharing system from four European marine regions (Baltic Sea, Mediterranean Sea, Northern Sea and Atlantic _ including in its transatlantic dimension), and building on the scientific knowledge-based established and on project-dedicated IT structure/platform, the project will then develop and test under real conditions innovative communication tools. Key principles guiding this development will be interactivity, mutual learning, creativity and entertainment.

Finally, specific activities will be performed for ensuring proposed communication tools are made accessible and available to their future users in Europe but also elsewhere.

Project's Participants List

Respon-Sea-ble

Sustainable oceans: our collective responsibility, our common interest. Building on real-life knowledge systems for developing interactive and mutual learning media

Project's partners	Name	Country
1	ACTEON SARL	FR
2	STIFTELSEN GRID ARENDAL	NO
3	NATIONAL UNIVERSITY OF IRELAND, GALWAY	IE
4	STICHTING PROSEA MARINE EDUCATION	NL
5	COFAC COOPERATIVA DE FORMACAO E ANIMACAO CULTURAL CRL	PT
6	INSTITUTUL NATIONAL DE CERCETARE DEZVOLTARE DELTA DUNARII	RO
7	NORSK INSTITUTT FOR VANNFORSKNING	NO
8	CSP - INNOVAZIONE NELLE ICT S.C.A.R.L.	IT
9	BALTIC ENVIRONMENTAL FORUM DEUTSCHLAND EV	DE
10	FUNDACION AZTI - AZTI FUNDAZIOA	ES
11	THE MARINE FOUNDATION LIMITED	UK
12	SEVEN ENGINEERING CONSULTANTS OE	EL
13	UNIVERSITE DE BRETAGNE OCCIDENTALE	FR
14	UNIVERSITY OF PLYMOUTH	UK
15	TELEVISION FOR THE ENVIRONMENT	UK

SeaChange

Abstract

Sea Change project seeks to bring about a fundamental "Sea Change" in the way European citizens view their relationship with the sea, by empowering them – as 'Ocean Literate' citizens - to take direct and sustainable action towards healthy seas and ocean, healthy communities and ultimately - a healthy planet.

Sea Change is working with partners and advice from across the Atlantic in North America.

Key objectives of Sea Change are to:

- Compile an in-depth review of the links between Seas and Ocean and Human health;

- Build upon the latest social research on citizen and stakeholder attitudes, perceptions and values to help design and implement successful mobilisation activities focused on education, community, governance actors and directly targeted at citizens;

- Build upon significant work to date, adopting best practice and embedding Ocean Literacy across established strategic initiatives and networks in order to help maximise impact and ensure sustainability;

- Ensure that efforts to sustain an Ocean Literate society in Europe continue beyond the life of Sea Change through codes of good practice, public campaigns and other ongoing community activities;

- Ensure that all activities of Sea Change are carefully monitored and evaluated to ensure maximum sustainability, effectiveness and efficiency;

- Ensure Knowledge exchange with transatlantic partners to bring about a global approach to protecting the planet's shared seas and ocean.

Sea Change includes a mobilisation phase engaging with citizens, formal education and policy actors.

At a glance

Acronym: Sea Change

Title: SeaChange

Call: H2020-BG-2014-1

Topic: BG-13-2014

Instrument: Coordination & support action

Start date: 01/03/2015

End date: 28/02/2018

Duration: 36 months

Total Cost: € 3,494,876.00

EC Contribution: € 3,494,876.00

Consortium: 17 partners and 4 IAG partners

Project Coordinator: Marine Biological Association Of The United Kingdom, UK

Project's Participants List

SeaChange

Project's partners	Name	Country
1	MARINE BIOLOGICAL ASSOCIATION OF THE UNITED KINGDOM	UK
2	AQUATT UETP LTD	IE
3	THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS	UK
4	NATIONAL UNIVERSITY OF IRELAND, GALWAY	IE
5	GOETEBORGS UNIVERSITET	SE
6	VLAAMS INSTITUUT VOOR DE ZEE VZW	BE
7	FONDATION EUROPEENNE DE LA SCIENCE	FR
8	ASSOCIATION EUROPEENNE DES EXPOSITIONS SCIENTIFIQUES TECHNIQUES ET INDUSTRIELLES	BE
9	EUROPEAN ASSOCIATION OF GEOGRAPHERS	BE
10	DANMARKS TEKNISKE UNIVERSITET	DK
11	CIENCIA VIVA-AGENCIA NACIONAL PARA A CULTURA CIENTIFICA E TECNOLOGICA	PT
12	CIIMAR - CENTRO INTERDISCIPLINAR DE INVESTIGAÇÃO MARINHA E AMBIENTAL	PT
13	UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION -UNESCO	FR
14	HELLENIC CENTRE FOR MARINE RESEARCH	EL
15	COEXPLORATION LIMITED	UK
16	RESEAU OCEAN MONDIAL AISBL	BE
17	ASSOCIACIO SUBMON: DIVULGACIO, ESTUDI I CONSERVACIO DE L'ENTORN NATURAL	ES

IAG Partners	Name	Country
1	NATIONAL MARINE SCIENCES EDUCATION ASSOCIATION	US
2	CENTERS FOR OCEAN SCIENCES EDUCATION EXCELLENCE	US
3	THE CANADIAN NETWORK FOR OCEAN EDUCATION	CA
4	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	US

At a glance

Acronym: SUCCESS

Title: Strategic Use of Competitiveness towards Consolidating the Economic Sustainability of the European Seafood sector

Call: H2020-BG-2014-2

Topic: BG-10-2014

Instrument: Research & Innovation action

Start date: 01/04/2015

End date: 31/03/2018

Duration: 36 months

Total Cost: € 5,207,821.75

EC Contribution: € 4,998,290.25

Consortium: 24 partners

Project Coordinator: Université De Bretagne Occidentale (UBO), FR

SUCCESS

Strategic Use of Competitiveness towards Consolidating the Economic Sustainability of the European Seafood sector

Abstract

SUCCESS is bringing together an integrated team of scientists from all fields of fisheries and aquaculture science with industry partners and key stakeholders to work on solutions which shall improve the competitiveness of the European fisheries and aquaculture sector. The supply-side of seafood markets is limited from both sea fisheries and aquaculture. At the same time demand for seafood products is increasing. In a globalised economy, the conjunction of these two trends should generate high opportunities for any seafood production activity. However, both fisheries and aquaculture companies are facing key challenges, which currently hinder them reaping the full benefits of seafood markets expansion, and even question their sustainability. As a whole, the EU fisheries sector remains at low levels of profitability and sustainability. The SUCCESS project will examine two strategies to improve the competitiveness of the sector: (i) increasing demand for EU seafood products, especially improving the awareness of the advantages of European production (including sustainability requirements and adjustment to market evolution); and (ii) cost reduction in certain production segments. For both strategies development on world markets as well as consumer preferences and awareness will be analysed. Additionally, SUCCESS will explore the different sectors along the value chain (from fisheries and aquaculture producers via processing companies, wholesalers, retailers to direct marketing to mobile fishmongers and restaurants) and their potential for improvements in competitiveness. These analyses also include long term predictions about the viability of certain production systems and will be considered in specific case studies on for example mussel production, shrimp fisheries, whitefish, traditional pond aquaculture and new aquaculture production systems.

Project's Participants List

SUCCESS

Strategic Use of Competitiveness towards Consolidating the Economic Sustainability of the European Seafood sector

Project's partners	Name	Country
1	UNIVERSITE DE BRETAGNE OCCIDENTALE (UBO)	FR
2	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER (IFREMER)	FR
3	HASKOLI ISLANDS (IoES)	IS
4	STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK (DLO)	NL
5	UNIVERSIDAD DE CANTABRIA (UC)	ES
6	JOHANN HEINRICH VON THUENEN-INSTITUT, BUNDESFORSCHUNGSINSTITUT FUER LAENDLICHE RAEUME, WALD UND FISCHEREI (TI)	DE
7	NISEA SOCIETA COOPERATIVA (NISEA) SC	IT
8	MARKMAR EHF (MM) EHF	IS
9	Alexander Technological Educational Institute of Thessaloniki (TECHNOLOGIKO EKPAIDEFTIKO IDRYMA THESSALONIKIS) (ATEITH)	EL
10	MORSKI INSTYTUT RYBACKI - PANSTWOWY INSTYTUT BADAWCZY (NMFRI)	PL
11	FISHOR CONSULTING LTD (Fishor) LTD	UK
12	UNIVERSITA DEGLI STUDI DI PALERMO (UNIPA)	IT
13	Luonnonvarakeskus (RKT)	FI
14	ICELAND SEAFOOD INTERNATIONAL EHF (ISI) EHF	IS
15	PECHEURS DE MANCHE ET D'ATLANTIQUE SA (PMA)	FR
16	DUCAMAR SPAIN SL (Ducamar)	ES
17	RODECAN SL (RODECAN) SL	ES
18	FRIGORIFICOS ORTIZ SA (FRIGORSA) SA	ES
19	KILIC DENIZ URUNLERI URETIMI IHRACAT ITHALAT VE TICARET AS (Kilic) AS	TR
20	FISH-PASS (Fish-Pass) SARL	FR
21	WEMAKE SARL (wemake)	FR
22	FUNDACION CENTRO TECNOLOGICO ACUICULTURA DE ANDALUCIA (CTAQUA)	ES
23	ASOCIACION DE MAYORISTAS DE PESCADOS DEL PRINCIPADO DE ASTURIAS (AMPPA)	ES
24	BUNDESVERBAND DER DEUTSCHEN FISHINDUSTRIE UND DES FISCHGROSSHANDELS E.V. (BVFisch)	DE

TASCMAR

Tools And Strategies to access original bioactive compounds from Cultivation of MARine invertebrates

At a glance

Acronym: TASCMAR

Title: Tools And Strategies to access original bioactive compounds from Cultivation of MARine invertebrates and associated symbionts

Call: H2020-BG-2014-2

Topic: BG-03-2014

Instrument: Research & Innovation action

Start date: 01/04/2015

End date: 31/03/2019

Duration: 48 months

Total Cost: € 6,758,452.50

EC Contribution: € 6,755,950.25

Consortium: 13 partners

Project Coordinator: Centre National de la Recherche Scientifique (CNRS), FR

Abstract

TASCMAR project aspires to develop new tools and strategies in order to overcome existing bottlenecks in the biodiscovery and industrial exploitation of novel marine derived biomolecules (secondary metabolites and enzymes) with applications in the pharmaceuticals, nutraceuticals, cosmeceuticals and fine chemicals industries. Exploitation of neglected and underutilized marine invertebrates and symbionts from the mesophotic zone will be combined with innovative approaches for the cultivation and extraction of marine organisms from lab to pilot-scale, using the unique prototypes Platotex™ and Zippertex™, both reaching the Technology Readiness Level 7. Thus, marine dedicated cultivation and extraction equipment will be built and validated. These unique improvements will ensure sustainable supply of biomass and promote the production of high added value bioactive marine compounds. An integrated, holistic technological metabolomic approach will be applied, in conjunction with bioactivity profiling, as filtering and bio-prioritisation tools. Moreover, state-of-the-art analytical instrumentation and in-house databases will be employed for the dereplication and characterization of valuable compounds. A panel of libraries (marine organisms, extracts, pure metabolites and biocatalysts) will be constructed and exploited throughout the project. A focused panel of in-vitro, cell-based, in-ovo and in-vivo bioassays for discovering metabolites with anti-ageing and/ or angiogenesis modulating activity will frame the entire work-flow and will reveal the lead compounds. In addition, the catalytic potential of mesophotic symbionts and deriving enzymes candidates will be evaluated in the fine chemicals and bioremediation industries. The project activities will be constantly assessed via effective management for their societal, economic and environmental impact in order to find the best compromise between industrial development and sustainable growth.

TASCMAR

Tools And Strategies to access original bioactive compounds from Cultivation of MARine invertebrates

Project's Participants List

Project's partners	Name	Country
1	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)	FR
2	ETHNIKO KAI KAPODISTRIAKO PANEPISTIMIO ATHINON (National and Kapodistrian University of Athens)	EL
3	TEL AVIV UNIVERSITY	IL
4	CHULALONGKORN UNIVERSITY	TH
5	UNIVERSITE DE LA REUNION	FR
6	CRELUX GMBH	DE
7	BICT SRL	IT
8	PIERRE GUERIN SAS	FR
9	IMARE NATURAL SL	ES
10	ASTAREAL AB	SE
11	APIVITA KALLYNTIKA DIAITITIKA FARMAKA ANONYMI EMPORIKI KAI VIOTECHNIKIETAIREIA (APIVITA)	EL
12	T6 ECOSYSTEMS SRL	IT
13	ASSOCIATION ECO OCEAN (EcoOcean)	IL

UTOFIA

Underwater Time Of Flight Image Acquisition system

Abstract

UTOFIA will offer a compact and cost-effective underwater imaging system for turbid environments. Using range-gated imaging, the system will extend the imaging range by factor 2 to 3 over conventional video systems, while at the same time providing video-rate 3D information. This will fill the current gap between short-range, high-resolution conventional video and long-range low-resolution sonar systems.

UTOFIA offers a new modus operandi for the main targeted domains of application: marine life monitoring, harbour and ocean litter detection, fisheries and aquaculture stock assessment, and seabed mapping.

At a glance

Acronym: UTOFIA

Title: Underwater Time Of Flight Image Acquisition system

Call: H2020-BG-2014-2

Topic: BG-09-2014

Instrument: Research & Innovation action

Start date: 01/02/2015

End date: 30/04/2018

Duration: 39 months

Total Cost: € 5,716,971.00

EC Contribution: € 5,716,971.00

Consortium: 7 partners

Project Coordinator: STIFTELSEN SINTEF, NO

European Commission

Project's Participants List

UTOFIA

Underwater Time Of Flight Image Acquisition system

Project's partners	Name	Country
1	STIFTELSEN SINTEF	NO
2	BRIGHT SOLUTIONS S.R.L.	IT
3	ODOS IMAGING LIMITED	UK
4	SUBSEA TECH SAS	FR
5	FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	DE
6	FUNDACION AZTI - AZTI FUNDAZIOA	ES
7	DANMARKS TEKNISKE UNIVERSITET	DK

Call for Sustainable Food Security[2]

H2020-SFS-2014

Ensuring the availability of and access to sufficient safe and nutritious food is a key priority that impacts all EU citizens and needs to be ensured today and in the future. At the same time the production and processing of food is a key economic activity providing jobs, skills and training, attracting investments, supporting rural and urban economies and also shaping landscapes. Given the economic scale of the food sector, the potential gains from research and innovation, and the structure of the sector with a strong participation of SMEs, this focus area will develop competitive and resource-efficient aquatic and terrestrial food production systems covering: eco-intensification of production (i.e. without worsening environmental conditions); sustainable management of natural resources, including the accurate valuation of ecosystems services, while addressing climate change mitigation and adaptation; technologies for a sustainable food chain; safe foods and healthy diets for all; and a global food security system. Enabling technologies and space-enabled applications, adequately set in a societal context, will be an important element in achieving these goals. Overall, research and innovation actions within the Societal Challenge 2 (Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy) of Horizon 2020 will cover the whole food chain, including both the supply and demand sides.

The following section of this brochure, aims to present 4 projects selected from the 2014 call for Sustainable Food Security, that focus on the aquaculture and fisheries sectors. WP 2014 concentrates its efforts on key priorities for the EU to ensure that the critical mass needed to tackle the different sub-challenges is attained, while focusing on the main policy needs.

