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FORCOAST - Earth Observation services for Wild Fisheries, Oystergrounds Restoration and Bivalve Mariculture along European Coasts*

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The European Blue Growth perspective suggests a larger share in global economic production and food security appointed to the marine and coastal zone and an increase of marine and coastal infrastructures and operations. However, this growth must be aligned with increasing environmental constraints as well as complying and restoring regulations and frameworks. The compliance of growth and sustainability requires the adoption of economically and ecologically efficient behaviours, based on a wider incorporation of available information and knowledge from the industry and citizens alike. Marine and coastal managers must make decisions to maintain the social, economic, and ecological health of marine and coastal areas while operating, planning and managing their activities at sea.

The European funded FORCOAST project represents a step forward in this direction by bringing the coastal water quality and met-ocean information closer to the target sectors: wild fisheries, oyster grounds restoration, and bivalve mariculture. FORCOAST will develop, test and demonstrate, in operational mode, novel Copernicus-based downstream information services that will incorporate and combine Copernicus Marine Environment Monitoring Service (CMEMS), Copernicus Land Monitoring Service (CLMS) and Climate Change Monitoring Service (CMS), local monitoring data and advanced modelling in the service.

FORCOAST will provide consistent high-resolution data products for coastal applications, based on a standardized data processing scheme. The services of FORCOAST will provide managerial tools (e.g decision support, user warnings, on-demand case study) built upon those products and implemented through cloud-processing infrastructures.

FORCOAST will develop and provide those services in eight pilot service uptake sites covering five different regional waters (North Sea, Baltic Sea, Mediterranean Sea, Black Sea and the coastal Atlantic Ocean). Each of those pilots gathers marine information producers (eg. models),

providers (dissemination) and user (operating SMEs), to ensure inter-sectoral consistency. The outcome of FORCOAST is a novel commercial service that will provide Copernicus-based downstream information coastal services to a variety of stakeholders, which will result in an operation, planning and management improvement of different marine activities in the sectors of wild fisheries and aquaculture, having an economic and societal positive effect on the involved parties.

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