

EARTH OBSERVATION SYMPOSIUM (B1)
Earth Observation Applications and Economic Benefits (5)

Author: Dr. Rosario Pavone
SME4SPACE, Belgium, rosario.pavone@sme4space.org

Dr. Silvia Ciccarelli
Italy, silvia.ciccarelli@gmail.com

Mr. Lars Boye Hansen
DHI-GRAS A/S, Denmark, lbh@dhi-gras.com

Mr. Alessio Di Iorio
Alma Sistemi Sas, Italy, adi@alma-sistemi.com

Mr. Manuel Fonseca
Fundação Faculdade de Ciências, Universidade de Lisboa, Portugal, mjf@di.fc.ul.pt

Mr. Marco Fumanti
Codevintec Italiana Srl, Italy, marco.fumanti@codevintec.it

Mr. Dimitrios Ioannidis
Planetek Hellas epe, Greece, ioannidis@planetek.gr

Mr. Marco Romani
NAIS Srl, Italy, marco.romani@nais-solutions.it

Mr. Antonello Salvati
Kell Srl, Italy, asalvati@kell.it

Mr. Elias Spondylis
I.EN.A.E., Greece, ienae@otenet.gr

Mr. Eutimio Tiliacos
ANESTI, United Kingdom, anesti@anesti.co.uk

Prof. Sebastiano Tusa
Regione Siciliana - Soprintendenza del Mare, Italy, sebtusa@archeosicilia.it

EO APPLICATIONS AND ECONOMIC IMPACTS FOR UNDERWATER CULTURAL HERITAGE
(UCH): RESULTS OF THE EU FP7 ITACA (INNOVATION TECHNOLOGIES AND APPLICATIONS
FOR COASTAL ARCHAEOLOGICAL SITES) PROJECT

Abstract

This paper reports the developments carried out within the European Union Seventh Framework Programme (FP7) ITACA (Innovation Technologies and Applications for Coastal Archaeological sites) project, that aims to prove a web-based management system for underwater archaeological sites in coastal regions. It combines the most advanced techniques of high resolution satellite images elaboration, using both radar and optical data, with processing algorithms integrated into the Web GIS. All the technologies are optimized for archaeological uses, thus enabling the provision of a location and monitoring service specifically devoted to underwater archaeological sites in coastal zones.

The paper depicts the main building blocks of ITACA service, that has now arrived to its final phase, from the scientific advances in algorithms and processing software, to the web GIS tool specifically tailored to the archaeologists needs. Furthermore, it reports the new service model and related business plan, more suitable for service delivery via the web.

ITACA involves the contribution of end users, represented by the Hellenic Institute of Marine Archaeology (I.EN.A.E.) and Sicily Region/Soprintendenza del Mare, in order to include their specific needs, as end users, and to demonstrate the service in two test areas, one in Greece and the other in Italy.

EU FP7 ITACA project is coordinated by Planetek Hellas E.P.E. (GR) and includes the following institutes and companies: ALMA Sistemi Sas (IT), ANESTI Ltd (UK), CODEVINTEC Italiana Srl (IT), DHI GRAS (DK), FFCUL (PT), I.EN.A.E. (GR), Kell Srl (IT), NAIS Srl (IT), Regione Sicilia (IT), SME4SPACE (BE). The research leading to these results has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under Grant Agreement n. 606805. ITACA is managed by the Research Executive Agency (REA).