In particular, to progress towards sustainable food production systems, priority will be given in 2014 to minimising pre-harvest losses also in aquaculture and fisheries and to support the production of safe food and healthy diets, priority will be given to food safety and to sustainable and competitive food production.

[2] **The World Summit on Food Security in 2009 defined food security as existing 'when all people at all times have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life'.**

AquaSpace

Ecosystem Approach to making Space for Aquaculture

At a glance

Acronym: AquaSpace

Title: Ecosystem Approach to making Space for Aquaculture

Call: H2020-SFS-2014-2

Topic: SFS-11a-2014

Instrument: Research and Innovation action

Start date: 01/03/2015

End date: 28/02/2018

Duration: 36 months

Total Cost: € 3,198,914.00

EC Contribution: € 3,198,914.00

Consortium: 22 partners

Project Coordinator: The Scottish Association For Marinescience LBG (SAMS), UK

Abstract

The central goal of the AquaSpace project is to provide increased space of high water quality for aquaculture by adopting the Ecosystem Approach to Aquaculture (EAA) and Marine Spatial Planning (MSP) and so to deliver food security and increased employment opportunities through economic growth. MSP is strategic, forward-looking planning for regulating, managing and protecting the marine environment, including through allocation of space that addresses the multiple, cumulative, and potentially conflicting uses of the sea. The three pillars of EAA are ecological sustainability, social equity, and harmonization of multiple uses. We will achieve this goal by identifying the key constraints experienced by aquaculture development in a wide range of contexts and aquaculture types, taking into account all relevant factors and advised by a Reference User Group. We will then map these constraints against a wide variety of tools/methods that have already been developed in national and EU projects for spatial planning purposes, including some that have been designed specifically for aquaculture. In the freshwater sector only, we will also consider ecosystem services provided by aquaculture that are relevant to integrated catchment planning and management. At 16 case study sites having a variety of scales, aquaculture at different trophic levels with different environmental interactions and most importantly with a range of key space-related development constraints as defined by local stakeholders, we will assess appropriate tools using a common process so as to facilitate synthesis and comparison. This case study approach will generate a large amount of information and is allocated about a third of the project's resources.

The project will develop the outcomes leading to a set of evaluated tools for facilitating the aquaculture planning process by overcoming present constraints. This information will be presented on an interactive web-based platform with tailored entry points for specific user types (e.g. planners, farmers, public) to enable them to navigate to the tools most appropriate to their application.

The knowledge and information gained during this process will be developed into an on-line module at Masters Level which will also be developed into a short Professional Development course aimed at aquaculture planning professionals. The public will be engaged by an innovative school video competition and a vehicle to ensure project legacy will be established.

Project's Participants List

AquaSpace

Ecosystem Approach to making Space for Aquaculture

Project's partners	Name	Country
1	THE SCOTTISH ASSOCIATION FOR MARINESCIENCE LBG (SAMS)	UK
2	AGRIFOOD AND BIOSCIENCES INSTITUTE (AFBI)	UK
3	FUNDACION AZTI - AZTI FUNDAZIOA (AZTI-TECNALIA)	ES
4	BLUEFARM SRL (BLUEFARM)	IT
5	CHRISTIAN MICHELSEN RESEARCH AS (CMR)	NO
6	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS (CSIC)	ES
7	FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS FAO (FAO)	IT
8	NEMZETI AGRARKUTATASI ES INNOVACIOSKOZPONT (NARIC)	HU
9	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER (IFREMER)	FR
10	HAVFORSKNINGSINSTITUTTET (IMR)	NO
11	THE JAMES HUTTON INSTITUTE (JHI)	UK
12	LONGLINE ENVIRONMENT LTD (LLE)	UK
13	MARINE SCOTLAND (MSS)	UK
14	SAGREMARISCO-VIVEIROS DE MARISCO LDA (SGM)	PT
15	JOHANN HEINRICH VON THUENEN-INSTITUT, BUNDESFORSCHUNGSINSTITUT FUER LAENDLICHE RAEUME, WALD UND FISCHEREI (TI-SF)	DE
16	UNIVERSITY COLLEGE CORK, NATIONAL UNIVERSITY OF IRELAND (UCC)	IE
17	PANEPISTIMIO KRITIS (UNIVERSITY OF CRETE) (UOC)	EL
18	BIHARUGRAI HALGAZDASAG MEZOGAZDASAGI TERMELO ERTEKESITO ES TERMESZETVEDELMI KFT (BHG)	HU
19	DALHOUSIE UNIVERSITY (DAL)	CA
20	YELLOW SEA FISHERIES RESEARCH INSTITUTE, CHINESE ACADEMY OF FISHERY SCIENCES (YSFRI)	CN
21	THE UNIVERSITY OF WESTERN AUSTRALIA (UWA)	AU
22	THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)	US

DiscardLess

Strategies for the gradual elimination of discards in European fisheries

At a glance

Acronym: DiscardLess

Title: Strategies for the gradual elimination of discards in European fisheries

Call: H2020-SFS-2014-2

Topic: SFS-09-2014

Instrument: Research and Innovation action

Start date: 01/03/2015

End date: 28/02/2019

Duration: 48 months

Total Cost: € 5.551.125,25

EC Contribution: € 5.000.000,00

Consortium: 31 partners

Project Coordinator: Danmarks Tekniske Universitet, Denmark

Abstract

The European Union has committed to the gradual elimination of the discarding of unwanted catches in European fisheries. DiscardLess will help provide the knowledge, tools and technologies as well as the involvement of the stakeholders to achieve this goal. These will be integrated into Discard Mitigation Strategies (DMS) proposing cost-effective solutions at all stages of the seafood supply chain.

The first focus is on preventing the unwanted catches from ever being caught. This will promote changes in fishing gear using existing and innovative selectivity technology, and changes in fishing tactics based on fishers' and scientists' knowledge. The second focus is on making best use of the unavoidable unwanted catch. We will detail technical and marketing innovations from the deck, through the supply chain to the final market, including monitoring, traceability and valorisation components.

DiscardLess will evaluate the impacts of discarding on the marine environment, on the economy, and the fisheries communities and across the wider society. We will evaluate these impacts before, during and after the implementation of the landing obligation, allowing comparison between intentions and outcomes.

DiscardLess will describe the changes in management and the associated governance structures needed to cement the process. All these innovations will be combined in integrated Internet based interactive programs (DMS toolbox) that will help fishers to evaluate the present and future situation and to take a more qualified decision of how to adjust to the new regime. Also, we will disseminate the outcome of the project and maximize knowledge transfer across Europe through an educational environment – teaching the next generation – as well as more conventional routes.

Project's Participants List

DiscardLess

Strategies for the gradual elimination of discards in European fisheries

Project's partners	Name	Country
1	DANMARKS TEKNISKE UNIVERSITET	DK
2	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	FR
3	INSTITUTO ESPANOL DE OCEANOGRAFIA	ES
4	UNIVERSITETET I BERGEN	NO
5	UNIVERSITY OF STRATHCLYDE	UK
6	KOBENHAVNS UNIVERSITET	DK
7	UNIVERSITE DE BRETAGNE OCCIDENTALE	FR
8	SEA FISH INDUSTRY AUTHORITY	UK
9	MARINE SCOTLAND	UK
10	FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS FAO	IT
11	SIMRAD SPAIN SLU	ES
12	HAMPIDJAN HF	IS
13	SAFETYNET TECHNOLOGIES LIMITED	UK
14	MARINE INSTITUTE	IE
15	IOANNA N.ARGYROU SIMBOULOI EPICHEIR ISIAKIS ANAPTYXIS ETAIREIA PERIORISMENIS EYTHYNIS	EL
16	AQUIMER	FR
17	IMAR- INSTITUTO DO MAR	PT
18	THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS	UK
19	MATIS OHF	IS
20	MAREL HF	IS
21	SHIPCON SP ZOO	PL
22	TRACE WILDLIFE FORENSICS NETWORK LIMITED	UK
23	FUNDACION AZTI - AZTI FUNDAZIOA	ES
24	BARNA SA	ES
25	NUTRITION SCIENCES NV	BE
26	UNIVERSITETET I TROMSOE	NO
27	IRISH OBSERVER NETWORK LIMITED	IE
28	FISHFIX	BE
29	INSTITUT SUPERIEUR DES SCIENCES AGRONOMIQUES, AGROALIMENTAIRES, HORTICOLES ET DU PAYSAGE	FR
30	ALPHAFILM & KOMMUNIKATION APS	DK
31	MEMORIAL UNIVERSITY OF NEWFOUNDLAND	CA

MINOUW

Science, Technology, and Society Initiative to minimize Unwanted Catches in European Fisheries

Abstract

The complexity of the problem of banning discards and bringing all unwanted catches to land makes it necessary to follow a multi-actor approach, whereby scientists, fisheries technologists, fish producers and NGOs work collaboratively to provide the scientific and technical basis to achieve the gradual elimination of discards in European marine fisheries. The project's overall objective is to minimise unwanted catches by incentivising the adoption of fishing technologies and practices that reduce pre-harvest mortality and post-harvest discards, while avoiding damage to sensitive marine species and habitats. The general approach is based on technical/technological and socioeconomic solutions on a case-by-case analysis of the main types of European fisheries. The project will analyse existing and potential discard-mitigating innovative technologies in workshop roundtables with participation of fishers, technologists and scientists. The technologies selected will be tested in field trials to experimentally assess their efficiency: among other, improved pre-catch identification with observational technologies and pre-harvest loss reduction by gear modification and switching to light impact gear. The results will be analysed in terms of technological advances, marketability and cost-benefit analysis. Other actions included in the project are social and economic instruments to incentivise selective fishing and discourage discarding practices, such as eco-labelling, fisheries certification and promoting awareness among industry and consumers, and mathematical modelling of ecosystem effects of unwanted catches reduction.

At a glance

Acronym: MINOUW

Title: Science, Technology, and Society Initiative to minimize Unwanted Catches in European Fisheries

Call: H2020-SFS-2014-2

Topic: SFS-09-2014

Instrument: Research & innovation action

Start date: 01/03/2015

End date: 28/02/2019

Duration: 48 months

Total Cost: € 6,239,622.38

EC Contribution: € 5,904,029.50

Consortium: 15 partners

Project Coordinator: Agencia Estatal Consejo Superior de Investigaciones Cientificas (CSIC), ES

MINOUW

Project's Participants List

Science, Technology, and Society Initiative to minimize Unwanted Catches in European Fisheries

Project's partners	Name	Country
1	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS (CSIC)	ES
2	CONSIGLIO NAZIONALE DELLE RICERCHE (CNR)	IT
3	HASKOLI ISLANDS (UI)	IS
4	WWF EUROPEAN POLICY PROGRAMME AISBL (WWF)	BE
5	ILLES BALEARS (DGMRM)	ES
6	CENTRO DE CIENCIAS DO MAR DO ALGARVE (CCMAR)	PT
7	HAVFORSKNINGSINSTITUTTET (IMR)	NO
8	CONSORZIO PER IL CENTRO INTERUNIVERSITARIO DI BIOLOGIA MARINA ED ECOLOGIA APPLICATA G. BACCI (CIBM)	IT
9	HELLENIC CENTRE FOR MARINE RESEARCH (HCMR)	EL
10	UNIVERSIDAD DEL PAIS VASCO/ EUSKAL HERRIKO UNIBERTSITATEA (UPV/EHU)	ES
11	NISEA SOCIETA COOPERATIVA (NISEA) SC	IT
12	PROYECTOS BIOLOGICOS Y TECNICOS S.L. (PROBITEC) SL	ES
13	UNIVERSITY OF YORK (UoY)	UK
14	ISRAEL OCEANOGRAPHIC AND LIMNOLOGICAL RESEARCH LIMITED (IOLR)	IL
15	HELSINGIN YLIOPISTO (UH)	IT

ParaFishControl

Advanced Tools and Research Strategies for Parasite Control in European farmed fish

At a glance

Acronym: ParaFishControl

Title: Advanced Tools and Research Strategies for Parasite Control in European farmed fish

Call: H2020-SFS-2014-2

Topic: SFS-10a-2014

Instrument: Research & innovation action

Start date: 01/04/2015

End date: 31/03/2020

Duration: 60 months

Total Cost: € 8,104,133.75

EC Contribution: € 7,800,000.00

Consortium: 30 partners

Project Coordinator: Agencia Estatal Consejo Superior de Investigaciones Cientificas (CSIC), ES

Abstract

European aquaculture production provides direct employment to 80,000 people and a 3-billion € annual turnover.

Parasites cause severe disease outbreaks and high economic losses in finfish aquaculture. The overarching goal of ParaFishControl is to increase the sustainability and competitiveness of European Aquaculture by improving understanding of fish-parasite interactions and by developing innovative solutions and tools for the prevention, control and mitigation of the major parasites affecting Atlantic salmon, rainbow trout, common carp, European sea bass, gilthead sea bream and turbot. To achieve these objectives, ParaFishControl brings together a multidisciplinary consortium comprising 30 partners possessing world-leading, complementary, cross-cutting expertise and drawn from public and private research organisations, and the aquaculture industry. The consortium has access to excellent research facilities, diverse biological resources including host-parasite models, and state-of-the-art vaccinology, genomic, proteomic and transcriptomic technologies. The project will: 1) generate new scientific knowledge on key fish parasites, including genomics, life-cycle, invasion strategy and host-parasite interaction data, with special emphasis on host immunity, pathogen virulence and immunomodulation, providing a scientific basis for improved prophylaxis; 2) determine the transfer of parasites between farmed and wild host populations; 3) develop a wide range of novel prophylactic measures, including vaccines and functional feeds; 4) provide a range of advanced or alternative treatments for parasitic diseases; 5) develop cost-effective, specific and sensitive diagnostic tools for key parasitic diseases; 6) assess the risk factors involved in the emergence, transmission and pathogenesis of parasitic diseases; 7) map the zoonotic risks due to fish helminths and; 8) provide a catalogue of good husbandry practices to obtain safe and high-quality fish products.

