

ScienceDIVER Newsletter 1, June 2020

Introduction

The project ScienceDIVER aims to support the development of blue and smart cross-sectoral skills to meet the evolving needs in the labor market of the Blue Economy. ScienceDIVER will establish strong continuous collaboration between academia and industry in order to offer standardized training and clear career pathways to the diving scientists. ScienceDIVER aspires to cover the need for cooperation between scientific organisations, diving organizations, professional associations, industry and national Authorities throughout Europe in forming an international network to promote and support scientific diving as a prosperous profession with unified regulations.

The project brings the expertise of seven partners from Greece (Aristotle University of Thessaloniki, coordinator; Atlantis Consulting Ltd); Italy (University of Calabria); Germany (University of Stuttgart; envirocom); Bulgaria (Marine Cluster Bulgaria), and Malta (Divers Alert Network Europe Foundation). The geographical scope covers several European sea basins. It is implemented with the contribution of the European Maritime and Fisheries Fund. It started in November 2019 and the activities will be carried out during a period of three years. The ScienceDIVER kick-off meeting took place on 10th December 2019 at the premises of Aristotle University in Thessaloniki.



Photo: EASME Kick-off meeting for projects granted by EMFF-5 December 2019, Brussels, Belgium

Rationale

It is crucial to understand the ocean which covers 71% of the earth surface and at the same time to be able to benefit from its resources in a sustainable way.

Moreover it is recognized that science holds the key for the future growth of the Blue Economy and the transition from the lab to market is requiring scientists, engineers and skilled workers to apply new technologies and scientific knowledge in the marine environment". A large growth of the blue economy is expected with an increasing demand on underwater and marine scientific research/exploration, boosting the development of two promising and interconnected sectors: Blue Tech and Scientific Diving, which complement each other. Marine scientific sector as one of the prospective contributors to the global economy is expected to reach 10 billion euros added value in 2020 the next few years with opportunities for growth and jobs.

Additionally the United Nations declared the decade 2021-2030 as the Decade of Ocean Science for Sustainable Development, which provides a "once in a lifetime" opportunity for Nations to work together to generate the global ocean science needed to support the sustainable development of our shared ocean". To accomplish the above objective Science Divers are an important element of the global effort along with the active contribution of the Scientific Diving community.

Need of Ocean Science – Reasons

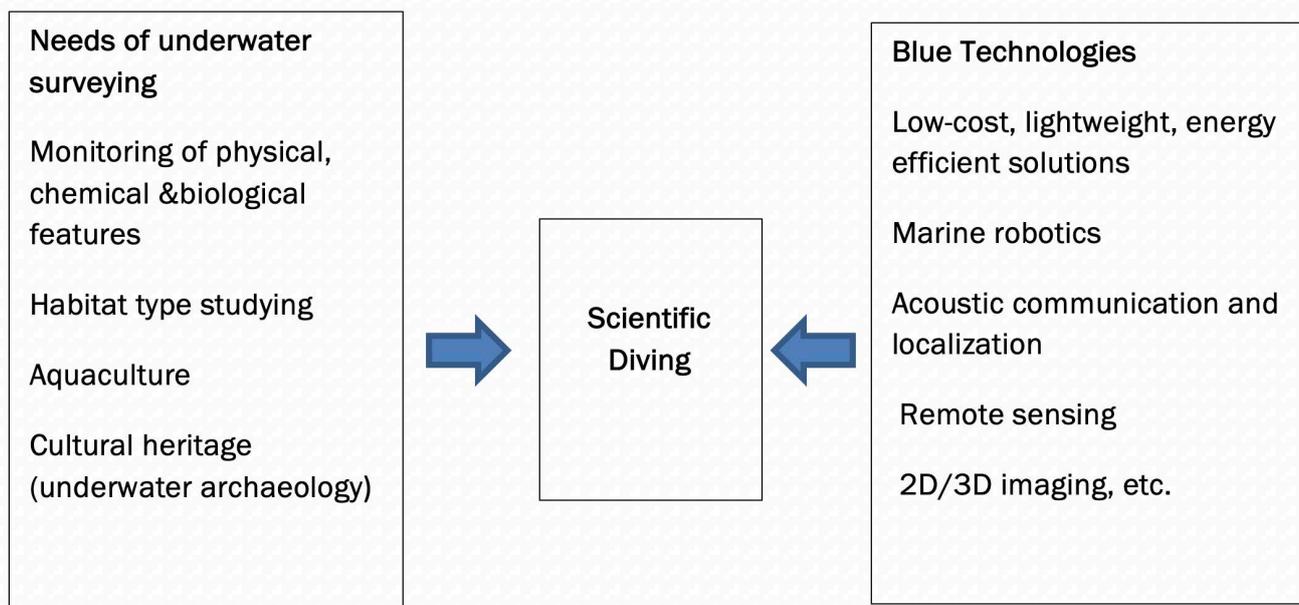


Achievement of the Decade's goals requires an extensive monitoring of physical and chemical features, habitat types, biological features and hydro-morphology of the marine environment. Moreover, there is an increased need for underwater studying/surveying/preserving/managing (in situ) underwater cultural heritage sites. Some of these emerging activities need to be carried out by scientific divers from diverse disciplines (e.g. engineers, archeologists etc.) by using standard methodologies and procedures or cutting edge Blue Technologies.

