The EuroGOOS High Frequency Radar Task Team: a success story of collaboration. To be kept alive and made growing.

Lorenzo Corgnati, CNR-ISMAR (Italy), lorenzo.corgnati@sp.ismar.cnr.it

Carlo Mantovani, CNR-ISMAR (Italy), carlo.mantovani@cnr.it

Anna Rubio, AZTI Marine Research (Spain), arubio@azti.es

Emma Reyes, ICTS-SOCIB (Spain), ereyes@socib.es

Paz Rotllan, ICTS SOCIB (Spain), protllan@socib.es

Antonio Novellino, ETT SpA (Italy), antonio.novellino@ettsolutions.com

Patrick Gorringe, SMHI (Sweden), patrick.gorringe@smhi.se

Lohitzune Solabarrieta, AZTI Marine Research (Spain), lsolabarrieta@azti.es

Annalisa Griffa, CNR-ISMAR (Italy), annalisa.griffa@sp.ismar.cnr.it

Julien Mader, AZTI Marine Research (Spain), imader@azti.es

High Frequency Radar (HFR) is the unique land-based remote sensing technology capable to map ocean surface currents and waves over wide coverages with high spatial and temporal resolution.

HFR gained relevance in the integrated management of coastal zones and thus rapidly expanded in Europe (7 new systems per year since 2016), with over 81 sites currently running and a number in the planning stage.

In 2014, EuroGOOS launched the HFR Task Team (HFR-TT) with the aim of promoting HFR in Europe. This was the cornerstone of a fruitful and still ongoing path towards the coordinated development of HFR technology and the full exploitation of its potential. In fact, many initiatives in Europe followed up, aiming at building an operational HFR European network based on coordinated data management. The HFR-TT actions played an important role in the growth of operational installations in Europe, which were up to then managed in research-specific contexts and without a strong identity in the marine observation landscape.

The achievements are promising: (i) the European HFR community took shape, (ii) a European operational HFR Node, best practices and operational tools were created for the production and distribution of standardized and quality controlled data, and (iii) HFR data have been included in the main marine data portals (CMEMS-INSTAC, SeaDataNet and EMODnet Physics).

The European HFR Node was established in 2018 by AZTI, CNR-ISMAR and SOCIB, coordinated by the EuroGOOS HFR-TT, as the focal point in Europe for HFR data management and distribution, and for networking between EU infrastructures and the Global HFR network. The Node is fully operational since December 2018 and is now managing data from 15 European HFR networks and integrates and delivers US HFR network data.