Project's Participants List

ParaFishControl

Advanced Tools and Research Strategies for Parasite Control in European farmed fish

Project's partners	Name	Country
1	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS (CSIC)	ES
2	AARHUS UNIVERSITET (AU)	DK
3	Biologicke centrum AV CR, v. v. i. (BCAS)	CZ
4	THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS (CEFAS)	UK
5	DANMARKS TEKNISKE UNIVERSITET (DTU)	DK
6	HELLENIC CENTRE FOR MARINE RESEARCH (HCMR)	EL
7	Institute of Oceanography and Fisheries (IOR)	HR
8	Instituto Nacional de Investigacion y Tecnologia Agraria y Alimentaria (INIA)	ES
9	KOBENHAVNS UNIVERSITET (KU)	DK
10	MAGYAR TUDOMANYOS AKADEMIA AGRARTUDOMANYI KUTATOKOZPONT (MTA)	HU
11	UNIVERSIDADE DE SANTIAGO DE COMPOSTELA (USC)	ES
12	UNIVERSITA DEGLI STUDI DI UDINE (UNIUD)	IT
13	ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA (UNIBO)	IT
14	UNIVERSITETET I BERGEN (UiB)	NO
15	THE UNIVERSITY COURT OF THE UNIVERSITY OF ABERDEEN (UNAB)	UK
16	THE UNIVERSITY OF STIRLING (UoS)	UK
17	WAGENINGEN UNIVERSITY (WU)	NL
18	FUNDACION AZTI - AZTI FUNDAZIOA (AZTI)	ES
19	SKRETTING AQUACULTURE RESEARCH CENTRE AS (SKRET)	NO
20	INRA TRANSFERT S.A. (IT)	FR
21	PANAGIOTIS CHRISTOFILOGIANNIS - IOANA TAVLA (AQUARK)	ES
22	VERTEBRATE ANTIBODIES LIMITED (VAL)	UK
23	KALLIERGEIES YDROVION ORGANISMON ANONYMOS ETAIREIA (ANDRO)	EL
24	ACQUA AZZURRA SPA (AA)	IT
25	ZF-SCREENS BV (ZF-S)	NL
26	W42 INDUSTRIAL BIOTECHNOLOGY GMBH (W42)	DE
27	INMUNOLOGIA Y GENETICA APLICADA SA (INGENASA)	ES
28	STIFTELSEN INDUSTRILABORATORIET (ILAB)	NO
29	KONINKLIJKE NEDERLANDSE AKADEMIE VAN WETENSCHAPPEN – KNAW (KNAW)	NL
30	AquaTT UETP Ltd (AquaTT)	IE


European
Commission

Call for Blue Growth: Unlocking the potential of Seas and Oceans

H2020-BG-2015

Rapid technological progress in working offshore in ever-deeper waters, the need to reduce greenhouse gas emissions, and the need to look at how the 71 % of the planet that is seas and oceans can deliver human necessities such as food and energy in a sustainable way have opened up an opportunity for blue growth with the aim to harness the huge potential of Europe's oceans, seas and coasts for jobs and growth. This focus area addresses this overall challenge through five cross-cutting priority domains supporting the Blue Growth Agenda: valorising the diversity of marine life; sustainable harvesting the deep-sea resources; new offshore challenge; ocean observation technologies; and the socioeconomic dimension. The aim of the focus area is to improve the understanding of the complex interrelations between various maritime activities, technologies, including space enabled applications, and the marine environment to help boost the marine and maritime economy by accelerating its potential through R&I in a sustainable manner. It will enhance sectorial and cross-sectorial cooperation by building on major international, national and regional initiatives.

The Blue Growth economy in the EU is expected to grow to 7 million people employed by 2020. Actions in this area will support the EU 'Blue Growth' strategy and relevant EU policies (e.g. Sea Basins Strategies and Action Plans) as well as provide support for international cooperation.

The 2015 Work – Programme under the Societal Challenge 2 (Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy) of Horizon 2020, puts emphasis on the sustainable exploitation of the diversity of marine life, on the preservation and sustainable exploitation of marine ecosystems and climate change effects on marine living resources.

In this 2015 Programme, a large scale initiative was planned on response to oil spill and maritime pollution. Finally, several horizontal activities regarding socio-economic issues, valorising research outcomes or engaging with society as well as projects targeting SMEs were promoted in 2015.

In terms of international cooperation, the 'Blue Growth' Focus Area will support the new Atlantic Ocean Research Alliance launched by the Galway Statement in May 2013[3].

[3] **Galway Statement on Atlantic Ocean Cooperation Launching a Canada- European Union- United States of America Research Alliance (Galway, 24th of May 2013)**

ATLAS

A Trans-AtLantic Assessment and deep-water ecosystem-based Spatial management plan for Europe

At a glance

Acronym: ATLAS

Title: A Trans-AtLantic Assessment and deep-water ecosystem-based Spatial management plan for Europe

Call: H2020-BG-2015-2

Topic: BG-01-2015

Instrument: Research and Innovation action

Start date: 01/05/2016

End date: 30/04/2020

Duration: 48 months

Total Cost: € 9,207,916.27

EC Contribution: € 9,100,316.86

Consortium: 25 partners

Project Coordinator: HERIOT-WATT UNIVERSITY, UK

Abstract

ATLAS creates a dynamic new partnership between multinational industries, SMEs, governments and academia to assess the Atlantic's deep-sea ecosystems and Marine Genetic Resources to create the integrated and adaptive planning products needed for sustainable Blue Growth. ATLAS will gather diverse new information on sensitive Atlantic ecosystems (incl. VMEs and EBSAs) to produce a step-change in our understanding of their connectivity, functioning and responses to future changes in human use and ocean climate. This is possible because ATLAS takes innovative approaches to its work and interweaves its objectives by placing business, policy and socioeconomic development at the forefront with science. ATLAS not only uses trans-Atlantic oceanographic arrays to understand and predict future change in living marine resources, but enhances their capacity with new sensors to make measurements directly relevant to ecosystem function. The ATLAS team has the track record needed to meet the project's ambitions and has already developed a programme of 25 deep-sea cruises, with more pending final decision. These cruises will study a network of 12 Case Studies spanning the Atlantic including sponge, cold-water coral, seamount and mid-ocean ridge ecosystems. The team has an unprecedented track record in policy development at national, European and international levels. An annual ATLAS Science-Policy Panel in Brussels will take the latest results and Blue Growth opportunities identified from the project directly to policy makers. Finally, ATLAS has a strong trans-Atlantic partnership in Canada and the USA where both government and academic partners will interact closely with ATLAS through shared cruises, staff secondments, scientific collaboration and work to inform Atlantic policy development. ATLAS has been created and designed with our N American partners to foster trans-Atlantic collaboration and the wider objectives of the Galway Statement on Atlantic Ocean Cooperation.

Project's Partners List

ATLAS

A Trans-AtLantic Assessment and deep-water ecosystem-based Spatial management plan for Europe

Project's partners	Name	Country
1	HERIOT-WATT UNIVERSITY	UK
2	AARHUS UNIVERSITET	DK
3	IMAR- INSTITUTO DO MAR	PT
4	SECRETARIA REGIONAL DO MAR, CIENCIA E TECNOLOGIA	PT
5	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
6	GIANNI MATTHEW	NL
7	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	FR
8	MARINE SCOTLAND	UK
9	UNIVERSITAET BREMEN	DE
10	Median SCP	ES
11	STICHTING NIOZ, KONINKLIJK NEDERLANDS INSTITUUT VOOR ONDERZOEK DER ZEE	NL
12	DYNAMIC EARTH CHARITABLE TRUST	UK
13	THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF OXFORD	UK
14	UNIVERSITY COLLEGE DUBLIN, NATIONAL UNIVERSITY OF IRELAND, DUBLIN	IE
15	UNIVERSITY COLLEGE LONDON	UK
16	NATIONAL UNIVERSITY OF IRELAND, GALWAY	IE
17	THE UNIVERSITY OF LIVERPOOL	UK
18	SYDDANSK UNIVERSITET	DK
19	UNIVERSITETET I TROMSOE	NO
20	THE SCOTTISH ASSOCIATION FOR MARINESCIENCE LBG	UK
21	SEASCAPE CONSULTANTS LTD	UK
22	INSTITUTO ESPANOL DE OCEANOGRAFIA	ES
23	UNIVERSITY OF NORTH CAROLINA AT WILMINGTON	US
24	AquaTT UETP Ltd	IE
25	DFO	CA

CERES

Climate change and European aquatic RESources

At a glance

Acronym: CERES

Title: Climate change and European aquatic RESources

Call: H2020-BG-2015-2

Topic: BG-02-2015

Instrument: Research and Innovation action

Start date: 01/03/2016

End date: 29/02/2020

Duration: 48 months

Total Cost: € 5,586,851.25

EC Contribution: € 5,586,851.25

Consortium: 26 partners

Project Coordinator: UNIVERSITAET HAMBURG, DE

Abstract

CERES advances a cause-and-effect understanding of how future climate change will influence Europe's most important fish and shellfish populations, their habitats, and the economic activities dependent on these species. CERES will involve and closely cooperate with industry and policy stakeholders to define policy, environment, social, technological, law and environmental climate change scenarios to be tested. This four-year project will: 1. Provide regionally relevant short-, medium- and long-term future, high resolution projections of key environmental variables for European marine and freshwater ecosystems; 2. Integrate the resulting knowledge on changes in productivity, biology and ecology of wild and cultured animals (including key indirect / food web interactions), and 'scale up' to consequences for shellfish and fish populations, assemblages as well as their ecosystems and economic sectors; 3. Utilize innovative risk-assessment methodologies that encompass drivers of change, threats to fishery and aquaculture resources, expert knowledge, barriers to adaptation and likely consequences if mitigation measures are not put in place; 4. Anticipate responses and assist in the adaptation of aquatic food production industries to underlying biophysical changes, including developing new operating procedures, early warning methods, infrastructures, location choice, and markets; 5. Create short-, medium- and long-term projections tools for the industry fisheries as well as policy makers to more effectively promote blue growth of aquaculture and fisheries in different regions; 6. Consider market-level responses to changes (both positive and negative) in commodity availability as a result of climate change; 7. Formulate viable autonomous adaptation strategies within the industries and for policy to circumvent/prevent perceived risks or to access future opportunities; 8. Effectively communicate these findings and tools to potential end-users and relevant stakeholders.

Project's Partners List

CERES

Climate change and European aquatic RESources

Project's partners	Name	Country
1	UNIVERSITAET HAMBURG	DE
2	THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS	UK
3	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	IT
4	DANMARKS TEKNISKE UNIVERSITET	DK
5	HELLENIC CENTRE FOR MARINE RESEARCH	EL
6	INSTITUTO ESPANOL DE OCEANOGRAFIA	ES
7	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	FR
8	Longline Environment Ltd	UK
9	NATIONAL UNIVERSITY OF IRELAND, GALWAY	IE
10	PLYMOUTH MARINE LABORATORY	UK
11	SVERIGES METEOROLOGISKA OCH HYDROLOGISKA INSTITUT	SE
12	UNIVERSITY OF HULL	UK
13	RODGER HAMISH	IE
14	ZACHODNIOPOMORSKI UNIWERSYTET TECHNOLOGICZNY W SZCZECINIE	PL
15	INSTITUTO PORTUGUES DO MAR E DA ATMOSFERA IP	PT
16	STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	NL
17	HAVFORSKNINGSINSTITUTTET	NO
18	INSTITUTUL NATIONAL DE CERCETARE-DEZVOLTARE DELTA DUNARII	RO
19	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
20	JOHANN HEINRICH VON THUENEN-INSTITUT, BUNDESFORSCHUNGSINSTITUT FUER LAENDLICHE RAEUME, WALD UND FISCHEREI	DE
21	MERSIN UNIVERSITESI	TR
22	PELAGIC FREEZER TRAWLER ASSOCIATION	NL
23	KILIC DENIZ URUNLERI URETIMI IHRACAT ITHALAT VE TICARET AS	TR
24	COOPERATIVE KOTTERVISSERIJ NEDERLAND UA	NL
25	INSKIE CENTRUM RYBACTWA SPOLKA ZOO	PL
26	Sagremarisco-Viveiros de Marisco Lda	PT

ClimeFish

Co-creating a decision support framework to ensure sustainable fish production in Europe under climate change

Abstract

The overall goal of ClimeFish is to help ensure that the increase in seafood production comes in areas and for species where there is a potential for sustainable growth, given the expected developments in climate, thus contributing to robust employment and sustainable development of rural and coastal communities. The underlying biological models are based on single species distribution and production, as well as multispecies interactions. Forecasting models will provide production scenarios that will serve as input to socio-economic analysis where risks and opportunities are identified, and early warning methodologies are developed. Strategies to mitigate risk and utilize opportunities will be identified in co-creation with stakeholders, and will serve to strengthen the scientific advice, to improve long term production planning and the policy making process. ClimeFish will address 3 production sectors through 16 case studies involving 25 species, and study the predicted effects of 3 pre-defined climate scenarios. For 7 of these cases ClimeFish will develop specific management plans (MPs) coherent with the ecosystem approach and based on a results-based scheme that will allow regulators, fishers and aquaculture operators to anticipate, prepare and adapt to climate change while minimizing economic losses and social consequences. A guideline for how to make climate-enabled MPs will be produced, and published as a low-level, voluntary European standard after a consensus-based open consultation process. As a container for the models, scenarios and MPs ClimeFish will develop the ClimeFish Decision Support Framework (DSF) which also contains the ClimeFish Decision Support System (DSS); a software application with capabilities for what-if analysis and visualization of scenarios. The presence of key international stakeholders in the project will ensure quality and relevance of the project outputs thus ensuring uptake and significant impact also after project and other technologies.

At a glance

Acronym: ClimeFish

Title: Co-creating a decision support framework to ensure sustainable fish production in Europe under climate change

Call: H2020-BG-2015-2

Topic: BG-02-2015

Instrument: Research and Innovation action

Start date: 01/04/2016

End date: 31/03/2020

Duration: 48 months

Total Cost: € 5,195,216.25

EC Contribution: € 5,000,000.00

Consortium: 21 partners

Project Coordinator: UNIVERSITETET I TROMSOE, NO

Project's Partners List

ClimeFish

Co-creating a decision support framework to ensure sustainable fish production in Europe under climate change

Project's partners	Name	Country
1	UNIVERSITETET I TROMSOE	NO
2	Memorial University of Newfoundland	CA
3	AVS CHILE SOCIEDAD ANONIMA	CL
4	Biologicke centrum AV CR, v. v. i.	CZ
5	INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA	DK
6	SP/F SYNTESA	FO
7	Fédération Européenne des Producteurs Aquacoles	FR
8	BRANDENBURGISCHE TECHNISCHE UNIVERSITAT COTTBUS-SENFTENBERG	DE
9	HELLENIC CENTRE FOR MARINE RESEARCH	EL
10	NEMZETI AGRARKUTATASI ES INNOVACIOSKOZPONT	HU
11	MATIS OHF	IS
12	FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS FAO	IT
13	UNIVERSITA CA' FOSCARI VENEZIA	IT
14	HAVFORSKNINGSINSTITUTTET	NO
15	NOFIMA AS	NO
16	CENTRO TECNOLOGICO DEL MAR - FUNDACION CETMAR	ES
17	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
18	STOCKHOLMS UNIVERSITET	SE
19	THE UNIVERSITY COURT OF THE UNIVERSITY OF ABERDEEN	UK
20	THE UNIVERSITY OF STIRLING	UK
21	TRUONG DAI HOC NHA TRANG	VN

CSA Oceans 2

Coordination action in support of the implementation of the Joint Programming Initiative on 'Healthy and Productive Seas and Oceans'

At a glance

Acronym: CSA Oceans 2

Title: Coordination action in support of the implementation of the Joint Programming Initiative on 'Healthy and Productive Seas and Oceans'

Call: H2020-BG-2015-1

Topic: BG-16-2015

Instrument: Coordination & support action

Start date: 01/02/2016

End date: 31/01/2019

Duration: 36 months

Total Cost: € 2,024,062.5

EC Contribution: €1,999,375.00

Consortium: 12 partners

Project Coordinator: SERVICE PUBLIC FEDERAL DE PROGRAMMATION POLITIQUE SCIENTIFIQUE, BE

Abstract

CSA Oceans 2 is a 36 month project with the general aim to facilitate and support the implementation of the Strategic Research and Innovation Agenda (SRIA) of JPI Oceans. CSA Oceans 2 will build further on the outcomes of the FP7 CSA Oceans project. To achieve the objective above the project has been organised in five work packages: - WP1 will allow to link closely the project with the JPI Oceans structures namely the Management Board, the Executive Committee, Strategic Advisory Board and the JPI Oceans Secretariat and involve them in the CSA activities - WP2 will deal with the implementation of joint transnational activities and will facilitate the organisation of the activities, it will guide the member countries in identifying and selecting the best fit for purpose (new) tools and provide a framework for evaluating, assessing and monitoring of the actions - WP3 aims at maintaining and further developing the relationships between JPI Oceans with different relevant actors (research funding organisations (RFOs), Ministries, research performing organisations (RPOs), industry and partners outside of the EU) in the field of marine and maritime sciences in supporting the implementation of JPI Oceans agreed actions - WP4 will support the implementation of the SRIA through thematic foresight mechanisms and will design a process for JPI Oceans to update its SRIA, Implementation Plan and Operational plan. - WP5 will deliver the necessary tools for the information management as well as outreach and dissemination of CSA Oceans 2 project and JPI Oceans' activities. The CSA Oceans 2 project will be performed by a consortium of a mix of funding, coordinating and research performing organisations. All are members of the JPI Oceans Management Board or have a close connection to their national Management Board member.

