

Future Integral SatCom Initiative

The FIS I project aims at supporting the Integral SatCom Initiative (Technology Platform) in defining a strategic vision on innovation priorities to reinforce the competitiveness of the European SatCom industry and in promoting emerging SatCom architectures in response to EU policy objectives.

Main Objectives

At a glance: FIS I

Future Integral SatCom Initiative

**PROJECT LOGO
UNDER
CONSTRUCTION**

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Duration: September 2010 – August 2012

Funding scheme: CA

Total Cost: € 0.6 m

EC Contribution: € 0.5 m

Contract Number: INFISO-ICT-257118

Involving leading European satellite manufacturers, Research Institutes/Universities, SME, and a Service provider in the SatCom domain, FIS I will serve the interest of all European SatCom industry stakeholders gathered in the ISI technology platform (www.isi-initiative.org) by

- Highlight and promote the **added value of emerging SatCom architectures** in the support of EC grand challenges including broadband for all, security and Future Internet;
- Harmonising the research and innovation priorities for the European SatCom industry sector;
- Promoting an ambitious development program to maintain the technological edge, international competitiveness and market share of the European SatCom industry.

Beyond the SatCom industry, FIS I results will be disseminated the European Commission as well as European and National space agencies to serve as inputs to the industrial policy and R&D work programmes.

Hence FIS I will serve Europe ambition to draw a space policy (see article 189 of Lisbon treaty) by promoting scientific and technical progress, industrial competitiveness.

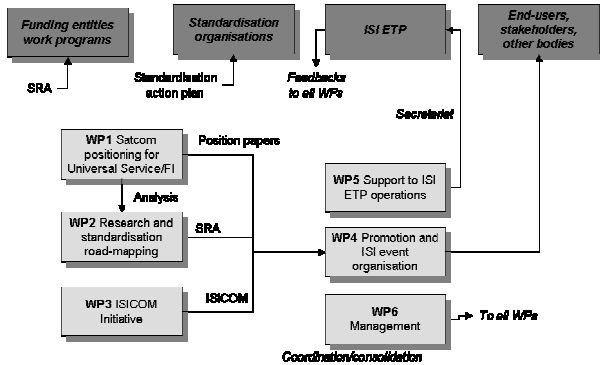
In particular, FIS I will support the European SatCom industry to develop emerging SatCom solutions for global network addressing education and information service provisioning but also security, disaster management and defence applications.

Given that it represents more than 60% of the European Space industry revenues, SatCom is strategic for the sustainability of the whole European satellite industry.

FIS I to pave the way for a reinforced European SatCom industry and hence to the whole European space industry sector

Technical Approach

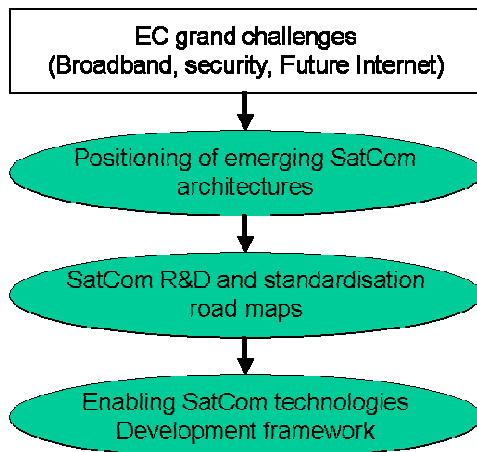
To achieve the defined objectives, the project is structured in 6 work packages each addressing a thematic and following the general logic hereunder illustrated in the figure below.



Key Issues

This support action will handle:

- The positioning of emerging SatCom architectures with respect to selected EC grand challenges such as Broadband for all, Future Internet and Security;
- The definition of consistent SatCom R&D and standardisation road map for the timely development of emerging SatCom solutions;
- The definition of a long term framework program for the development of enabling SatCom technologies.



Expected Impact

FISI will define the development framework for the the European SatCom industry to prepare next

generation SatCom technologies and solutions that will contribute to the Future Internet's objectives¹ providing ubiquitous, secure and resilient communications.

It will contribute to structure research, development and standardization activities as well as solutions and technologies development in a coherent and structured way in order to achieve disruptive performances: Increased Satellite throughput and Service rate capability by an order of magnitude wrt to current state of the art, allowing competitive cost/Mbytes transmitted especially in low density populated areas typically with less than 50 inhabitants/km².

In line with the mandate (EU/M415), it will address the relationship between research and standardization activities in a coherent, harmonized and synergic way, aiming at maximizing the amount of research work serving the implementation of future open and interoperable standards associated to emerging SatCom architectures.

In particular, it will foster the contribution of ISI members to

- "Interoperability and integration of Mobile Satellite Systems (MSS) and Fixed Satellite Systems (FSS) with Next Generation Networks (NGNs)
- Emergency Telecommunication Service for Disaster Management, Integrated Warning System in Disaster Management, Digital added-value maps for disaster monitoring

It will monitor closely the Future Internet development and will identify the related requirements thus ensuring that the SatCom community is well in line with these important developments and allow smooth interoperability.

FISI will contribute to promote and support the development of emerging SatCom architectures to serve EU policy objectives in the context of Future Internet networks and hence will contribute to the uptake of new SatCom solutions.

¹ Cross-ETP Vision Document on Future Internet , Available on-line at the EU Future Internet portal: <http://www.future-internet.eu/publications/papers-reports.html>