





Contract no.: 257118

# FISI Project - contract n°257118 D4.4.2 SatCom event concept – 2nd year

#### **FISI** project executive summary

The FISI 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.

Involving leading European satellite manufacturers, Research Institutes/Universities, SME, and a Service provider in the SatCom domain, FISI will serve the interest of all European SatCom industry stakeholders gathered in the ISI technology platform (www.isi-initiative.org) by highlighting and promoting 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; And promoting an ambitious framework program to maintain the technological edge, international competitiveness and market share of the European SatCom industry.

#### **Abstract**

This deliverable contains the concept of the ISI SatCom events to be organized during the second year of the project. In particular, the 5<sup>th</sup> ISI SatCom Day will be held on April 11, 2012 in Brussels, Belgium. The event concept is discussed in terms of objective, scope, format, invited external stakeholders, as defined by WP4 of the FISI project.

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#### 1 Introduction

This deliverables mainly contains the description of the 5<sup>th</sup> ISI SatCom event (concept and organization) which will be held on April 11, 2012, at Conseil Central de l'Economie (CCE) – Room 1, 17-21, Avenue de la Joyeuse entrée, Brussels. It will be co-located with the 15<sup>th</sup> ISI General Assembly and the "SatCom Research" Workshop which will be held on April 10, 2012.

The ISI SatCom event aims at opening the discussion on topics related to the role of the emerging SatCom architectures in Europe, taking into account R&D activities and their potential mapping onto European standards.

The event will be a one-day meeting and the format will be the *workshop*. In particular, two workshops will be organized:

- 1st Workshop: "SatCom to address the EU Security and emergency Strategy"
- 2<sup>nd</sup> Workshop: "High speed broadband via satellite"

One of the main objectives of the 5<sup>th</sup> ISI SatCom Day will be to select:

- End-users to report about their immediate needs and their speculations about their future needs.
- Solution providers to report about current successful experiences with existing/planned solutions that could meet the users' needs.
- Industries to open up the debate with a perspective in the future with satellite communication initiatives to meet societal challenges: Space policy, Digital Agenda, Security & Defence policy.

In addition to these two Workshops, another ISI Workshop on "SatCom Research" will be organized on April 10 in the same location of the SatCom Day.

In the following, the ISI SatCom event planning and the selected topics to be discussed during the two Workshops are reported along with some details on the "SatCom Research" Workshop.

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#### 2 ISI SatCom event planning

The proposed format of the "5<sup>th</sup> ISI SatCom Day 2012" is the workshop where ISI members and guests are invited to an open discussion in order to define strategies and provide solutions for end-user needs on the topics proposed in this document.

The event will be designed according to the "III" model:

- Informative for the ISI community to understand the context that SatComs has to deal with.
- *Innovation* centric so that the ISI community can prepare itself for the future by detecting the needed evolutions on SatCom and how to facilitate introduction of changes onto the market.
- *Interactive* with open discussions among the panellists and with the audience.

The event is scheduled for April 11, 2012 in Brussels and it will be co-located with the 15<sup>th</sup> ISI General Assembly which will be held on April 10, 2012.

It is worth highlighting that Brussels was selected to host the events as in 2011 in order to raise awareness about the issues SatCom can solve to EC and European Parliament representatives. This choice derives from the successful results and feedback received during the 4<sup>th</sup> ISI SatCom event.

The ISI SatCom event will be a one-day meeting and will be structured in two workshops composed of ISI presentations followed by panel discussion with different stakeholders.

The draft Agenda is reported in the following.

April 11<sup>th</sup>, 09:00 – 17:30

Schedule	Agenda item description
09:00 - 09:30	Welcome to 5 <sup>th</sup> ISI SatCom day + coffee
09:30 – 09:45	1 <sup>st</sup> Workshop "SatCom to address the EU security and emergency Strategy": introduction
09:45 – 10:30	"The European policy context and EU security needs": ISI presentation followed by panel discussion with Institutional stakeholders
10:30 – 11:00	Coffee Break
11:00 – 11:45	"ISICOM architectural and programmatic options": ISI presentation followed by panel discussion
11:45 – 12:30	"A possible ISICOM financing framework for R&D activities and infrastructure deployment": ISI presentation followed by panel discussion
12:30 – 13:00	Wrap-up
13:00 – 14:00	Lunch
14:00 – 14:15	2 <sup>nd</sup> Workshop "High speed broadband via satellite": introduction
14:15 – 15:00	"Current Broadband access service offer via satellite: Positioning with respect to the DA 2020 objective"
	Panel moderated by M. Baudry from IDATE