CSA Oceans 2

Coordination action in support of the implementation of the Joint Programming Initiative on 'Healthy and Productive Seas and Oceans'

Project's Partners List

Project's partners	Name	Country
1	SERVICE PUBLIC FEDERAL DE PROGRAMMATION POLITIQUE SCIENTIFIQUE	BE
2	MINISTERIO DE ECONOMIA Y COMPETITIVIDAD	ES
3	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	FR
4	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
5	KONSORTIUM DEUTSCHE MEERESFORSCHUNG e.V.	DE
6	FORSCHUNGSZENTRUM JULICH GMBH	DE
7	FUNDACAO PARA A CIENCIA E A TECNOLOGIA	PT
8	INNOVATIONSFONDEN	DK
9	THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS	UK
10	HELLENIC CENTRE FOR MARINE RESEARCH	EL
11	NORGES FORSKNINGSRAD	NO
12	VLAAMS INSTITUUT VOOR DE ZEE VZW	BE

GRACE

Integrated oil spill response actions and environmental effects

At a glance

Acronym: GRACE

Title: Integrated oil spill response actions and environmental effects

Call: H2020-BG-2015-2

Topic: BG-07-2015

Instrument: Research and Innovation action

Start date: 01/03/2016

End date: 31/08/2019

Duration: 42 months

Total Cost: € 5,513,252.50

EC Contribution: € 5,277,554.00

Consortium: 13 partners

Project Beneficiary: SUOMEN YMPARISTOKESKUS, FI

Abstract

Objectives: 1) to improve the observation and predictions of oil spreading in the sea using novel on-line sensors on-board vessels, fixed structures or gliders, and smart data transfer into operational awareness systems; 2) to examine the true environmental impacts and benefits of a suite of marine oil spill response methods (mechanical collection in water and below ice, in situ burning, use of chemical dispersants, bioremediation, electro-kinetics, and combinations of these) in cold climate and ice-infested areas; 3) to assess the impacts on biota of naturally and chemically dispersed oil, in situ burning residues and non-collected oil using biomarker methods and to develop specific methods for the rapid detection of the effects of oil pollution; 4) to develop a strategic Net Environmental Benefit Analysis tool (sNEBA) for oil spill response strategy decision making. A true trans-disciplinary consortium will carry out the project. Oil sensors will be applied to novel platforms such as ferry-boxes, smart buoys, and gliders. The environmental impacts of the oil spill response methods will be assessed by performing pilot tests and field experiments in the coastal waters of Greenland, as well as laboratory tests in Svalbard and the Baltic Sea with the main focus on dispersed oil, in situ burning residues and non-collected oil. The sNEBA tool will be developed to include and overarch the biological and technical knowledge obtained in the project, as well as integrate with operational assessments being based on expertise on coastal protection and shoreline response. This can be used in establishing cross-border and trans-boundary cooperation and agreements. The proposal addresses novel observation technology and integrated response methods at extreme cold temperatures and in ice. It also addresses the environmental impacts and includes a partner from Canada. The results are vital for the off-shore industry and will enhance the business of oil spill response services.

Project's Partners List

GRACE

Integrated oil spill response actions and environmental effects

Project's partners	Name	Country
1	SUOMEN YMPARISTOKESKUS	FI
2	AARHUS UNIVERSITET	DK
3	TARTU ULIKOOL	EE
4	TALLINNA TEHNIKAULIKOOL	EE
5	RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN	DE
6	UNIVERSIDAD DEL PAIS VASCO/ EUSKAL HERRIKO UNIBERTSITATEA	ES
7	NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU	NO
8	GREENLAND OIL SPILL RESPONSE AS	GL
9	LAMOR CORPORATION AB	FI
10	MERITAITO OY	FI
11	SSPA SWEDEN AB.	SE
12	Northern Research Institute Narvik AS	NO
13	UNIVERSITY OF MANITOBA	CA

At a glance

Acronym: SponGES

Title: Deep-sea Sponge Grounds Ecosystems of the North Atlantic: an integrated approach towards their preservation and sustainable exploitation

Call: H2020-BG-2015-2

Topic: BG-01-2015

Instrument: Research and Innovation action

Start date: 01/03/2016

End date: 29/02/2020

Duration: 48 months

Total Cost: € 10,225,865.25

EC Contribution: € 9,994,302.75

Consortium: 19 partners

Project Coordinator: UNIVERSITETET I BERGEN, NO

SponGES

Deep-sea Sponge Grounds Ecosystems of the North Atlantic: an integrated approach towards their preservation and sustainable exploitation

Abstract

The objective of SponGES is to develop an integrated ecosystem-based approach to preserve and sustainably use vulnerable sponge ecosystems of the North Atlantic. The SponGES consortium, an international and interdisciplinary collaboration of research institutions, environmental non-governmental and intergovernmental organizations, will focus on one of the most diverse, ecologically and biologically important and vulnerable marine ecosystems of the deep-sea - sponge grounds – that to date have received very little research and conservation attention. Our approach will address the scope and challenges of EC's Blue Growth Call by strengthening the knowledge base, improving innovation, predicting changes, and providing decision support tools for management and sustainable use of marine resources. SponGES will fill knowledge gaps on vulnerable sponge ecosystems and provide guidelines for their preservation and sustainable exploitation. North Atlantic deep-sea sponge grounds will be mapped and characterized, and a geographical information system on sponge grounds will be developed to determine drivers of past and present distribution. Diversity, biogeographic and connectivity patterns will be investigated through a genomic approach. Function of sponge ecosystems and the goods and services they provide, e.g. in habitat provision, bentho-pelagic coupling and biogeochemical cycling will be identified and quantified. This project will further unlock the potential of sponge grounds for innovative blue biotechnology namely towards drug discovery and tissue engineering. It will improve predictive capacities by quantifying threats related to fishing, climate change, and local disturbances. SpongeGES outputs will form the basis for modeling and predicting future ecosystem dynamics under environmental changes. SponGES will develop an adaptive ecosystem-based management plan that enables conservation and good governance of these marine resources on regional and international levels.

European Commission

SponGES

Project's Partners List

Deep-sea Sponge Grounds Ecosystems of the North Atlantic: an integrated approach towards their preservation and sustainable

Project's partners	Name	Country
1	UNIVERSITETET I BERGEN	NO
2	FLORIDA ATLANTIC UNIVERSITY BOARD OF TRUSTEES	US
3	INSTITUTO ESPANOL DE OCEANOGRAFIA	ES
4	UPPSALA UNIVERSITET	SE
5	NATURAL HISTORY MUSEUM	UK
6	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
7	UNIVERSITEIT VAN AMSTERDAM	NL
8	WAGENINGEN UNIVERSITY	NL
9	BANGOR UNIVERSITY	UK
10	UNIVERSITY OF BRISTOL	UK
11	UNIVERSIDADE DO MINHO	PT
12	IMAR- INSTITUTO DO MAR	PT
13	ECOLOGY ACTION CENTRE	CA
14	STICHTING NIOZ, KONINKLIJK NEDERLANDS INSTITUUT VOOR ONDERZOEK DER ZEE	NL
15	HELMHOLTZ ZENTRUM FUR OZEANFORSCHUNG KIEL	DE
16	UNIVERSITEIT UTRECHT	NL
17	STUDIO ASSOCIATO GAIA SNC DEI DOTTORI ANTONIO SARA E MARTINA MILANESE	IT
18	FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS FAO	IT
19	ALFRED-WEGENER-INSTITUT HELMHOLTZ- ZENTRUM FUER POLAR- UND MEERESFORSCHUNG	DE

Third Parties Involved	Name	Country
1	Nansen Environmental and Remote Sensing Centre (NERSC)	NO
2	Fisheries and Oceans Canada (DFO)	CA


European
Commission

Call for Sustainable Food Security[4]

H2020-SFS-2015

Ensuring the availability of and access to sufficient safe and nutritious food is a key priority that impacts all EU citizens and needs to be ensured today and in the future. At the same time the production and processing of food is a key economic activity providing jobs, skills and training, attracting investments, supporting rural and urban economies and also shaping landscapes. Given the economic scale of the food sector, the potential gains from research and innovation, and the structure of the sector with a strong participation of SMEs, this focus area will develop competitive and resource-efficient aquatic and terrestrial food production systems covering: eco-intensification of production (i.e. without worsening environmental conditions); sustainable management of natural resources, including the accurate valuation of ecosystems services, while addressing climate change mitigation and adaptation; technologies for a sustainable food chain; safe foods and healthy diets for all; and a global food security system. Enabling technologies and space-enabled applications, adequately set in a societal context, will be an important element in achieving these goals. Overall, research and innovation actions within the Societal Challenge 2 (Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy) of Horizon 2020 will cover the whole food chain, including both the supply and demand sides.

The following section of this brochure, aims to present 2 projects selected from the 2015 call for Sustainable Food Security, that focus on the aquaculture and fisheries sectors. WP 2015 concentrates its efforts on key priorities for the EU to ensure that the critical mass needed to tackle the different sub-challenges is attained, while focusing on the main policy needs.

In particular, to progress towards sustainable food production systems, priority will be given in 2015 to tackle disease related challenges and threats faced by European farmed aquatic animals and to the implementation of an Ecosystem-based approach for European aquaculture, consolidating its environmental sustainability.

[4] **The World Summit on Food Security in 2009 defined food security as existing 'when all people at all times have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life'.**

TAPAS

Tools for Assessment and Planning of Aquaculture Sustainability

At a glance

Acronym: TAPAS

Title: Tools for Assessment and Planning of Aquaculture Sustainability

Call: H2020-SFS-2015-2

Topic: SFS-11b-2015

Instrument: Research and innovation action

Start date: 01/03/2016

End date: 29/02/2020

Duration: 48 months

Total Cost: € 6,918,512.50

EC Contribution: € 6,918,512.50

Consortium: 15 partners

Project Coordinator: THE UNIVERSITY OF STIRLING, UK

Abstract

Aquaculture is one of five sectors in the EU's Blue Growth Strategy, aimed at harnessing untapped potential for food production and jobs whilst focusing on environmental sustainability. TAPAS addresses this challenge by supporting member states to establish a coherent and efficient regulatory framework aimed at sustainable growth. TAPAS will use a requirements analysis to evaluate existing regulatory and licensing frameworks across the EU, taking account of the range of production environments and specificities and emerging approaches such as offshore technologies, integrated multi-trophic aquaculture, and integration with other sectors. We will propose new, flexible approaches to open methods of coordination, working to unified, common standards. TAPAS will also evaluate existing tools for economic assessment of aquaculture sustainability affecting sectorial growth. TAPAS will critically evaluate the capabilities and verification level of existing ecosystem planning tools and will develop new approaches for evaluation of carrying capacities, environmental impact and future risk. TAPAS will improve existing and develop new models for far- and near-field environmental assessment providing better monitoring, observation, forecasting and early warning technologies. The innovative methodologies and components emerging from TAPAS will be integrated in an Aquaculture Sustainability Toolbox complemented by a decision support system to support the development and implementation of coastal and marine spatial planning enabling less costly, more transparent and more efficient licensing. TAPAS partners will collaborate with key industry regulators and certifiers through case studies to ensure the acceptability and utility of project approach and outcomes. Training, dissemination and outreach activities will specifically target improvement of the image of European aquaculture and uptake of outputs by regulators, while promoting an integrated sustainable strategy for development.

Project's Partners List

TAPAS

Tools for Assessment and Planning of Aquaculture Sustainability

Project's partners	Name	Country
1	THE UNIVERSITY OF STIRLING	UK
2	NORSK INSTITUTT FOR VANNFORSKNING	NO
3	DHI	DK
4	WATER INSIGHT BV	NL
5	STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	NL
6	PLYMOUTH MARINE LABORATORY	UK
7	UNIVERSIDAD DE MURCIA	ES
8	UNIVERSITE DE NANTES	FR
9	HELLENIC CENTRE FOR MARINE RESEARCH	EL
10	SZENT ISTVAN UNIVERSITY	HU
11	AQUABIOTECH LIMITED	MT
12	MARINE INSTITUTE	IE
13	KOZEP ES KELET EUROPAI AKVAKULTURAKOZPONTOK EGYESULET	HU
14	AQUACULTURE STEWARDSHIP COUNCIL	UK
15	FUNDACION IMDEA AGUA	ES

VIVALDI

Preventing and mitigating farmed bivalve diseases

Abstract

The overarching goal of VIVALDI is to increase the sustainability and competitiveness of the European shellfish industry by improving the understanding of bivalve diseases and by developing innovative solutions and tools for the prevention, control and mitigation of the major pathogens affecting the main European farmed shellfish species: Pacific oyster (Crassostrea gigas), mussels (Mytilus edulis and M. galloprovincialis), European flat oyster (Ostrea edulis), clams (Venerupis philipinarum) and scallops (Pecten maximus). The project addresses the most harmful pathogens affecting either one or more of these shellfish species: the virus OsHV-1, Vibrio species including V. aestuarianus, V. splendidus, V. harveyi and V. tapetis, as well as the parasite Bonamia ostreae. The project is committed to provide practical solutions based on the most advanced knowledge. VIVALDI will dissect the disease mechanisms associated with pathogen virulence and pathogenesis and host immune responses, develop in vivo and in vitro models, and apply “omic” approaches that will help the development of diagnostic tools and drugs against pathogen targets, and breeding programmes in a collaborative effort with industrial partners. The proposal will include a global shellfish health approach, recognising that cultured bivalves are often exposed to several pathogens simultaneously, and that disease outbreaks can be due to the combined effect of two or more pathogens. The proposal will also investigate advantages and risks of the used of disease-resistant selected animals in order to improve consumer confidence and safety. VIVALDI will be both multi- and trans-disciplinary. In order to cover both basic and applied levels from molecules to farm, the proposal will integrate partners with a broad range of complementary expertises in pathology and animal health, epidemiology, immunology, molecular biology, genetics, genomics and food safety.

At a glance

Acronym: VIVALDI

Title: Preventing and mitigating farmed bivalve diseases

Call: H2020-SFS-2015-2

Topic: SFS-10b-2015

Instrument: Research and nnovation action

Start date: 01/03/2016

End date: 29/02/2020

Duration: 48 months

Total Cost: € 5,414,417.50

EC Contribution: € 4,503,082.50

Consortium: 21 partners

Project Coordinator: INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER, FR

Project's Partners List

VIVALDI

Preventing and mitigating farmed bivalve diseases

Project's partners	Name	Country
1	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	FR
2	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	FR
3	SYNDICAT DES SELECTIONNEURS AVICOLES ET AQUACOLES FRANCAIS	FR
4	LABOGENA DNA	FR
5	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
6	INSTITUT DE RECERCA I TECNOLOGIA AGROALIMENTARIES	ES
7	UNIVERSITY COLLEGE CORK - NATIONAL UNIVERSITY OF IRELAND, CORK	IE
8	MARINE INSTITUTE	IE
9	NATIONAL UNIVERSITY OF IRELAND, GALWAY	IE
10	ATLANTIUM TECHNOLOGIES LTD	IL
11	UNIVERSITA DEGLI STUDI DI GENOVA	IT
12	UNIVERSITA DEGLI STUDI DI PADOVA	IT
13	UNIVERSITA DEGLI STUDI DI TRIESTE	IT
14	NOFIMA AS	NO
15	HAVFORSKNINGSINSTITUTTET	NO
16	STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	NL
17	THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS	UK
18	THE QUEEN'S UNIVERSITY OF BELFAST	UK
19	ALFRED-WEGENER-INSTITUT HELMHOLTZ- ZENTRUM FUER POLAR- UND MEERESFORSCHUNG	DE
20	DANMARKS TEKNISKE UNIVERSITET	DK
21	THE UNIVERSITY OF LIVERPOOL	UK


European
Commission

Call for Blue Growth: Demonstrating an ocean of opportunities
H2020-BG-2016

In a context of growing demand for resources and maritime services including transport, sustainably capturing and demonstrating the potential of seas and oceans is critical to turning this potential into an asset with long-lasting economic, social and environmental benefits for Europe. Targeted innovation in our seas and oceans and an optimal use of the wide variety of research infrastructures available can play a key role in tackling global challenges such as the scarcity and vulnerability of strategic resources (e.g. for food, energy, transport, etc.), while providing valuable ecosystem services factoring in climate change. This has the potential to provide more jobs, growth, renewable energy sources and climate-smart solutions. However, a risky environment, insufficient knowledge, data, data access, and uncertain financial and legal frameworks are critical barriers to overcome.

EU intervention is therefore needed to bridge these gaps and create the conditions for mobilising investment in testing and demonstration projects for new technologies, bringing them 'from lab to market' and avoiding the costly duplication of work.

The Blue Growth Focus Area detailed in Work Programme 2016 – 2017 will fully address cross-cutting marine and maritime research as specifically called for in the Specific Programme implementing Horizon 2020. It will bring technologies to the readiness level needed for commercial applications and will improve current European marine observing, surveying and monitoring capabilities in order to increase our knowledge and understanding of the complex marine environment and its interaction with human activities. Finally, it will maximise synergies with activities funded at national and regional levels.

This Focus Area is based on four interlinked pillars, all of which include the mainstreaming of skills and competence development:

1) Boosting innovation for emerging Blue Growth activities: the objective is to test, demonstrate, scale-up and bring to the market existing or new sustainable marine and maritime technologies, and support innovative products and the development of new services while respecting marine ecosystems.

2) Linking healthy oceans and seas with healthy people: the objective is to explore the interactions between the human dimension, ocean health and marine ecosystem services.

3) The Arctic dimension: the objective is to deepen knowledge and identify sustainable and innovative approaches to tackle the challenges that climate change is posing in the Arctic region. The Arctic is the region of the globe where climate is changing the most rapidly. This is a source of risks, but is opening up new opportunities as well. New transport routes, access to vast and previously not accessible resources and the shifting to the north of fish stocks all increase the strategic importance of the Arctic. In addition, changes in the Arctic have global consequences such as sea-level rise, changing weather patterns and more extreme weather events, with socio-economic impacts on the EU. The Arctic is as well a region where research is key. Its rapid changes require research to study its processes and improve our predictive capability their evolution. The need to protect unique and fragile environments, together with the constraints of working under extreme conditions, requires a close link between research and operational activities. Sustainability issues in the Arctic must also consider indigenous communities and the use of traditional

knowledge. Moreover, international scientific cooperation is necessary as, due to the complex logistical constraints, no single country can work on its own. The Arctic may become a test bed for sustainable innovation and science diplomacy.

4) Valorising the Mediterranean Sea Basin: the objective is to deepen knowledge on the Mediterranean marine ecosystems and their services and to strengthen the European ocean observing, surveying and monitoring capabilities and related technologies necessary for accelerating the production of high-resolution maps and assessments. The Mediterranean Sea is going through rapid changes in response to closely interlinked anthropogenic and natural pressures, including climate change. In addition, the geo-political complexity of the area adds further difficulties concerning the establishment of favourable framework conditions to support the growth of a blue economy (e.g. in trans-border cooperation in sea-related activities, including maritime spatial planning).The Blue Growth Focus Area will contribute to the realisation of the 'Research and Innovation Initiative for Blue Jobs and Growth in the Mediterranean Area' (The BLUEMED Initiative) which aims to create a healthier, more productive, resilient, better known and valued Mediterranean Sea, enabling science diplomacy.

This Focus Area contributes to implementing the EU Strategy for international cooperation in research and innovation73 and to other commitments such as the Galway Statement (on the Arctic), the BLUEMED Initiative74 and cooperation with South-East Asian countries in the field of aquaculture75, as well as the other EU macro-regional strategies and ongoing activities in Regional Seas Conventions

This Focus Area has cross-cutting activities with other areas of Horizon 2020, such as Secure, clean and efficient energy (Societal Challenge 3), Smart, Green and Integrated Transport (Societal Challenge 4), Climate action, environment, resource efficiency and raw materials (Societal Challenge 5) and Leadership in Enabling and Industrial Technologies (LEIT).

Wherever possible, applicants may seek synergies with other sources of funding and relevant national/ regional research and innovation programmes including European Structural and Investment Funds in connection with smart specialisation strategies.

Synergies and/or complementarities will be welcome across projects selected for funding within Societal Challenge 2; for example, between those in the Blue Growth Focus Area and the Rural Renaissance call tackling domains like healthy oceans and seas for healthy people e.g. "BG-8-2017: Innovative sustainable solutions for improving the safety and dietary properties of seafood" in connection with new approaches towards policies and governance e.g. "RUR-2-2017: Coastal-rural interactions: Enhancing synergies between land and sea-based activities".

All activities funded under this call should, insofar as is possible, use data resulting from or made available through different initiatives of the European Commission. In particular, the utilisation of GEOSS (Global Earth Observation System of Systems)76 and Copernicus (the European Earth Observation Programme)77 data, products and information should be prioritised. Likewise, in line with EU cooperation with the European Space Agency (ESA), activities should use ESA Earth Science data as far as is possible. The data, both from ESA missions or third party missions, are for the vast majority of cases available for free web download (further details are available at http://eopi.esa.int).

At a glance

Acronym: APPLICATE

Title: Advanced Prediction in Polar regions and beyond: Modelling, observing system design and LInkages associated with ArctiC ClimATE change

Call: H2020-BG-2016-1

Topic: BG-10-2016

Instrument: Research and Innovation action

Start date: 01/11/2016

End date: 31/10/2020

Duration: 48 months

Total Cost: € 8,715,066.25

EC Contribution: € 7,999,591.25

Consortium: 16 partners

Project Coordinator: ALFRED-WEGENER-INSTITUT HELMHOLTZ- ZENTRUM FUER POLAR- UND MEERESFORSCHUNG, DE

APPLICATE

Advanced Prediction in Polar regions and beyond: Modelling, observing system design and LInkages associated with ArctiC ClimATE change

Abstract

Arctic climate change increases the need of a growing number of stakeholders for trustworthy weather and climate predictions, both within the Arctic and beyond. APPLICATE will address this challenge and develop enhanced predictive capacity by bringing together scientists from academia, research institutions and operational prediction centres, including experts in weather and climate prediction and forecast dissemination. APPLICATE will develop a comprehensive framework for observationally constraining and assessing weather and climate models using advanced metrics and diagnostics. This framework will be used to establish the performance of existing models and measure the progress made within the project. APPLICATE will make significant model improvements, focusing on aspects that are known to play pivotal roles in both weather and climate prediction, namely: the atmospheric boundary layer including clouds; sea ice; snow; atmosphere-sea ice-ocean coupling; and oceanic transports. In addition to model developments, APPLICATE will enhance predictive capacity by contributing to the design of the future Arctic observing system and through improved forecast initialization techniques. The impact of Arctic climate change on the weather and climate of the Northern Hemisphere through atmospheric and oceanic linkages will be determined by a comprehensive set of novel multi-model numerical experiments using both coupled and uncoupled ocean and atmosphere models. APPLICATE will develop strong user-engagement and dissemination activities, including pro-active engagement of end-users and the exploitation of modern methods for communication and dissemination. Knowledge-transfer will also benefit from the direct engagement of operational prediction centres in APPLICATE. The educational component of APPLICATE will be developed and implemented in collaboration with the Association of Early Career Polar Scientists (APECS).

APPLICATE

Project's Participants List

Advanced Prediction in Polar regions and beyond: Modelling, observing system design and LInkages associated with ArctiC ClimATE change

Project's partners	Name	Country
1	ALFRED-WEGENER-INSTITUT HELMHOLTZ- ZENTRUM FUER POLAR- UND MEERESFORSCHUNG	DE
2	BARCELONA SUPERCOMPUTING CENTER - CENTRO NACIONAL DE SUPERCOMPUTACION	ES
3	EUROPEAN CENTRE FOR MEDIUM-RANGE WEATHER FORECASTS	UK
4	UNIVERSITETET I BERGEN	NO
5	UNI RESEARCH AS	NO
6	METEOROLOGISK INSTITUTT	NO
7	MET OFFICE	UK
8	UNIVERSITE CATHOLIQUE DE LOUVAIN	BE
9	THE UNIVERSITY OF READING	UK
10	STOCKHOLMS UNIVERSITET	SE
11	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	FR
12	CENTRE EUROPEEN DE RECHERCHE ET DE FORMATION AVANCEE EN CALCUL SCIENTIFIQUE	FR
13	ARTIC PORTALAP NORDURSLODAGATTIN EHF	IS
14	UNIVERSITETET I TROMSOE	NO
15	P.P. SHIRSHOV INSTITUTE OF OCEANOLOGY OF RUSSIAN ACADEMY OF SCIENCES	RU
16	THE FEDERAL STATE BUDGETARY INSTITUTION VOEIKOV MAIN GEOPHYSICAL OBSERVATORY	RU

Blue-Action

Artic impact on Weather and Climate

At a glance

Acronym: Blue-Action

Title: Arctic Impact on Weather and Climate

Call: H2020-BG-2016-1

Topic: Research and innovation action

Instrument: BG-10-2016

Start date: 01/12/2016

End date: 28/02/2021

Duration: 51 months

Total Cost: : € 8,103,125.00

EC Contribution: € 7,500,000.00

Consortium: 40 partners

Project Coordinator: DANMARKS METEOROLOGISKE INSTITUT, DK

Abstract

Blue-Action will provide fundamental and empirically-grounded, executable science that quantifies and explains the role of a changing Arctic in increasing predictive capability of weather and climate of the Northern Hemisphere. To achieve this Blue-Action will take a transdisciplinary approach, bridging scientific understanding within Arctic climate, weather and risk management research, with key stakeholder knowledge of the impacts of climatic weather extremes and hazardous events; leading to the co-design of better services. This bridge will build on innovative statistical and dynamical approaches to predict weather and climate extremes. In dialogue with users, Blue-Arctic will take stock in existing knowledge about cross-sectoral impacts and vulnerabilities with respect to the occurrence of these events when associated to weather and climate predictions. Modeling and prediction capabilities will be enhanced by targeting firstly, lower latitude oceanic and atmospheric drivers of regional Arctic changes and secondly, Arctic impacts on Northern Hemisphere climate and weather extremes. Coordinated multi-model experiments will be key to test new higher resolution model configurations, innovative methods to reduce forecast error, and advanced methods to improve uptake of new Earth observations assets are planned. Blue-Action thereby demonstrates how such an uptake may assist in creating better optimized observation system for various modelling applications. The improved robust and reliable forecasting can help meteorological and climate services to better deliver tailored predictions and advice, including sub-seasonal to seasonal time scales, will take Arctic climate prediction beyond seasons and to teleconnections over the Northern Hemisphere. Blue-Action will through its concerted efforts therefore contribute to the improvement of climate models to represent Arctic warming realistically and address its impact on regional and global atmospheric and oceanic circulation.

Project's Participants List

Blue-Action

Artic impact on Weather and Climate

Project's partners	Name	Country
1	DANMARKS METEOROLOGISKE INSTITUT	DK
2	LAPIN YLIOPISTO	FI
3	CAMARA MUNICIPAL DE ALMADA	PT
4	FONDAZIONE CENTRO EURO-MEDITERRANEO SUI CAMBIAMENTI CLIMATICI	IT
5	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	FR
6	EDUCATIONAL FOUNDATION YONSEI UNIVERSITY	KR
7	DNV GL AS	NO
8	DANMARKS PELAGISKE PRODUCENTORGANISATION FORENING	DK
9	DANMARKS TEKNISKE UNIVERSITET	DK
10	FORESIGHT INTELLIGENCE GBR	DE
11	HELMHOLTZ ZENTRUM FUR OZEANFORSCHUNG KIEL	DE
12	HAVSTOVAN	FO
13	INSTITUTE OF ATMOSPHERIC PHYSICS OFCHINESE ACADEMY OF SCIENCES	CN
14	ORGANIZATION OF THE RUSSIAN ACADEMYOF SCIENCES A.M. OBUKHOV INSTITUTEOF ATMOSPHERIC PHYSICS RAS	RU
15	INSTITUTE FOR ADVANCED SUSTAINABILITY STUDIES EV	DE
16	FUNDACIO INSTITUT CATALA DE CIENCIES DEL CLIMA	ES
17	FEDERAL STATE BUDGETARY INSTITUTION - INSTITUTE OF WORLD ECONOMY AND INTERNATIONAL RELATIONS OF THE RUSSIAN ACADEMY OF SCIENCES	RU
18	KONSORTIUM DEUTSCHE MEERESFORSCHUNG e.V.	DE
19	MEOPAR INCORPORATED	CA
20	MERCATOR OCEAN	FR
21	MAX-PLANCK-GESELLSCHAFT ZUR FORDERUNG DER WISSENSCHAFTEN EV	DE
22	HAFRANNSOKNASTOFNUNIN	IS
23	MARINE SCOTLAND	UK
24	UNIVERSITY CORPORATION FOR ATMOSPHERIC RESEARCH NONPROFIT CORPORATION	US
25	STIFTELSEN NANSEN SENTER FOR MILJOOG FJERNMALING	NO
26	STICHTING NIOZ, KONINKLIJK NEDERLANDS INSTITUUT VOOR ONDERZOEK DER ZEE	NL
27	STICHTING NETHERLANDS ESCIENCE CENTER	NL
28	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
29	PELAGIC FREEZER TRAWLER ASSOCIATION	NL
30	RUKAKESKUS OY	FI
31	THE SCOTTISH ASSOCIATION FOR MARINESCIENCE LBG	UK
32	SAMS RESEARCH SERVICES LIMITED	UK
33	UNIVERSITAET HAMBURG	DE
34	UNIVERSITETET I BERGEN	NO
35	UNI RESEARCH AS	NO
36	UNIVERSITY OF SOUTHAMPTON	UK
37	UNIVERSITY OF WASHINGTON	US
38	THE UNIVERSITY OF READING	UK
39	WOODS HOLE OCEANOGRAPHIC INSTITUTION	US
40	WOC - WORLD OCEAN LIMITED	UK

BLUEMED

At a glance

Acronym: BLUEMED

Title: BLUEMED

Call: H2020-BG-2016-1

Topic: BG-13-2016

Instrument: Coordination & support action

Start date: 01/10/2016

End date: 30/09/2020

Duration: 48 months

Total Cost: : € 2,998,000.00

EC Contribution: € 2,998,000.00

Consortium: 11 partners

Project Coordinator: CONSIGLIO NAZIONALE DELLE RICERCHE, IT

Abstract

The BLUEMED Project is a Coordination and Support Action for the exploitation of the BLUEMED Research and Innovation Initiative for blue jobs and growth in the Mediterranean area, with particular reference to the implementation of the BLUEMED Strategic Research and Innovation Agenda (SRIA). The ultimate objective is to support the activation of sustainable 'blue' innovation and growth, by fostering integration of knowledge and efforts of relevant stakeholders from EU Member States of the Mediterranean Basin, and then among these, other EU and non-EU Countries. To this end, the project will set the scene for the effective coordination of marine and maritime research and innovation activities in the long term. In particular, the Work Package 2 will consolidate the BLUEMED SRIA, develop the BLUEMED Implementation Plan, and promote joint implementation. Four dedicated working Platforms on knowledge, economy, technology, and policy will be set up to allow representatives from research, private sector, public administration, and civil society to work together, pivoting on identified key players of these sectors at national level. The Work Package 3 will address relevant framework conditions for efficiently implementing actions, including indicators and assessment methodologies, and key enabling factors such as research infrastructures, data policies, and human resources. Feasibility studies on specific priorities will be developed by the Start-up Actions under Work Package 4. The Work Package 5 will be finally devoted to enlarge the participation to non-EU countries, through connection with project and other suitable activities for promoting the BLUEMED concept and involve all countries in the perspective of a global Mediterranean. The coordination and management of the project, the functioning of the governance as well as communication and dissemination activities will be carried out within Work Package 1.