The application of the Maritime Strategy Framework Directive (MSFD) and UNESCO Convention create job opportunities for the scientific divers due to emerging need for targeted actions aiming at assessment and protection of the quality of the marine environment, biodiversity and cultural assets. Furthermore these legislative drivers re-round to the growth of Blue Technology business, as there

is an increasing need for high-tech equipment to support "Blue" scientific diving missions.

The development of Blue Technologies: low-cost, light-weight, energy efficient solutions in the areas of marine robotics, acoustic communication and localization, remote sensing, 2D/3D imaging, etc. has an impact on the scientific diver works, bringing to the definition of new methodologies, protocols and processes in the various fields: marine geology, biology, ecology, archaeology etc. opened new opportunities for scientific diving, making their work more efficient (more data gathered in the same time), safer (continuous communication with the surface, monitoring of the health conditions, real time supervision and coordination from the surface, etc.) and more effective (introducing new possibilities like 3D recording of seabed, artefacts and biological species.



In general Scientific Diving is an underwater activity that emerges in different forms all over the Blue Economy and creates opportunities for growth and jobs. Scientific divers are qualified scientists, who use diving equipment and techniques to perform scientific underwater tasks for their fieldwork. Diving is major part of their research and professional work.

General aim and objectives

ScienceDIVER aims at creating a long lasting collaboration framework between industry and education and at developing a tailored training diving course which will allow young scientists of marine biology, geology, ecology, aquaculture, offshore oil & gas, oceanography and other marine related sciences/sectors to obtain needed skills and certifications to perform underwater activities. The main aim is to promote and mature the discussion in Europe of a European Directive concerning the common framework, status, educational standards, recognition and rights of science divers in all European countries – a fine-tuning of policies towards Scientific diving.

Overall, the project will:

- raise awareness on scientific diving at national/ EU level and academic institutions,
- provide tangible solutions through a pilot vocational training scheme for scientific divers in three EU countries,
- mobilize actors, create partnerships and joint actions among competent organizations,
- facilitate the professional acknowledgement of scientific divers in the Blue Economy market.

Approach

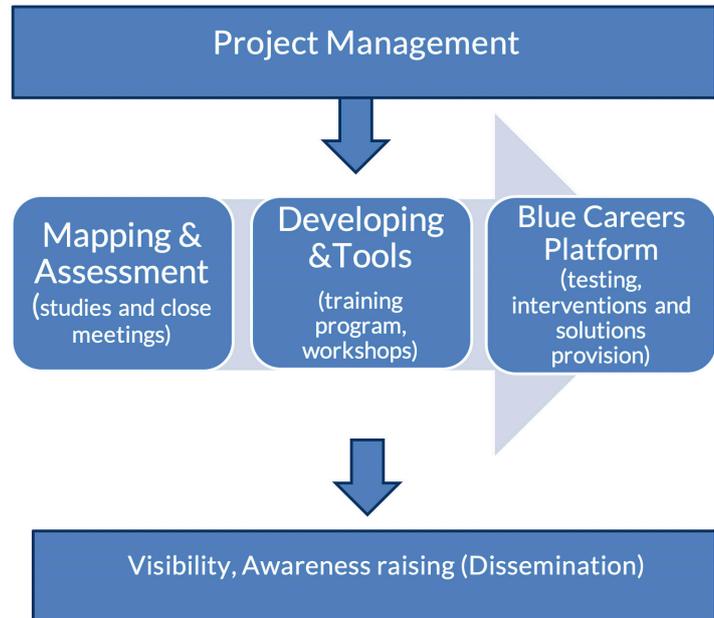
The project aims will be achieved by setting a holistic innovative approach in bringing together stakeholders from both the industry, education and training providers (higher level training by academia lectures and vocational training by diving instructors) towards bridging the gap between skills' offer and demand.

Five focus countries with traditions in Scientific diving are identified across Europe: Germany, Greece, Italy, France and Croatia, including relevant competent organizations and stakeholders, training and legislative framework, professional recognition. Based on the research outcomes, close meetings and workshops, gaps between science and industry will be defined to make further the ground of the training program and Blue Careers platform. Participation of relevant stakeholders such as marine industry, academic and research institutions, underwater training organizations and diving centers, e-learning providers, policy makers and social insurance organizations in planned local and international workshops, B2B meetings and Career Days through involvement in the discussions and sharing of opinions will contribute to the achievement of project objectives and wider promotion of Scientific Diving as promising and well paid profession.

Planned Activities

The project goals will be achieved by completing a series of successive activities, carried out locally or internationally.

- On desk research - stakeholders mapping and needs assessment;
- Creation of a pilot Roadmap – Career Days, Workshops, B2B meetings;
- Blue Carriers Platform – facilitator for job seekers and employers;
- Pilot training course – vocational training scheme for scientific divers
- Awareness raising on scientific diving



Expected impact

In short term, the project will build solid relationships with stakeholders in the focus countries. Pilot Roadmaps will be created. Workshops and B2B meetings will gather relevant stakeholders, setting up a Blue Careers Platform and its optimization, allowing improved employability of students

In long term, through the presentation of outcomes to the wider EU policy community, in the project's Final Conference and the continuation of work from project partners beyond the project life we expect to trigger change, towards the initiation of a European Directive that will include aspects concerning the common framework, status, educational standards, recognition and rights of Scientific Divers in all European countries (ensuring a long-lasting job mobility for Scientific Divers).

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