

**Designação do projeto:** COASTNET - Portuguese Coastal Monitoring Network

**Código do projeto:** PINFRA/22128/2016

**Objetivo Principal:** CoastNet aims at monitoring important coastal ecosystems of the Portuguese coast, through relevant chemical, physical and biological parameters, collected remotely in near real-time.

**Região de intervenção:** Zona Costeira Portuguesa

**Entidade promotora:** FACULDADE DE CIENCIAS DA UNIVERSIDADE DE LISBOA

**Entidade parceira:** UNIVERSIDADE DE ÉVORA

**Data de aprovação:** 17-03-2017

**Data de início:** 15-06-2017

**Data de conclusão:** 13-06-2021

**Custo total elegível:** 865.688,00 (oitocentos e sessenta e cinco mil, seiscentos e oitenta e oito euros)

**Apoio Financeiro da União Europeia:**

- FEDER – 487.594,10€ (quatrocentos e oitenta e sete mil, quinhentos e noventa e quatro euros e dez cêntimos)

**Objetivos, atividades e resultados esperados:**

**Objectives:** CoastNet aims at monitoring important coastal ecosystems of the Portuguese coast, through relevant chemical, physical and biological parameters, collected remotely in near real-time. CoastNet will be implemented through the development of a near real-time satellite data processing centre; a set of sensors and acoustic receivers to collect in-situ data on environmental and biological parameters, as well as marine fauna movements, transmitted in near-real time to the data centre; and a web-based platform, integrating the whole database and providing open access to the information.

**Activities:** Four main activities will be carried out. (i) The first activity comprises the installation of a Coastal Remote Sensing System (CRSS), which aims to provide sea-surface temperature (SST), chlorophyll a and other non-standard ocean color derived products, based on data obtained from NASA and ESA, and processed at MARE. (ii) The Environmental and Biological Monitoring Systems (EBMS) aims to set up a structure of continuous real-time measurements of several environmental and biological variables in important estuarine systems. Different systems of sensors will be deployed on strategic areas along the Portuguese coast. Sensors measuring salinity, temperature, dissolved oxygen and chlorophyll a will be installed in Mondego, Tejo and Mira estuaries, covering the whole estuarine gradient. (iii) The Portuguese Coastal Tracking Network (PCTN) aims to assemble an array of monitoring receivers to collect comprehensive data on sea animals along the Portuguese coastal area. (iv) Construction of the web based CoastNet platform making available the information obtained in the other three activities and also historical data.

**Expected Results:** Understanding coastal ecosystems functioning and assessing their long-term trends and spatial variability. Gathering scientific knowledge to improve scientific production, socio-economic activities, such as fishing and aquaculture, and the conservation of endangered species, as well as to provide a variety of services to a wide range of stakeholders.