BLUEMED

Project's Participants List

Project's partners	Name	Country
1	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
2	IDRYMA PROOTHISIS EREVNAS	CY
3	MINISTERIO DE ECONOMIA Y COMPETITIVIDAD	ES
4	INSTITUTO ESPANOL DE OCEANOGRAFIA	ES
5	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	FR
6	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	FR
7	HELLENIC CENTRE FOR MARINE RESEARCH	EL
8	INSTITUTE OF OCEANOGRAPHY AND FISHERIES - INSTITUT ZA OCEANOGRAFIJU I RIBARSTVO	HR
9	MINISTRY FOR EDUCATION AND EMPLOYMENT	MT
10	DIRECAO-GERAL DE POLITICA DO MAR	PT
11	NACIONALNI INSTITUT ZA BIOLOGIJO	SI

GENIALG

GENetic diversity exploitation for Innovative macro-ALGal biorefinery

Abstract

The GENIALG project aims to boost the Blue Biotechnology Economy (BBE) by increasing the production and sustainable exploitation of two high-yielding species of the EU seaweed biomass: the brown alga Saccharina latissima and the green algae Ulva spp. GENIALG will demonstrate the economic feasibility and environmental sustainability of cultivating and refining seaweed biomass in multiple use demanded products of marine renewable origin. The consortium integrates available knowledge in algal biotechnology and ready to use reliable eco-friendly tools and methods for selecting and producing high yielding strains in economically feasible quantities and qualities. By cracking the biomass and supplying a wide diversity of chemical compounds for existing as well as new applications and markets, GENIALG will anticipate the economic, social and environmental impacts of such developments in term of economic benefit and job opportunities liable to increase the socio-economic value of the blue biotechnology sector. In a larger frame, conservation and biosafety issues will be addressed as well as more social aspects such as acceptability and competition for space and water regarding other maritime activities. To achieve these objectives GENIALG will foster a trans-sectorial and complementary consortium of scientists and private companies. • GENIALG will involve a diversity of private companies already positioned in the seaweed sector individually for different applications (texturants, feed, agriculture, bioplastics, pharmaceuticals, personal care products…) in order to strengthen interactions for developing a bio-refinery concept and accelerate efficient and sustainable exploitation of seaweed biomass to bring new high-value products on the market.

At a glance

Acronym: GENIALG

Title: GENetic diversity exploitation for Innovative macro-ALGal biorefinery

Call: H2020-BG-2016-1

Topic: BG-01-2016

Instrument: Innovation action

Start date: 01/01/2017

End date: 31/12/2020

Duration: 48 months

Total Cost: : € 12,224,237.50

EC Contribution: € 10,885,817.25

Consortium: 19 partners

Project Coordinator: CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS, FR

Project's Participants List

GENIALG

GENetic diversity exploitation for Innovative macro-ALGal biorefinery

Project's partners	Name	Country
1	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	FR
2	THE SCOTTISH ASSOCIATION FOR MARINESCIENCE LBG	UK
3	SEAWEED ENERGY SOLUTIONS AS	NO
4	ALGAPLUS PRODUCAO E COMERCIALIZACAO DE ALGAS E SEUS DERIVADOS LDA	PT
5	STICHTING WAGENINGEN RESEARCH	NL
6	SINTEF FISKERI OG HAVBRUK AS	NO
7	INEGI - INSTITUTO DE CIENCIA E INOVACAO EM ENGENHARIA MECANICA E ENGENHARIA INDUSTRIAL	PT
8	AMADEITE SAS	FR
9	ALGAIA	FR
10	UNIVERSITY OF YORK	UK
11	LESSONIA	FR
12	LTD IOTA Pharmaceuticals Ltd	UK
13	BIOME TECHNOLOGIES BIOME TECHNOLOGIES PLC	UK
14	CIIMAR - Centro Interdisciplinar de Investigação Marinha e Ambiental	PT
15	NATIONAL UNIVERSITY OF IRELAND GALWAY	IE
16	AquaTT UETP Ltd	IE
17	UNIVERSIDADE DE AVEIRO	PT
18	THE BIORENEWABLES DEVELOPMENT CENTRE LIMITED	UK
19	C-WEED AQUACULTURE SARL	FR

At a glance

Acronym: INTAROS

Title: Integrated Arctic observation system

Call: H2020-BG-2016-1

Topic: BG-09-2016

Instrument: Research & innovation action

Start date: 01/12/2016

End date: 30/11/2021

Duration: 60 months

Total Cost: : € 15,490,066.78

EC Contribution: € 15,490,066.78

Consortium: 41 partners

Project Coordinator: STIFTELSEN NANSEN SENTER FOR MILJOOG FJERNMALING, NO

INTAROS

Integrated Artic observation system

Abstract

The overall objective of INTAROS is to develop an integrated Arctic Observation System (iAOS) by extending, improving and unifying existing systems in the different regions of the Arctic. INTAROS will have a strong multidisciplinary focus, with tools for integration of data from atmosphere, ocean, cryosphere and terrestrial sciences, provided by institutions in Europe, North America and Asia. Satellite earth observation data plays an increasingly important role in such observing systems, because the amount of EO data for observing the global climate and environment grows year by year. In situ observing systems are much more limited due to logistical constraints and cost limitations. The sparseness of in situ data is therefore the largest gap in the overall observing system. INTAROS will assess strengths and weaknesses of existing observing systems and contribute with innovative solutions to fill some of the critical gaps in the in situ observing network. INTAROS will develop a platform, iAOS, to search for and access data from distributed databases. The evolution into a sustainable Arctic observing system requires coordination, mobilization and cooperation between the existing European and international infrastructures (in-situ and remote including space-based), the modelling communities and relevant stakeholder groups. INTAROS will include development of community-based observing systems, where local knowledge is merged with scientific data. An integrated Arctic Observation System will enable better-informed decisions and better-documented processes within key sectors (e.g. local communities, shipping, tourism, fisheries), in order to strengthen the societal and economic role of the Arctic region and support the EU strategy for the Arctic and related maritime and environmental policies.

Project's Participants List

INTAROS

Integrated Artic observation system

Project's partners	Name	Country
1	STIFTELSEN NANSEN SENTER FOR MILJOOG FJERNMALING	NO
2	UNIVERSITETET I BERGEN	NO
3	HAVFORSKNINGSINSTITUTTET	NO
4	STOCKHOLMS UNIVERSITET	SE
5	ALFRED-WEGENER-INSTITUT HELMHOLTZ- ZENTRUM FUER POLAR- UND MEERESFORSCHUNG	DE
6	INSTYTUT OCEANOLOGII POLSKIEJ AKADEMII NAUK	PL
7	DANMARKS TEKNISKE UNIVERSITET	DK
8	AARHUS UNIVERSITET	DK
9	Geological Survey of Denmark and Greenland	DK
10	ILMATIETEEN LAITOS	FI
11	University Centre in Svalbard	NO
12	NORDISK FOND FOR MILJØ OG UDVIKLING	DK
13	SVERIGES METEOROLOGISKA OCH HYDROLOGISKA INSTITUT	SE
14	THE UNIVERSITY OF SHEFFIELD	UK
15	NATIONAL UNIVERSITY OF IRELAND MAYNOOTH	IE
16	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	FR
17	MAX-PLANCK-GESELLSCHAFT ZUR FORDERUNG DER WISSENSCHAFTEN EV	DE
18	EUROGOOS AISBL	BE
19	FUNDACAO EUROCEAN	PT
20	UNIVERSIDAD POLITECNICA DE MADRID	ES
21	UNIVERSITAET BREMEN	DE
22	UNIVERSITAET HAMBURG	DE
23	NORUT NORTHERN RESEARCH INSTITUTE AS	NO
24	TERRADUE SRL	IT
25	GRONLANDS NATURINSTITUT	GL
26	THE OPEN UNIVERSITY	UK
27	NORSK INSTITUTT FOR VANNFORSKNING	NO
28	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	FR
29	HELSINGIN YLIOPISTO	FI
30	HELMHOLTZ ZENTRUM POTSDAM DEUTSCHESGEOFORSCHUNGSZENTRUM GFZ	GFZ
31	ASSOCIATION POUR LA RECHERCHE ET LE DEVELOPPEMENT DES METHODES ET PROCESSUS INDUSTRIELS	FR
32	Instytut Geofizyki Polskiej Akademii Nauk	PL
33	UNIWERSYTET SLASKI	PL
34	BARCELONA SUPERCOMPUTING CENTER - CENTRO NACIONAL DE SUPERCOMPUTACION	ES
35	DNV GL AS	NO
36	ALL-RUSSIAN RESEARCH INSTITUTE OF HYDROMETEOROLOGICAL INFORMATION-WORLD DATA CENTRE	RU
37	Scientific foundation Nansen International Environmental and Remote Sensing Centre	RU

38	WOODS HOLE OCEANOGRAPHIC INSTITUTION	US
39	THE REGENTS OF THE UNIVERSITY OF CALIFORNIA	US
40	UNIVERSITE LAVAL	CA
41	INSTITUTE OF REMOTE SENSING AND DIGITAL EARTH - CHINESE ACADEMY OF SCIENCE	CN

LINCOLN

Learn innovative connected vessels

Abstract

LINCOLN presents three new concepts of added-value specialized vessels able to run requested services for several maritime sectors in the most effective, efficient, economic valuable and eco-friendly way. LINCOLN will develop three types of completely new vessels concepts at TRL5, through dynamic simulation model testing. The first is a Multi-platform Catamaran to serve as: Service crew vessel and Multipurpose survey vessel, optimized for Ocean energy and Aquaculture. It will develop a new people transfer system, able to improve safety during people transfer, it will have reduced operations costs and will be eco-friendly. The second is a Module Based High Speed Patrol Boat Platform, that is reconfigurable to adapt to the different operational requirements of Patrol and Security operators. Here LINCOLN will develop one platform, where different vessels can be designed for several markets, built as series production at low cost and it will enable the new "Vessel as a Service" business model. The third one is an Emergency Response and Recovery Vessels series for Coastal Rescue activities, with integrated electronics, IoT connectivity and an enhanced and low cost Integrated Dynamic Position System, which will help rescue operators during their activities and enhancing safety and security. All the three vessels will share the same design methodology. In fact, LINCOLN will be also a success story for the use of innovative design methodologies and tools in the marine sector. It will use: a lean fact based design model approach, which combines real operative data at sea with lean methodology, to support the development and implementation of the vessel concepts; IT customized tools to enable the acquisition and usage of field data, coming from an IoT platform; High Performance Computing Simulation. This new design approach will be demonstrated with the three vessels designed and delivered in the project and disseminated to bring back EU yards to the edge of innovation.

At a glance

Acronym: LINCOLN

Title: Lean innovative connected vessels

Call: H2020-BG-2016-1

Topic: BG-02-2016-2017

Instrument: Innovation action

Start date: 01/06/2016

End date: 30/09/2019

Duration: 36 months

Total Cost: : € 7,808,691.25

EC Contribution: € 6,343,600.00

Consortium: 16 partners

Project Coordinator: POLITECNICO DI MILANO, IT

Project's Participants List

LINCOLN

Learn innovative connected vessels

Project's partners	Name	Country
1	POLITECNICO DI MILANO	IT
2	ASOCIACION CENTRO TECNOLOGICO NAVAL Y DEL MAR	ES
3	HUBSTRACT SRL	IT
4	TECHNO PRO HISPANIA SRL	ES
5	BIBA - BREMER INSTITUT FUER PRODUKTION UND LOGISTIK GMBH	DE
6	HOLONIX SRL-SPIN OFF DEL POLITECNICO DI MILANO	IT
7	STIFTELSEN SINTEF	NO
8	CINECA CONSORZIO INTERUNIVERSITARIO	IT
9	HYDROLIFT AS	NO
10	SOUPER TOYS SKAFI EPE	EL
11	INVENTAS KRISTIANSAND AS	NO
12	TOI SRL	IT
13	INSTITOUTO TECHNOLOGIAS YPOLOGISTONKAI EKDOSEON DIOFANTOS	EL
14	BALANCE TECHNOLOGY CONSULTING GMBH	DE
15	ARESA MARINE SL	ES
16	CENTER FOR TECHNOLOGY RESEARCH AND INNOVATION LTD	CY

At a glance

Acronym: MarTERA

Title: Maritime and Marine Technologies for a New ERA

Call: H2020-BG-2016-1

Topic: BG-05-2016

Instrument: ERA-NET-Cofund

Start date: 01/12/2016

End date: 30/11/2021

Duration: 60 months

Total Cost: : € 31,118,822.00

EC Contribution: € 10,269,211.26

Consortium: 18 Partners

Project Coordinator:
FORSCHUNGSZENTRUM JULICH GMBH, DE

MarTERA

Maritime and Marine Technologies for a New ERA

Abstract

The overall goal of the proposed Cofund is to strengthen the European Research Area (ERA) in maritime and marine technologies and Blue Growth. The realisation of a European research and innovation agenda needs a broad and systematic cooperation in all areas of waterborne transport, offshore activity, marine resources, maritime security, biotechnologies, desalination, offshore oil & gas, fisheries, aquaculture etc. covering all relevant maritime and marine sectors and regions for a sustainable development of the maritime sector. Research and innovation activities in these fields cannot be tackled either at national levels alone, or solely by a single sector. Coordinated actions are required for the maritime industry to strengthen Europe's position in this important and complex economic field in a global market. The proposing consortium will organise and co-fund, together with the EU, a joint call for trans-national research projects on different thematic areas of Blue Growth. Furthermore, additional joint activities that go beyond this co-funded call are planned, in order to contribute to the national priorities as well as to the Strategic Research Agenda of JPI Oceans and WATERBORNE. With the cooperation of ERA-NET MARTEC and JPI Oceans, a broader variety of topics with a larger amount of funding will be available for the trans-national projects. Moreover, the focus of development in MarTERA is given to technologies (instead of sectors) due to their potentially large impact to a wide range of application fields. The proposal responds to the topic ERA-NET Cofund on marine technologies of the work programme 2016-2017 of the societal challenge 2 (Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bio-economy) under Horizon 2020. Thereby it also contributes to the overall EU objective of building the ERA through enhanced cooperation and coordination of national research programmes.

Project's Participants List

MarTERA

Maritime and Marine Technologies for a New ERA

Project's partners	Name	Country
1	FORSCHUNGSZENTRUM JULICH GMBH FORSCHUNGSZENTRUM JULICH GMBH	DE
2	BUNDESMINISTERIUM FUER WIRTSCHAFT UND TECHNOLOGIE	DE
3	MINCyT Ministerio de Ciencia, Tecnología e Innovación Productiva	AR
4	NAS OF BELARUS NATIONAL ACADEMY OF SCIENCES OF BELARUS	BY
5	HERMESFOND FONDS FLANKEREND ECONOMISCH EN INNOVATIEBELEID	BE
6	ANR AGENCE NATIONALE DE LA RECHERCHE	FR
7	MEEM MINISTERE DE L'ENVIRONNEMENT, DE L'ENERGIE ET DE LA MER	FR
8	MARINE INSTITUTE	IE
9	MIUR MINISTERO DELL'ISTRUZIONE, DELL'UNIVERSITA' E DELLA RICERCA	IT
10	MINISTRY FOR EDUCATION AND EMPLOYMENT	MT
11	NWO NEDERLANDSE ORGANISATIE VOOR WETENSCHAPPELIJK ONDERZOEK	NL
12	THE RESEARCH COUNCIL OF NORWAY NORGES FORSKNINGSRAD	NO
13	NCBR NARODOWE CENTRUM BADAN I ROZWOJU	PL
14	FCT FUNDACAO PARA A CIENCIA E A TECNOLOGIA	PT
15	UEFISCDI Unitatea Executiva pentru Finantarea Invatamantului Superior, a Cercetarii, Dezvoltarii si Inovarii	RO
16	CDTI CENTRO PARA EL DESARROLLO TECNOLOGICO INDUSTRIAL.	ES
17	TUBITAK TURKIYE BILIMSEL VE TEKNOLOJIK ARASTIRMA KURUMU	TR
18	DEPARTMENT OF SCIENCE AND TECHNOLOGY	ZA

Muses

Multi-Use in European Seas

At a glance

Acronym: MUSES

Title: Multi-Use in European Seas

Call: H2020-BG-2016-1

Topic: BG-03-2016

Instrument: Coordination & support action

Start date: 01/11/2016

End date: 31/10/2018

Duration: 24 months

Total Cost: : € 1,987,603.88

EC Contribution: € 1,982,104.38

Consortium: 10 partners

Project Coordinator: MARINE SCOTLAND, UK

Abstract

The Multi-Use in European Seas (MUSES) project will review existing planning and consenting processes against international quality standards for MSP and compliance with EU Directives used to facilitate marine and coastal development in the EU marine area to ensure that they are robust, efficient and facilitate sustainable multi use of marine resources. The project will build knowledge of the appropriate techniques to minimize barriers, impacts and risks, whilst maximising local benefits, reducing gaps in knowledge to deliver efficiencies through integrated planning, consenting processes and other techniques. MUSES Project - 3 main pillars: 1. Regional overviews which take into account EU sea basins (Baltic Sea, North Sea, Mediterranean Sea, Black Sea and Eastern Atlantic) will be based on an analytical framework to facilitate adoption of a common approach across the sea basins. The progress in implementation of the concept of Multi-Uses in European Sea Basins will be assessed and key obstacles and drivers identified. 2. A comprehensive set of case studies of real and/or potential multi-use will be conducted and analysed to provide a complete spectrum of advantages in combining different uses of the sea. The case studies will create local stakeholder platforms to identify multi-use potentiality, opportunities and limitations. 3. Development of an Action Plan to address the challenges and opportunities for the development of Multi-Uses of oceans identified in the regional overviews and case studies. Provide recommendations for future action, taking into account national, regional and sea basin dimensions. The project will build on work undertaken in other studies including Mermaid, TROPOS, H2Ocean and SUBMARINER. MUSES project partners have direct links with related forums including The Ocean Energy Forum (OEF) which will assist understanding of many issues that need to be addressed at an EU level and could help facilitate and implement the OEF roadmap.

Project's Participants List

Muses

Multi-Use in European Seas

Project's partners	Name	Country
1	MARINE SCOTLAND	UK
2	UNIVDUN UNIVERSITY OF DUNDEE	UK
3	SUBMARINER NETWORK FOR BLUE GROWTH EWIV	DE
4	INSTYTUT MORSKI W GDANSKU	PL
5	THETIS SPA	IT
6	CNR CONSIGLIO NAZIONALE DELLE RICERCHE	IT
7	HELLENIC CENTRE FOR MARINE RESEARCH	EL
8	FGF FUNDACAO GASPAR FRUTUOSO	PT
9	ECORYS NEDERLAND B.V.	NL
10	AWI ALFRED-WEGENER-INSTITUTHELMHOLTZ- ZENTRUM FUER POLAR- UND MEERESFORSCHUNG	DE

ODYSSEA

OPERATING A NETWORK OF INTEGRATED OBSERVATORY SYSTEMS IN THE MEDITERRANEAN SEA

At a glance

Acronym: ODYSSEA

Title: OPERATING A NETWORK OF INTEGRATED OBSERVATORY SYSTEMS IN THE MEDITERRANEAN SEA

Call: H2020-BG-2016-2

Topic: BG-12-2016

Instrument: Research and Innovation action

Start date: 01/06/2017

End date: 30/11/2021

Duration: 54 months

Total Cost: : € 8,398,716.25

EC Contribution: € 8,398,716.00

Consortium: 28 partners

Project Coordinator: DEMOCRITUS UNIVERSITY OF THRACE, EL

Abstract

ODYSSEA will develop, operate and demonstrate an interoperable and cost-effective platform that fully integrates networks of observing and forecasting systems across the Mediterranean basin, addressing both the open sea and the coastal zone. The platform will collect its data from the many databases maintained by agencies, public authorities, and institutions of Mediterranean EU and non-EU countries, integrating existing earth observation facilities and networks in the Mediterranean Sea building on key initiatives such as Copernicus, GEOSS, GOOS, EMODNet, ESFRI, Lifewatch, Med-OBIS, GBIF, AquaMaps, Marine IBA e-atlas, MAPAMED and others with marine and maritime links. Through ODYSSEA's end-user centred approach, in which the various groups of end-users and stakeholders, within and external to the Consortium, will be involved from Day 1 of the project in the design, development and operation of the platform, including identification of gaps in data collection and accessibility. High priority gaps will be filled through multiple approaches that include developing a network of coastal observatories, deploying novel in-situ sensors at sea (a.o. microplastic sensors), oceanographic modelling and integrating existing mobile apps for citizen scientist networks. Applying advanced algorithms to organise, homogenise and fuse the large quantities of data in common standard type and format as well as other types of formats, the ODYSSEA platform will provide both primary data and on-demand derived data services, including forecasts, from ALL Mediterranean countries through a SINGLE PUBLIC PORTAL to various end-user groups and stakeholders. End-user requirements will drive the creation of secondary data sets which the platform will provide as new and packaged services matching the specialised information needs of users. ODYSSEA will improve accessibility to existing data as well as increase the temporal and geographic coverage of observational data in the Mediterranean.

European Commission

Project's Participants List

ODYSSEA

OPERATING A NETWORK OF INTEGRATED OBSERVATORY SYSTEMS IN THE MEDITERRANEAN SEA

Project's partners	Name	Country
1	DEMOCRITUS UNIVERSITY OF THRACE	EL
2	FOUNDATION FOR RESEARCH AND TECHNOLOGY HELLAS	EL
3	TECHNION - ISRAEL INSTITUTE OF TECHNOLOGY	IL
4	FUNDACION DE LA COMUNIDAD VALENCIANA PARA LA INVESTIGACION, PROMOCION Y ESTUDIOS COMERCIALES DE VALENCIAPORT	ES
5	UNIVERSITA DEGLI STUDI DI ROMA LA SAPIENZA	IT
6	WCMC LBG	UK
7	REGIONAL ACTIVITY CENTRE FOR SPECIALLY PROTECTED AREAS	TN
8	BLUE LOBSTER IT LIMITED	UK
9	STICHTING DELTARES	NL
10	ALSEAMAR	FR
11	ACONDICIONAMIENTO TARRASENSE ASSOCIACION	ES
12	AGIR Association de Gestion Intégrée des Ressources	MA
13	SARL NORD SUD VENTURES	DZ
14	ASSOCIATION NATIONALE DE DEVELOPPEMENT DURABLE ET DE LA CONSERVATION DE LA VIE SAUVAGE	TN
15	ARAB NETWORK FOR ENVIRONMENT & DEVELOPMENT	EG
16	ISTANBUL UNIVERSITESI	TR
17	HELLENIC CENTRE FOR MARINE RESEARCH	EL
18	HIDROMOD MODELACAO EM ENGENHARIA LDA	PT
19	ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA	IT
20	DEVELOGIC GMBH	DE
21	GTD SISTEMAS DE INFORMACION SA	ES
22	ASSOCIATION ECO OCEAN	IL
23	THE SOCIETY FOR THE PROTECTION OF NATURE IN ISRAEL	IL
24	ARISTOTELIO PANEPISTIMIO THESSALONIKIS	EL
25	COLLECTE LOCALISATION SATELLITES SA	FR
26	THALES SA	FR
27	EDISOFT-EMPRESA DE SERVICOS E DESENVOLVIMENTO DE SOFTWARE SA	PT
28	AGORA P.S.V.D.	IL

SABANA

Sustainable Algae Biorefinery for Agriculture aNd Aquaculture

At a glance

Acronym: SABANA

Title: Sustainable Algae Biorefinery for Agriculture aNd Aquaculture

Call: H2020-BG-2016-1

Topic: BG-01-2016

Instrument: Innovation action

Start date: 01/12/2016

End date: 30/11/2020

Duration: 48 months

Total Cost: : € 10,646,705.00

EC Contribution: € 8,848,523.75

Consortium: 11 partners

Project Coordinator: UNIVERSIDAD DE ALMERIA, ES

Abstract

SABANA aims at developing a large-scale integrated microalgae-based biorefinery for the production of biostimulants, biopesticides and feed additives, in addition to biofertilizers and aquafeed, using only marine water and nutrients from wastewaters (sewage, centrate and pig manure). The objective is to achieve a zero-waste process at a demonstration scales up to 5 ha sustainable both environmentally and economically. A Demonstration Centre of this biorefinery will be operated to demonstrate the technology, assess the operating characteristics of the system, evaluate environment impacts and collaborate with potential customers for use. The key advantages of SABANA project are: the sustainability of the process, using marine water and recovering nutrients from wastewaters while minimizing the energy consumption, and the socioeconomic benefits, due to the relevance of the target bioproducts for two major pillars in food production as agriculture and aquaculture. Bioproducts capable of increasing the yield of crops and fish production are highly demanded, whereas recovery of nutrients is a priority issue in the EU. Instead of considering wastewater as an inevitably useless and problematic residue of our society, SABANA acknowledges its potential as an opportunity for economically relevant sectors. SABANA project includes (i) the utilization of microalgae-bacteria consortia and in co-culture with other algae to control grazing species, (ii) the implementation of efficient thin-layer cascade and raceway, (iii) the scale-up of reactors to ensure stable operation, (iv) to use marine water to increase the sustainability of the process; (v) to recover nutrients from wastewaters, (vi) to develop harvesting processes taking into account the remaining water, (vii) to establish processes for mild/energy efficient extraction of bioproducts, (viii) to process residual biomass to produce biofertilizers and aquafeed in zero-waste schemes, (ix) using robust and sustainable technology.

European Commission

Project's Participants List

SABANA

Sustainable Algae Biorefinery for Agriculture aNd Aquaculture

Project's partners	Name	Country
1	UNIVERSIDAD DE ALMERIA UNIVERSIDAD DE ALMERIA	ES
2	AQUALIA FCC AQUALIA SA	ES
3	WSPC GEA WESTFALIA SEPARATOR GROUP GMBH	DE
4	KIT KARLSRUHER INSTITUT FUER TECHNOLOGIE	DE
5	BIORIZON BIOTECH SL	ES
6	MIKROBIOLOGICKY USTAV - AVCR, V.V.I.	CZ
7	UMIL UNIVERSITA DEGLI STUDI DI MILANO	IT
8	UNIVERSIDAD DE LAS PALMAS UNIVERSIDAD DE LAS PALMAS DE GRAN CANARIA	ES
9	SZECHENYI ISTVAN UNIVERSITY	PL
10	CIB-CONSORZIO ITALIANO BIOGAS E GASSIFICAZIONE	IT


European
Commission

Call for Sustainable Food Security[5]

H2020-SFS-2016

There are major challenges to the supply and quality of food and animal feed, of both terrestrial and aquatic origin. These challenges stem from a wide range of interrelated factors, e.g. climate change, natural hazards, energy and resource scarcity, inappropriate agricultural and fishing practices, marine and land degradation, plant and animal diseases, unsustainable manufacturing processes, food waste, population growth, demographic changes and unsustainable dietary patterns. Collectively, they threaten food security11 and the health and well-being of people in the EU and around the world.

Research and innovation are vital to understanding, minimising and coping with risks to food security and to creating new production, processing and consumption models.

The focus area 'sustainable food security' will put greater emphasis on the resilience of primary production, coping with resource depletion and climate change, and research and innovation along the food value chain than the previous work programme (2014–2015). From a demand-side perspective, it will also highlight sustainable and healthy consumption and lifestyles. This focus area has been aligned with the Commission's strategic guidelines and with the need to provide evidence-based support for relevant EU policies such as plant health or food safety.12

The vast majority of research in Europe is funded at national level. It is therefore important that support for transnational coordination on national and regional research programmes continues to consolidate the European Research Area, and streamlines the required research activities. The ERA-NET Cofund action is designed to strengthen and simplify cooperation between the European Commission and the Member States and to support more strategic collaboration between research programme managers

This focus area has four sub-areas:

- More resilient and resource efficient value chains
- Environment-smart and climate-smart primary production
- A competitive food industry
- Healthy and safe foods and diets for all

and two areas focussing on international cooperation:

- Support to the implementation of the EU-Africa Partnership on Food and Nutrition Security and Sustainable Agriculture
- Implementation of the EU-China Food, Agriculture and Biotechnology Flagship initiative and EU-South East Asian cooperation around aquaculture.

[5] **The World Summit on Food Security in 2009 defined food security as existing 'when all people at all times have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life'.**

This focus area is particularly suitable for international cooperation, as the EU has leading expertise in sustainable food production and access to the resources of truly international organisations. In terms of international cooperation, it will reinforce the role of the EU as a strong global actor, in particular in the Mediterranean region, Africa, China and South-East Asia (aquaculture).

Wherever possible, proposers may seek synergies, including possibilities for funding, with relevant national/regional research and innovation programmes and/or cumulative funding with European Structural and Investment Funds (ESIF) in connection with research & innovation smart specialisation strategies (RIS3).

