

PhD SCHOLARSHIP APPLICATION FORM CALL 2016

ORGANISATION	AZTI
Business Area	Coastal and Marine Environmental Management
Scholarship Location Province/Building	Herrera Kaia, Portualdea z/g 20110 - Pasaia (Gipuzkoa)
Lecturer	Ibon Galparsoro

DESCRIPTION OF SCHOLARSHIP

Title: Development of Marine Spatial Planning supporting tools and their application in the Basque Country

Short description of the Scholarship:

Nowadays the availability of food and energy is a global challenge for society, and the marine environment is a critical source of such resources. At the same time it is widely acknowledged that environmental pressure caused by human activities should not increase. Thus, the only way to guarantee current and future supply of energy and food of marine origin, as well as other needs, is through sustainable activities guaranteeing good environmental status. Moreover, another major constraint maritime activities must face is space availability.

This doctoral thesis will evaluate different tools currently used in the field of Marine Spatial Planning and decision-making processes. The needs not covered by the tools analysed will be identified. As a result, new tools addressing the needs described above will be designed, developed and applied in the Basque Country for their validation. The thesis will be carried out in close collaboration with the AquaSpace (Ecosystem Approach to making Space for Sustainable Aquaculture) project. This project is funded by the EU Framework Programme for Research and Innovation - Horizon H2020 (Grant Agreement: 633476). The AquaSpace project intends to go a step further in the production of a series of management tools and effective implementation of an eco-systemic approach and Marine Spatial Planning supporting the aquaculture sector.

As part of this Doctoral Thesis, the next points will be tackled:

- existing constraints as well as Marine Spatial Planning supporting tools / methods already developed in national and international projects will be analysed;
- interactions and conflicts of use among different human activities in the marine environment will be analysed;
- ecosystem services provided by the marine environment will be analysed and a Cost/Benefit Analysis of the different human activities will be carried out; and

- tools contributing to facilitate the identification and planning processes of human activities with a special focus on aquaculture, artisanal fishing and renewable energies will be developed.

The aforementioned breakthroughs will be applied to the case study managed by AZTI in the AquaSpace project.

Requirements:

To do so, candidates should meet the following requirements:

- Qualification: Degree in Marine Sciences, Biology, Environmental Sciences, Geography or similar.
- Speciality: Preferably specialities related to the environment, marine environment or Marine Spatial Planning
- Languages: English (required: spoken and written skills at advanced level; equivalent to Cambridge Advanced diploma level or similar, if possible); Spanish; Basque will be a plus.
- Others: Master degree. Master contents will preferably include training in subjects related to Marine Spatial Planning and an end-of-master project on the same subject will also be desirable.
- The following will be an advantage:
 - Knowledge of and experience in Geographic Information Systems (ArcGIS or Quantum GIS).
 - Programming
 - Database administration and management
 - Knowledge of statistics and Bayesian networks
 - Knowledge of and experience in sociological studies
 - Participation or collaboration in projects or initiatives related to Marine Spatial Planning topics.
 - Attendance to training courses related to Marine Spatial Planning topics, participatory processes, etc.
 - Overall knowledge of marine environment operation: habitats, environmental impact, environmental risks, vulnerability, human activities in marine environments, ecosystem goods and services, etc.
 - Knowledge of other Marine Spatial Planning initiatives which may contribute to Thesis preparation.
- Comments

The candidate must be available for travelling to regional/national/international congresses/meetings to present the results obtained during this Thesis preparation. In the second year of the Thesis, the possibility of an overseas secondment will be considered.