

## Use of Galileo Advanced Features in Maritime Domain

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**Abstract :** GAMBAS (Galileo Advanced features for the Maritime domain: Breakthrough Applications for Safety and security) is a project funded by the European Space Program Agency (EUSPA) aiming at identifying the search-and-rescue and ship security alert system needs for maritime users (including operators and fishing stakeholders) and developing operational concepts to answer these needs. The general objective of the GAMBAS project is to support the deployment of Galileo exclusive features in the maritime domain in order to improve safety and security at sea, detection of illegal activities and associated surveillance means, resilience to natural and human-induced emergency situations, and develop, integrate, demonstrate, standardize and disseminate these new associated capabilities. The project aims to demonstrate: improvement of the SAR (Search And Rescue) and SSAS (Ship Security Alert System) detection and response to maritime distress through the integration of new features into the beacon for SSAS in terms of cost optimization, user-friendly aspects, integration of Galileo and OS NMA (Open Service Navigation Message Authentication) reception for improved authenticated localization performance and reliability, and at sea triggering capabilities, optimization of the responsiveness of RCCs (Rescue Coordination Centre) towards the distress situations affecting vessels, the adaptation of the MCCs (Mission Control Center) and MEOLUT (Medium Earth Orbit Local User Terminal) to the data distribution of SSAS alerts.

**Keywords :** Galileo new advanced features, maritime, safety, security

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