EURASTIP

Promoting Multi-Stakeholder Contributions to International Cooperation on Sustainable Solutions for Aquaculture Development in South-East Asia

At a glance

Acronym: EURASTIP

Title: Promoting Multi-Stakeholder Contributions to International Cooperation on Sustainable Solutions for Aquaculture Development in South-East Asia

Call: H2020-SFS-2016-1

Topic: SFS-24-2016

Instrument: Coordination & support action

Start date: 01/01/2017

End date: 31/12/2019

Duration: 36 months

Total Cost: : € 1,998,779.00

EC Contribution: € 1,998,779.00

Consortium: 12 partners

Project Coordinator: UNIVERSITEIT GENT, BE

Abstract

EURASTIP will evaluate and prepare for the launch of an international multi-stakeholder platform (MSP), so as to provide a new mechanism to create and reinforce international cooperation on sustainable aquaculture between Europe and South-East Asia and will focus on actions that will provide mutual benefit to both regions. EURASTIP, headed by the European Aquaculture Technology and Innovation Platform (EATiP) will create and support 3 National Pilot multi-stakeholder Platforms (NPPs) in major aquaculture producing countries (Thailand, Vietnam and Bangladesh) and develop road-map models for others in the region, providing the foundation for an international MSP. It will create, develop and reinforce the networking needed for the promotion of B2B partnerships, using European and SE Asian networks, realising international brokerage events and promoting cooperation. EURASTIP will identify and address common standards for aquaculture site planning, animal health, food product safety and farm governance, supporting sustainable aquaculture development. Focus is given to reinforcing professional skills and competences in industry and research, using European and SE Asian education networks and industrial apprenticeship opportunities. The NPPs will develop vision documents, strategic research and innovation agendas (SRIAs), priorities and proposed actions; these will feed into EURASTIP impact measurement and including influence on national and regional policies. Attention is given to widespread dissemination actions, promoting EURASTIP in SE Asia and in Europe, encouraging a strong legacy position. URASTIP will provide recommendations and a plan for the establishment of an international MSP, covering its scope and operation further to the project timeline, leading to reinforced long-term international cooperation efforts and opportunities.

Project's Participants List

EURASTIP

Promoting Multi-Stakeholder Contributions to International Cooperation on Sustainable Solutions for Aquaculture Development in South-East Asia

Project's partners	Name	Country
1	UNIVERSITEIT GENT	BE
2	EATIP - European Aquaculture Technology and Innovation Platform	BE
3	Sorgeloos4Aquaculture (S4A)	BE
4	European Aquaculture Society (EAS)	BE
5	THE UNIVERSITY OF STIRLING	UK
6	WU WAGENINGEN UNIVERSITY	NL
7	Nofima AS	NO
8	AquaTT UETP CLG	IE
9	WORLD FISH CENTER - INTERNATIONAL CENTER FOR LIVING AQUATIC RESOURCES	MY
10	UNIVERSITI MALAYSIA TERENGGANU	MY
11	NONG LAM UNIVERSITY -HO CHI MINH CITY	VN
12	INVE TECHNOLOGIES NV	TH

FarFish

Responsive Results-Based Management and capacity building for EU Sustainable Fisheries Partnership Agreement- and international waters

At a glance

Acronym: FarFish

Title: Responsive Results-Based Management and capacity building for EU Sustainable Fisheries Partnership Agreement- and international waters

Call: H2020-SFS-2016-2

Topic: SFS-21-2016

Instrument: Research and Innovation action

Start date: 01/06/2017

End date: 31/05/2021

Duration: 48 months

Total Cost: : € 5,098,062.50

EC Contribution: € 4,999,960.00

Consortium: 21 partners

Project Coordinator: MATIS, IS

Abstract

The objective of FarFish is to improve knowledge on and management of EU fisheries outside Europe, while contributing to sustainability and long term profitability. 21% of EU catches originate from non-EU waters. These fisheries are often poorly regulated, management decisions are sometimes based on limited knowledge and enforcement capabilities, compliance and trust between stakeholders tend to lack. FarFish will address these shortcomings in a multidisciplinary and innovative way by focusing on six diverse case studies, four in Sustainable Fisheries Partnership Agreement (SFPA) waters and two in international waters. Firstly, FarFish will analyse biological, ecological, technological, economic, political and social impacts of EU fisheries in the case studies to advance knowledge and promote sustainable and profitable exploitation. Secondly, introduce Results-Based Management approaches and new decision support tools into these fisheries and test their applicability in collaboration with stakeholders. Thirdly, build capacities in fisheries management and related disciplines amongst stakeholders. The results of FarFish will both have immediate and long-term application. FarFish includes a diverse groups of stakeholders, EU and third country fleets representatives, scientists, decision makers, Regional Fisheries Management Organisations (RFMOs), relevant industries and stakeholders from areas outside the case studies but of importance for the EU fleet, forming a platform for future cooperation between EU and third countries. FarFish addresses the work programme by improving knowledge within the relevant fisheries, developing management tools and models, improving professional skills and sharing new findings in correspondence to the priorities of SFPAs, RFMOs and the CFP. FarFish will contribute to sustainable management, resilience and efficiency in the seafood value chains, increase European food security, boost long-term profitability and promote jobs.

Project's Participants List

FarFish

Responsive Results-Based Management and capacity building for EU Sustainable Fisheries Partnership Agreement- and international waters

Project's partners	Name	Country
1	MATIS OHF	IS
2	UNIVERSIDADE DE SAO PAULO	BR
3	INSTITUTO NACIONAL DE DESENVOLVIMENTO DAS PESCAS	CV
4	SYNTESA APS	DK
5	CONSEJO CONSULTIVO DE FLOTA DE LARGA DISTANCIA EN AGUAS NO COMUNITARIAS	ES
6	HAFRANNSOKNASTOFNUNIN	IS
7	INSTITUT MAURITANIEN DE RECHERCHESOCEANOGRAPHIQUES ET DES PECHES	MR
8	UNIVERSITE CADI AYYAD	MA
9	HAVFORSKNINGSINSTITUTTET	NO
10	UNIVERSITETET I TROMSOE	NO
11	NOFIMA AS	NO
12	CENTRO DE CIENCIAS DO MAR DO ALGARVE	PT
13	CONSERVATION AND RESEARCH OF WEST AFRICAN AQUATIC MAMMALS (COREWAM)	SN
14	INSTITUT SENEGALAIS DE RECHERCHES AGRICOLES	SN
15	SEYCHELLES FISHING AUTHORITY	SC
16	AGENCIA ESTATAL CONSEJO SUPERIOR DEINVESTIGACIONES CIENTIFICAS	ES
17	ASOCIACION NACIONAL DE FABRICANTES DE CONSERVAS DE PESCADOS Y MARISCOS-CENTRO TECNICO NACIONAL DE CONSERVACION DE PRODUCTOS DE LA PESCA	ES
18	CENTRO TECNOLOGICO DEL MAR - FUNDACION CETMAR	ES
19	ORGANIZACION DE PRODUCTORES DE PESCA FRESCA DEL PUERTO Y RIA DE MARIN	ES
20	SHUTTLE THREAD LIMITED	UK
21	UNIVERSITY OF PORTSMOUTH HIGHER EDUCATION CORPORATION	UK

MedAID

Mediterranean Aquaculture Integrated Development

At a glance

Acronym: MedAID

Title: Mediterranean Aquaculture Integrated Development

Call: H2020-SFS-2016-2

Topic: SFS-23-2016

Instrument: Research and Innovation action

Start date: 01/05/2017

End date: 30/04/2021

Duration: 48 months

Total Cost: : € 6,999,996.25

EC Contribution: € 6,999,996.25

Consortium: 34 partners

Project Coordinator: Mediterranean Agronomic Institute of Zaragoza / International Centre for Advanced Mediterranean Agronomic Studies, ES

Abstract

Production and productivity of Mediterranean marine fish aquaculture, mainly seabass and seabream, are stagnating or growing slowly as a result of multiple and interrelated causes. To accomplish the objective of improving its competitiveness and sustainability, MedAID is structured in a first interdisciplinary WP to assess technical, environmental, market, socioeconomic and governance weaknesses, and in several specialized WPs exploring innovative solutions, followed by an integrating WP, which will provide codes of practice and innovative tool-boxes throughout the value chain to enhance the sector performance holistically. Various stakeholders will interact in the consultation, communication, dissemination and training WPs ensuring practical orientation of the project and results implementation. Biological performance (nutrition, health and genetics) will be scrutinized to identify and quantify the relevant components to improve Key Performance Indicators (KPIs: growth rates, mortality and feed efficiency), thus contributing to increase production efficiency. Economic, business, marketing, environmental, social, administrative and legal factors will be addressed to obtain integrated solutions to shift towards a market-oriented and consumer-responsible business and to face the multiple administrative, environmental and social issues constraining competitiveness and public acceptance. An interdisciplinary consortium of research and industrial partners will carry out R&D and case study activities to close the existing gaps. Mediterranean countries (EU and non-EU) with significant aquaculture production are represented. Northern European R&D institutions will participate by bringing successful technological tools and integrated approaches that Mediterranean aquaculture is missing today. MedAID will impact the sector positively by providing innovative tools, integrated marketing and business plans and by improving the sector image, sustainability and governance.

Project's Participants List

MedAID

Mediterranean Aquaculture Integrated Development

Project's partners	Name	Country
1	Mediterranean Agronomic Institute of Zaragoza / International Centre for Advanced Mediterranean Agronomic Studies	ES
2	INSTITUT DE RECERCA I TECNOLOGIA AGROALIMENTARIES	ES
3	NOFIMA AS	NO
4	VETERINAERINSTITUTTET - NORWEGIAN VETERINARY INSTITUTE	NO
5	UNIVERSIDAD DE CANTABRIA	ES
6	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	FR
7	FUNDACION AZTI - AZTI FUNDAZIOA	ES
8	HELLENIC CENTRE FOR MARINE RESEARCH	EL
9	HRVATSKI VETERINARSKI INSTITUT	HR
10	DANMARKS TEKNISKE UNIVERSITET	DK
11	AARHUS UNIVERSITET	DK
12	KOBENHAVNS UNIVERSITET	DK
13	NATIONAL INSTITUTE OF OCEANOGRAPHY AND FISHERIES	EG
14	SCEA LES POISSONS DU SOLEIL	FR
15	SELARL DU DOCTEUR ALAIN LE BRETON	FR
16	AVDELAS LAMPRAKIS	EL
17	ISTITUTO ZOOPROFILATTICO SPERIMENTALE DELLE VENEZIE	IT
18	ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA	IT
19	NISEA SOCIETA COOPERATIVA	IT
20	WAGENINGEN UNIVERSITY	NL
21	SAMFUNNS-OG NAERINGSLIVSFORSKNING AS	NO
22	CENTRO DE CIENCIAS DO MAR DO ALGARVE	PT
23	DIBAQ DIPROTEG SA	ES
24	INSTITUTO NACIONAL DE INVESTIGACION Y TECNOLOGIA AGRARIA Y ALIMENTARIA	ES
25	Institut National des Sciences et Technologies de la Mer	TN
26	EGE UNIVERSITESI	TR
27	GALAXIDI MARINE FARM AE	EL
28	STICHTING WAGENINGEN RESEARCH	NL
29	UNIVERSIDAD DE MURCIA	ES
30	UNIVERSITE DE BRETAGNE OCCIDENTALE	FR
31	AZIENDA ITTICA IL PADULE DI FORNACIARI NAIDA & C SOCIETA AGRICOLA SEMPLICE	IT
32	COMPAGNIE ITTICHE RIUNITE SOCIETA'AGRICOLA SRL	IT
33	FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS FAO	IT
34	THE UNIVERSITY OF EDINBURGH	UK

At a glance

Acronym: PerformFISH

Title: Consumer driven Production: Integrating Innovative Approaches for Competitive and Sustainable Performance across the Mediterranean Aquaculture Value Chain

Call: H2020-SFS-2016-2

Topic: SFS-23-2016

Instrument: Research and Innovation action

Start date: 01/05/2017

End date: 30/04/2022

Duration: 60 months

Total Cost: : € 7,045,060.74

EC Contribution: € 6,997,060.74

Consortium: 28 partners

Project Coordinator: PANEPISTIMIO THESSALIAS, EL

PerformFISH

Consumer driven Production: Integrating Innovative Approaches for Competitive and Sustainable Performance across the Mediterranean Aquaculture Value Chain

Abstract

Gilthead sea bream and European sea bass are by volume the third and fourth most farmed fish species in the EU, while their collective value surpasses that of salmon, trout or mussel. These two species are farmed and contribute significantly to wealth and job creation in rural and coastal areas in all EU Mediterranean countries. However, production of sea bream/bass in the EU has remained stagnant for the last decade and the industry faces significant sustainability challenges. The overarching objective of PerformFISH is to increase the competitiveness of Mediterranean aquaculture by overcoming biological, technical and operational issues with innovative, cost-effective, integrated solutions, while addressing social and environmental responsibility and contributing to "Blue Growth". PerformFISH adopts a holistic approach constructed with active industry involvement to ensure that Mediterranean marine fish farming matures into a modern dynamic sector, highly appreciated by consumers and society for providing safe and healthy food with a low ecological footprint, and employment and trade in rural, peripheral regions. PerformFISH brings together a representative multi-stakeholder, multi-disciplinary consortium to generate, validate and apply new knowledge in real farming conditions to substantially improve the management and performance of the focal fish species, measured through Key Performance Indicators. At the core of PerformFISH design are, a) a link between consumer demand and product design, complemented with product certification and marketing strategies to drive consumer confidence, and b) the establishment and use of a numerical benchmarking system to cover all aspects of Mediterranean marine fish farming performance. Created knowledge and innovative solutions will underpin the developed code of conduct and good practices and will foster modernization through capacity building of the Mediterranean aquaculture workforce.

Project's Participants List

PerformFISH

Consumer driven Production: Integrating Innovative Approaches for Competitive and Sustainable Performance across the Mediterranean Aquaculture Value Chain

Project's partners	Name	Country
1	UNIVERSITY OF THESSALY - UTH	EL
2	UNIVERSIDAD DE LAS PALMAS DE GRAN CANARIA	ES
3	ASOCIACION EMPRESARIAL DE PRODUCTORES DE CULTIVOS MARINOS - APROMAR	ES
4	SYNDESMOS ELLHNIKON THALASSOKALLIERGEION SOMATEO	EL
5	ASSOCIAZIONE PISCICOLTORI ITALIANI	IT
6	CROATIAN CHAMBER OF ECONOMY CCE	HR
7	AGENCIA ESTATAL CONSEJO SUPERIOR DEINVESTIGACIONES CIENTIFICAS	ES
8	HELLENIC CENTRE FOR MARINE RESEARCH	EL
9	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE	FR
10	CENTRO DE CIENCIAS DO MAR DO ALGARVE	PT
11	PANEPISTIMIO KRITIS	EL
12	UNIVERSITAT AUTONOMA DE BARCELONA	ES
13	UNIVERSITA DEGLI STUDI DI UDINE	IT
14	UNIVERSITA DEGLI STUDI DI PADOVA	IT
15	SINTEF OCEAN AS	NO
16	AquaTT UETP Ltd	IE
17	PANAGIOTIS CHRISTOFILOGIANNIS - IOANA TAVLA	EL
18	AQUAxprs Limited	UK
19	SPAROS LDA	PT
20	Istituto Superiore per la Protezione e la Ricerca Ambientale	IT
21	SYNDICAT FRANCAIS AQUACULTURE MARINE NOUVELLE	FR
22	RUDER BOSKOVIC INSTITUTE	HR
23	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
24	INTERNATIONAL ORGANISATION FOR THE DEVELOPMENT OF FISHERIES IN EASTERN AND CENTRAL EUROPE*EUROFISH	DK
25	ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA	IT
26	SYNDICAT DES SELECTIONNEURS AVICOLES ET AQUACOLES FRANCAIS	FR
27	SKRETTING AQUACULTURE RESEARCH CENTRE AS	NO
28	CLUSTER DE LA ACUICULTURA DE GALICIA ASOCIACION	ES

EUROPEAN COMMISSION

Director-General for Research and Innovation
Directorate F – Bioeconomy
Unit F.4 – Marine Resources

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Horizon 2020 website: https://ec.europa.eu/programmes/horizon2020/

Bioeconomy website: https://ec.europa.eu/research/bioeconomy

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