Autonomous Surface Vehicles Network Initiative in support to EOOS

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The Ocean Observing System includes different networks, integrating their data output in data assimilation centres that feeds into the assimilation and forecast systems. A wide range of platforms and systems constitute the current global ocean observing infrastructure, including satellite observations, research vessels, autonomous floats, underwater gliders, fixed-point observatories, sea level stations, high frequency radar and autonomous surface vehicles. Currently the ocean observing system remain largely immature and is composed of a large and diverse set of actors, such as research institutes, governmental agencies and the private sector.

Ocean observing data and derived product-information are required to meet many societal challenges, from food security, to climate change, ecosystem health, or water management. Yet, the European in-situ ocean observing capacity is still fragmented and broadly un-sustained. While the space-borne ocean observations are funded through specific programmes, in-situ observations are supported in the best scenario through numerous short-term projects, with no guarantee of a long-term sustainability.

The European Ocean Observing System (EOOS) is a coordinating framework designed to align and integrate Europe's ocean observing capacity, promote a systematic and collaborative approach to collecting information on the state and variability of our seas, and underpin sustainable management of the marine environment and its resources. An overarching strategy across all measurement platforms is required to ensure that best use is made of limited resources in Member States and at European level. EOOS attempts to link the currently disparate components of the observing system in Europe and promote novel technology and infrastructure development, standardization, open access to data, and capacity building.

Within the framework of EOOS is the EU-funded EuroSea project, with an overall goal about to consolidate a more integrated interdisciplinary ocean observing system able to deliver essential information for the wellbeing, blue growth and sustainable management of the ocean, based on

the implementation and coordination of the different observing networks above-mentioned, being the Autonomous Surface Vehicles (ASV) technology one of the main novelties in terms on network initiative that attempts to engage existing and forthcoming actors from public and private sectors, set and coordinate current and upcoming efforts in order to establish and consolidate a recognized international network under Best Practices standard procedures in support to EOOS strategy.