Objective

This proposal brings forward a passive bistatic radar (PBR) based on Galileo transmissions for maritime surveillance. The exploitation of existing transmissions for PBR applications is becoming increasingly attractive due to their low costs, covert operation, and reduced environmental pollution. Galileo is particularly suited for the proposed task since it comprises a satellite constellation, ensuring that any point on Earth is permanently illuminated by a number of satellites. This feature potentially enables surveillance both in coastal areas and the open sea. In this proposal a ground based receiver is considered for coastal monitoring while the receiver is placed on mobile platforms to assure open sea surveillance. The feasibility of such a system will be evaluated and the required techniques will be studied and developed in order to propose an original and innovative solution to solve a major European problem using European technology.

Field of Science

radar

satellites
Programme(s)
H2020-EU.2.1.6. - INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies – Space

Topic(s)
GALILEO-2-2014 - Small and Medium Enterprise (SME) based EGNSS applications

Call for proposal
H2020-Galileo-2014-1
See other projects for this call

Funding Scheme
IA - Innovation action

Coordinator
ASTER SPA
Address
Via Tiburtina 1166
00156 Roma
Italy
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
EU Contribution
€ 183 750

Website
Contact the organisation

Participants (3)
THE UNIVERSITY OF BIRMINGHAM
Address
Edgbaston
B15 2tt Birmingham
United Kingdom
Activity type
Higher or Secondary Education Establishments
EU Contribution
€ 250 000

Website
Contact the organisation
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<td>ELETTRONICA GMBH</td>
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<td>Am Hambuch 10 53340 Meckenheim</td>
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*Record number: 193820*