## An interactive atlas to display information on Atlantic marine economic activities

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## Maritime, Ocean Sector and Ecosystem Sustainability: Fostering Blue Growth in Atlantic Industries



MOSES is an EU multinational research project involving eight partners representing the five member states of the Atlantic Area. The partners of MOSES (universities, marine research institutions, and regional bodies) include representatives from France, Ireland, Portugal, Spain, and the United Kingdom.

MOSES seeks to understand and quantify the sustainability dimension of Blue Growth with respect to the potential environmental impacts of key strategic marine sectors, and will result in the development of integrated marine sustainability assessment toolkits and sustainable transition plans using case studies.

As part of work package 4 activities, MOSES has developed an economic database of marine activities in the five countries of the Atlantic Area. Each economic activity is characterized by a set of indicators, with the objective of having comparable data for the five countries. The purpose of this poster is to present the different steps that led to the creation of this database and atlas.

The methodology and framework used for building the MOSES economic database are based on the work performed for MARNET, which was an INTERREG project (2009-2012) to analyse marine activities in the Atlantic Area. The three dimensions of the MOSES database are similar to that of MARNET: a selection of marine activities and of yearly indicators characterizing each activity; and a common time frame for the indicators as time series.

- Marine activities are identified by NACE code, i.e. by business category. This hierarchical classification is exhaustive (all activities are classified by NACE class, with one code per class), avoids double counting (each activity has one code) and allows readily accessing economic documentation by activity.

- Marine activities are equally identified by territorial unit, based on the NUTS European statistical classification of territorial units. The units used in the database include countries (level 0 of the NUTS) and Atlantic regions (levels 2 and 3), i.e. units with an Atlantic shoreline. Level 1 is less necessary as it includes countries or groups of regions.

- Collecting reliable data requires using official European sources whenever possible: the project gives priority to the databases from Eurostat and the National Statistical Institutes of the five Atlantic countries. The EC statistical administration, Eurostat, collects data from the National Statistical Institutes under EU regulation.

- Economic indicators are selected among those currently used by these sources for developing the Structural Business Statistics and National Accounts. Such indicators are available at NUTS 0 only. At higher NUTS levels (regions and sub regions), only establishments can be documented with much fewer indicators, e.g. number of establishments and employment.

- Specific "proxies" are collected to supplement economic indicators, and are mostly available at local level: proxies are non-monetary indicators characterizing important features of certain marine activities.

- The time frame of the MOSES database (2013-2015) follows that of MARNET (2005-2012).

## The MOSES database

The partners collected the required data from member states' national statistical institutes and from Eurostat, as said above. In several cases, data sources included state or private agencies with an expertise on specific maritime activities such as fisheries.

The poster will present the different steps from integration of these data within a PostgreSQL database until the mapping of these data in an interactive tool using OGC standards for displaying and downloading results and products.

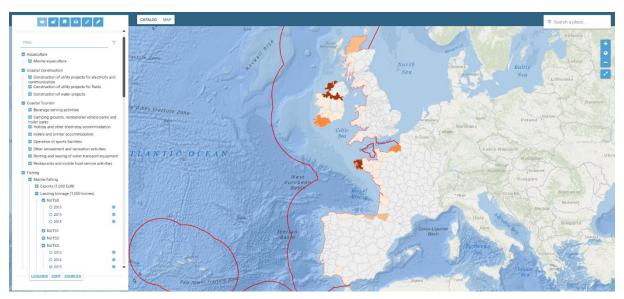


Figure 1: Map representing Marine fishing /Landing tonnage (1000 tonnes) at Nuts 3 level in 2015