

DELIVERABLES SUMMARY SHEET

Project Number: **IST-1999-10836**
Project Acronym: **SUMARE**
Title: **Survey of Marine Resources**

Deliverable N°: **D0.1**
Due date: **February 2000**
Delivery Date: **February 2, 2000**

Short Description:

The attached project description has been complemented by

- (i) the project Website <http://www.mumm.ac.be/SUMARE/> which has been launched on March 17, 2000**
- (ii) a newsletter published in July 2000 (see copy in annex).**

The publication of the second number of this project newsletter is scheduled for end January 2001.

Partners owning: **Coordination (MUMM)**

Partners contributed: **everybody**

Made available to: **public**

IST Project fact Sheet

Proposal Number : IST-1999-10836 Version : 2

Acronym : SUMARE

Title : SURVEY OF MARINE RESOURCES

Key Action : KA I

Research Area :

Action line : 1.1.2.-1.5.1

ABSTRACT :

The goal of SUMARE is to prove the utility of autonomous sensors for environmental monitoring, i.e. their ability in providing the information requires to guarantee a sustainable exploitation of natural resources. Compared to traditional methods, two main advantages are expected : efficiency (smaller operational costs and fast deployment times) and accuracy (better spatial registration, appropriate sampling rates, guarantee of overall coherency). This implies efficient use of both existing environmental knowledge and of the sensing and navigation abilities of the project groups technology providers, data processing experts and responsables for environment management around two marine applications (volumetric monitoring of sand banks and mapping of living/dead maerl) which will serve as test-beds for the project's results.

OBJECTIVES :

The goal of SUMARE is to prove the utility of autonomous sensors for environmental monitoring, showing their efficiency in providing to the competent authorities the data required to guarantee a safe and sustainable exploitation of natural resources. Besides obvious savings in terms of time and costs associated with the use of oceanographic ships, autonomous sensors offer the possibility of :

- (i) adaptively selecting the regions to be sampled in response to observed data;
- (ii) exploiting the morphological characteristics of the sampled field to improve accuracy and consistency.

The project's workprogram assesses the multi-disciplinary issues underlying these goals : environmental knowledge modeling, data fusion, sensing and guidance. Its results will be tested in two marine applications :

- (i) monitoring of the evolution of sand banks and
- (ii) mapping of living/dead maerl.

MILESTONES

Month	Description
12	Models of a priori Knowledge
18	Adaptive Sampling Strategies
24	Contour tracking
30	AUV final configuration; ROV final configuration
36	Sea trials Assessment of quality and efficiency of mapping and classification missions

Project Data :

Starting date : 01-Jan-2000 *Duration :* 36 months
Total Cost : 2,114,211 EURO EC
Contribution : 1,000,000 EURO

Contact Details

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Project Participants

Principal Contractors	Country	Role
Institut Royal des Sciences Naturelles de Belgique, Unité de Gestion du Modèle Mathématique de la Mer du Nord	B	Co
Heriot-Watt University, International Centre for Island Technology, Department of Civil and Offshore Engineering	UK	CR
Centre National de la Recherche Scientifique – Délégation Côte d’Azur, Laboratoire informatique, signaux et systèmes – I3S – UPRESA 6070	F	CR

Instituto Superior Técnico, Instituto de Sistemas e Robótica	P	CR
Thomson Marconi Sonar SAS	F	CR

Validation sites

- Villefranche-sur-Mer (F)
- Flemish Banks off the Belgian coast (B)
- Maerl beds off the Orkney coast (UK)