

### **SpaceWave:**

The SpaceWave consortium will be studying the international markets and trends in the Blue Growth Economy as well as the sectoral challenges where Earth Observation data could provide viable solutions for Blue Growth. Earth Observation (EO) refers to the use of remote sensing technologies such as satellites and dedicated measurement instruments, to monitor the state and evolution of our planet on land, at sea and in the atmosphere. The project will identify the current and future commercial and technological potential of Earth Observation technologies to enable the Blue Economy sector to grow and aims to define the most promising technologies and identify appropriate clusters and business networks to work with in targeted countries.

Earth Observation, through satellites, drones and stratospheric balloons (HAPs, High Altitude Platforms) offers a unique view of our oceans, seas, and coasts.

Several sectors are at the intersection of earth observation and blue economy:

- Using the potential of the Meteocean data for marine safety (marine operations, oil spill drift, ship routing, defence, search & rescue), marine and coastal environment (water quality, pollution, coastal activities), marine resources (for example fish stock management), climate & weather forecasting;
- Design, installation, management and maintenance of wind farms;
- Marine renewable energy facilities, such as current/tidal energy and ocean thermal energy;
- Fisheries management, including the impact of climate change on ocean ecosystems and their fisheries;
- Deployment, operation and maintenance of aquaculture adapted to the environmental and ecological context, including the adaptation of aquaculture to climate change;
- Adaptation of coastal zones to sea-level rise: determination, anticipation and control of hazards (erosion, submersion, siltation of coastal and port areas, etc.), shoreline management;
- Observing systems and operational oceanography capacities;
- Safer maritime transport: ship detection and classification tools to ground-truth satellite images.

The over-arching goal of SpaceWave is to create a joint internationalisation strategy targeting cluster cooperation and SMEs access to global markets for Earth Observation and related services contributing to Blue Growth. This strategy will include an implementation roadmap and support the constitution of a sustainable ESCP (European Strategic Cluster Partnership) between European Aerospace Clusters and Blue Growth clusters.

The high-level objectives of SpaceWave are:

1. To study the international markets for downstream Earth Observation in Blue Growth.
2. To identify European and International stakeholders and analyse the related value chains.
3. To draft an internationalization plan in order to reach Europe's full potential in downstream Earth Observation in Blue Growth.

The SpaceWave partners will then develop an Internationalisation Strategy and an Implementation Roadmap. The project will also identify and contact other European clusters working in Earth Observation and Blue Growth sectors that could be interested in enlarging the SpaceWave community as well as collaborating with SMEs for business deployment.

SPACEWAVE will act as a pilot for the acceleration of Earth Observation for Blue Growth which can be replicated at a larger scale to include other European clusters and their members.

The partners in the Space Wave project are:

