universidade de aveiro
theoria poiesis praxis

Is your technology seaworthy?

SEA CALL FOR INNOVATORS

1. Introduction

In 2011 the European Commission adopted a Communication on Blue Growth[1] showing how Europe's coasts, seas and oceans have the potential to be a major source of new jobs and growth[2] that can contribute to the Europe 2020 strategy and improve the way we harvest the planet's resources.

The 'blue economy' represents roughly 5,4 million jobs and generates a gross added value of almost €500 billion a year. Further growth is possible in a number of areas, and innovation across all sectors of the blue economy is crucial for realising its growth and jobs potential.

The long-term strategy set by the EU to support sustainable growth in the marine and maritime sectors as a whole[3], defines five sectors that have a high potential for sustainable jobs and growth**,** namely:

(i) aquaculture
(ii) coastal tourism
(iii) marine biotechnology
(iv) ocean energy
(v) seabed mining

These sectors together with the other sectors of the 'blue economy' that are crucial for creating value and jobs (e.g., shipbuilding and ship repair, transport, fisheries and offshore oil and gas) are enabled by a set of enabling technologies that include imaging and physical sensors, satellite technologies, advanced materials, ICT, big data analytics, autonomous systems, biotechnology, nanotechnology and subsea engineering[4].

2. Call for innovators in 'blue economy' technologies

The University of Aveiro is willing to support its scientists (students, professors and researchers) that are carrying out researcher in the above-mentioned enabling technologies, with possible applications in any of the sectors of the 'blue economy', to commercialize their technologies.

For that purpose UA is calling innovators in 'blue economy' technologies to participate in an event to help them access the commercial viability of their research.

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[1] Blue Growth opportunities for marine and maritime sustainable growth COM(2012)494
[2] Blue Growth Scenarios and drivers for Sustainable Growth from the Oceans, Seas and Coasts, Final Report, Call for tenders No. MARE/2010/01, August 2012
[3] http://ec.europa.eu/maritimeaffairs/policy/blue_growth
[4] OECD (2016), *The Ocean Economy in 2030*, OECD Publishing, Paris.

The event will take place on the January 18, 2017 and researchers willing to participate will have to submit an application by December 12, 2016. A committee appointed by the University will review the applications and the selected projects will be invited to pitch at the event.

3. Applications

Applications should be submitted, exclusively by University of Aveiro students, professors and researchers, in a Word or Pdf format and need to contain the following sections:

(i) Name, email and affiliation of the researchers submitting the application

(ii) Technology description: Describe the technology that you are working on in terms that can be understood by scientists with a general background. (Max. 8000 characters)

(iii) Technology Readiness Level (TRL): indicate the Technology Readiness Level (TRL) of your technology.

Table 1: Technology readiness levels

Classification	Description
TRL 0	Just an idea under development
TRL 1	An idea supported by minimal scientific development
TRL 2	An idea supported on well developed science
TRL 3	Technology validated in a laboratory environment
TRL 4	Technology validated with field tests
TRL 5	Technology with a complete proof-of-concept (e.g., prototype or in-vivo testing)
TRL 6	Technology scaled-up to semi-industrial production

(iv) Unique features: describe what is unique and different about the technology results that you have achieved, emphasizing the unique capabilities. Describe this in relation to work by other groups in the same field (Max. 8000 characters).

(v) Potential applications: discuss the ideas that you envision for the application of your science or technology in the sectors of the 'blue economy'. This should include possible products, services or processes that could be derived from your research results. Also indicate who are potential customers and/or users for these applications. (Max. 8000 characters)

(vi) The two main criteria for the selection of the projects that will present in the event will be:

(vii) Deepness of the technology, i.e., the set of unique features that makes the technology competitive in a world basis.

(viii) Broadness of the technology, i.e., the range of products, services or processes that the technology can support (even if outside the 'blue economy sectors').

4. Pitching the technology

The purpose of the pitching event is to support the investigators in preparing a short presentation, geared towards business people, of their technology offering. So, a panel of advisors will give feedback to the investigators to help them improve the pitch.

For that purpose, investigators need to prepare a presentation to be delivered in 5 minutes, covering the following topics:

(ix) The Product Concept and the Market Need: In this topic, uniqueness, innovativeness and a clear market need for the product concept needs to be emphasised. The presentation should clearly describe what the envisioned product concept is and does. The benefits of the product should be stressed over the technical details of how it works. The presentation should also state what is innovative and unique about the envisioned product. Finally, there should be a clear description of how the product idea creates value in the marketplace. What real need does it solve?

(x) The Technology and the Development Plan. The technology and the product should be clearly defined with emphasis placed on functions. The presentation should clarify the current state of development of the technology and attempt to outline the necessary technology or product development required to reach TRL 5. This element should include an estimate of necessary funds for continued development and an explanation of key assumptions in deriving those estimates. Included in these estimates should be a timeline of development. If the technology is at a very early stage idea phase (TRL 0), the presentation should highlight assurances that it is feasible to create the product being proposed.

(xi) The Market and the First Customer. The market for the product should be clearly defined. The presentation should make clear that a reasonable effort has been made to segment and define the markets for the product. In particular, the presentation should make clear who the initial customers are and include characteristics of those customers. Appropriate rationale and sources of market information used to define the initial market segment should be credible. Ideally, the rationale for estimating the market size should be provided.

(xii) The Competitive Advantage. Analysis of competitive technologies is essential to clearly define the product concept's advantage. The presentation should clearly define barriers to market entry and state the competitive advantage of the product offering.

5. Why you should participate

Sea Call is a great opportunity to present and assess your idea and/or technology and to realize if those technologies can be applied on sea sector or to achieve to sea sector applications.

This call also allows you to integrate your technology in a valorization program of R&D results.

The best projects will receive funding and support to define the best protection strategy and perform patentability studies. Furthermore, they will also have the opportunity to participate in one of the best acceleration programs (COHITEC).

6. Important dates

21-11-2016	Sea Call Presentation
12-12-2016	Deadline for submitting applications
14-12-2016	Jury meeting
16-12-2016	Communication of results
21-12-2016	Pitch preparation workshop
18-01-2017	Pitch
End of february	COHITEC