

THE TRADE PROJECT (TRANS-REGIONAL RADARS FOR ENVIRONMENTAL APPLICATIONS). A CONTRIBUTION TO THE PRESERVATION OF THE ENVIRONMENT BASED IN RADAR HF

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HF radar is a technology able to provide measurements of real time 2D surface current fields. This technology is being currently deployed on both coasts of the United States (150 radar stations built by NOAA in 2010). Europe has begun to implement it in the past five years. TRADE project will deploy a network of these instruments in the coastal strip of the Algarve and Huelva, and in the straits of Gibraltar (see figure). The area is selected because the maritime corridor located between Cape St. Vincent and the Strait of Gibraltar is the scenario of one of the world's largest vessel concentration. Many ships in the region are transporting oil, toxic products and chemicals. Additionally, in the coastal area that concerns the project, there are two national parks of high ecological value (Formosa and the Doñana). The TRADE project aspires to provide the technological infrastructure required by the region to prevent risks and, at the same time, substantially improve coastal management. To meet the general objectives described above, the following actions will be carried out: 1) Implementation of an HF Radar network for observation of surface currents and waves; 2) Establishment of the methods and procedures for validating the quality of information provided by the new infrastructure and integrate it into existing Puertos del Estado and Hydrographic Institute information systems and 3) - To create a platform for managing cross-border interoperability and distribution of data, as well as develop a model of collaboration that allows for joint management of information in a new model of trans-boundary ocean observatory. Results of the project will

be integrated in the framework of GMES, EUROGOOS, EMODNET and MyOcean activities.

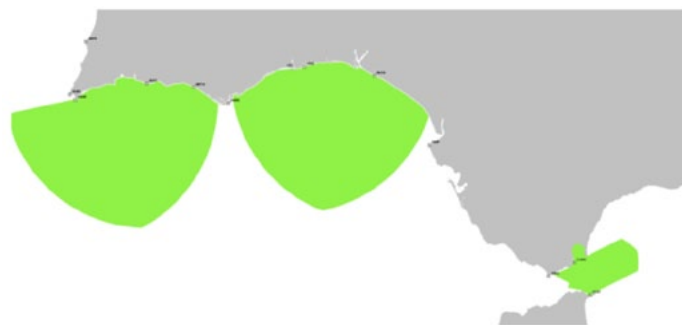
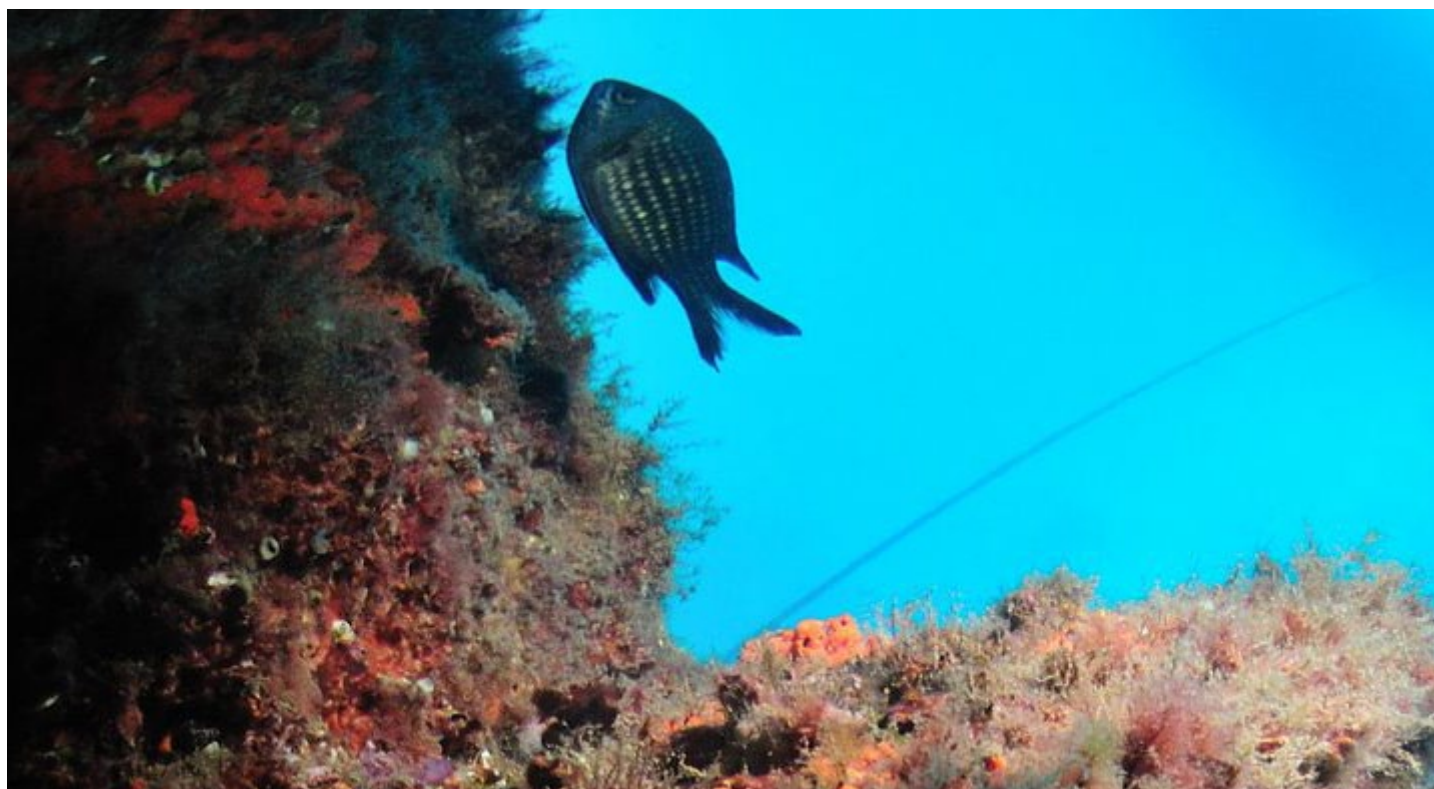


Figure 1: HF radar network for TRADE project



Underwater life. Picture by Ramon Margalef