



UNIÃO EUROPEIA
Fundo Europeu
de Desenvolvimento Regional

Designação do projeto | BIOREM – Bioremediation of Hydrocarbon Pollutants by Autochthonous Microorganisms in Aquatic Environment

Código do projeto | POCI-01-0145-FEDER-032186 - PTDC/BTA-GES/32186

Objetivo principal | Reforçar a investigação, o desenvolvimento tecnológico e a inovação através do desenvolvimento de um software capaz de ser integrado em veículos com sensores no volante para detectar a fadiga e sonolência do condutor.

Região de intervenção | Norte

Entidade beneficiária | INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência

Data de aprovação | 27-02-2018

Data de início | 01-06-2018 **Data de conclusão** | 2021-05-31

Custo total elegível | 233 573,31€

Apoio financeiro da União Europeia | FEDER: 198 537,31€

Apoio financeiro público nacional/regional | 35 036,00€

The overall aim of the BIOREM project is the implementation of an innovative and environmental friendly solution to tackle with with one of the most damaging sources of maritime pollution: spills of oil and marine fuels. This solution will be based on the production of autochthonous microbial consortia with bioremediation capacity, and the adaptation of unmanned aerial vehicles for in-situ release of autochthonous microorganisms (bioaugmentation) and nutrients (biostimulation). By doing so, these systems can be used as first line responders to pollution incidents in a fast, efficient and low cost way. Such innovative solutions aim to: (i) be environment-friendly, by using native organisms to naturally degrade oil spills, and thus avoiding the introduction of additional chemical or biological additives; (ii) integrate spill combat missions, by using unmanned aerial vehicles, which are able to operate under unfavourable and harsh conditions with low human intervention; (iii) increase the overall efficiency of the spill combat, by acting on defined targets and areas; (iv) decrease the overall time to reaction and mission costs, by using unmanned aerial vehicles, whose deployment is faster and less costly than using boats, planes or helicopters.