

SOFIA

Smart Objects For Intelligent Applications



EXECUTIVE *summary*

SOFIA aims to make 'information' in the physical world available for smart services in embedded and ubiquitous systems. SOFIA will propose an Open Innovation Platform that allows independent development of applications using the 'ubiquitous' data.

CONTRIBUTION *to SRA*

SOFIA will create a cross-domain information access and sharing solution and combine the connectivity and communication capabilities necessary to realise the seamless interoperability between the Ambient Intelligent Environments. The common platform will be used to introduce several applications using and sharing information from different domains - namely mobile, automotive, home, professional portable computers, and surveillance systems. The Open Innovation Platform and the shared information will create a basis for European innovation in Smart Environments that can be deployed on global scale.

MARKET INNOVATION *& impact*

SOFIA will have a fundamental role in creating applications for smart environment by defining a common way to share and access local data. The common and open solutions will enable the introduction of new digital applications, extension of functionality in existing systems and development of cross-domain services for consumer services in cities, houses and private spaces like the car, and for professional users in different areas like in building maintenance or in monitoring of spaces or assets. It is possible to foster innovation while maintaining value of existing legacy systems and investments.

RELEVANCE & CONTRIBUTIONS *to Call 2008 Objectives*

The SOFIA project will test its real use in three different application contexts: personal spaces, smart indoor spaces and smart city. While each of these addresses specific requirements and constraints arising from their environments, all face similar challenges in sharing information. The use of interaction methods and technologies as well

as application development tools for various kinds of platforms sets challenges that need to be solved through common solutions that can be adapted to different industrial sectors.

R&D INNOVATION *and technical excellence*

- > Open Innovation platform (OIP) as a reference platform providing the interoperability levels that enable interaction and data exchange between multivendor devices.
- > Interaction models and embedded devices to support a variety of smart spaces and a variety of users.
- > Move today's device oriented interaction modes to a user goal and result oriented interaction paradigm.
- > Methods, techno-economic structures and toolkits for the deployment of smart environments and for the development of services and applications based on smart environments.
- > Scenarios and use cases to demonstrate the capabilities of the OIP and the proposed interaction models and techno-economic structures in personal spaces, indoor spaces and cities.

PROJECT *partners*

Finland

Nokia

VTT Technical Research Centre of Finland

Meshworks Wireless

Italy

Elsag Datamat

Eurotech

Centro Ricerche FIAT

Consorzio Cooperative Costruzioni

University of Rome La Sapienza

Nextworks

University of Bologna

Switzerland

Ecole Polytechnique Fédérale de Lausanne

Netherlands

Philips Research Laboratories Eindhoven

NXP Semiconductors

Eindhoven University of Technology

Twente Institute for Wireless and Mobile Communications

Conante

Spain

Acciona Infraestructuras

ESI Tecnalia

Indra



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA



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WEBSITE

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START

January 2009

DURATION

36 months

TOTAL INVESTMENT

€36.5 M

PARTICIPATING ORGANISATIONS

19

NUMBER OF COUNTRIES

5