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15:00 – 15:30	Coffee Break
15:30 – 16:15	"Very high speed Broadband access via satellite: business model challenges"  Panel moderated by A. Gavras from EURESCOM
16:15 – 17:00	"How to make it happen in Europe to fulfil the digital Agenda?"  Panel moderated by M. Yardley from ANALYSYS MASON
17:00 – 17:30	Wrap –up then end of 5 <sup>th</sup> ISI SatCom Day

For each workshop an evaluation form will be circulated among attendees to get feedback on the discussion. An evaluation form for the overall event will be also distributed among all participants to collect comments and suggestions for the organization of next events. Along with paper form distributed at the event, a Web form will be made available after the event to gather further comments and suggestions.

#### 2.1 Target audience

In order to better adjust the later dissemination activities, and the detailed definition of the programme and content of the event, a clear description of the target audience shall be made during this preparatory phase. The event targets:

- Technical experts in the area of satellite communications from the industrial and academic fields.
- Public administration representatives from European and national bodies, with particular focus on rural areas and European Regions under the convergence objective of structural funds.
- Third countries representatives, both as potential technological partners and end users.
- Medium and high positions in the direction of technical and research departments.
- Companies from user sectors such as security, transport, etc.

In particular, the targeted participation is the following:

- ISI members
- End-users
- EC representatives
- Members of the European Parliament
- ESA representatives
- National Space Agencies representatives

# 3 1<sup>st</sup> Workshop: SatCom to address the EU security and emergency strategy

#### 3.1 Workshop Objective

This workshop will constitute an opportunity to discuss with key European Officials of the relevance to provision financial support for the development and deployment of innovative satellite resources.

The workshop shall be informative but allow interaction with the participants and will trigger a decision process among policy makers as well as business stakeholders.

#### 3.2 Workshop Organizers

The following positions are possible candidates for the Panel organization:

- the Leader of the ISICOM Task force
- the Leader of the ISI Markes & SatComs solutions Working Group

The Panel organizer will be in charge of:

- inviting the Panelist;
- identifying the moderator among the invited panelist on the basis of the experience and skills of spur discussion on the Panel topic;
- producing a list of key questions to be addressed by the Moderator to the Panelists;
- producing a list of key questions to be used by selected ISI members in the audience to keep alive the discussion;
- identifying four or five ISI members to be serve as facilitator of the discussion (see previous bullet points).

Following these guidelines, Vincenzo Fogliati (ISICOM TF Leader) and Philippe Boutry (Market & SatCom solutions WG Leader) have been selected as moderators of this Workshop. Nicolas Chuberre (ISI Chairman) will support them in the organization.

#### 3.3 Panel Participants

A panelist will be invited from the following categories:

- European Commission/DG Enterprise (DGs External Action, ECHO, HOME, Enterprise, INFSO)
- European Space Agency
- European Parliament
- European Defence Agency
- End User groups representatives
- Manufacturers
- Service operators and providers
- Public Administrations

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The invited panelists from the above categories will be selected on the basis of their involvement in the security field.

### 3.4 Workshop Agenda

The preliminary Agenda of the Workshop is reported below:

- 09:30: Workshop opening: Key note speech by a representative of European Institutions
- 09:45: 1st Focused presentation: "The European policy context and EU security needs"
- 10:00: 1<sup>st</sup> Panel discussion with questions triggered by a moderator
- **10:30: Coffee break** (30 minutes for networking)
- 11:00: 2<sup>nd</sup> focused presentation: "**ISICOM architectural and programmatic options**"
- 11:15: 2<sup>nd</sup> Panel discussion with questions triggered by a moderator
- 11:45: 3<sup>rd</sup> focused presentation: "A possible ISICOM financing framework for R&D activities and infrastructure deployment"
- 12:00: 3<sup>rd</sup> Panel discussion with questions triggered by a moderator
- 12:30: Wrap-up
- 13:00: End of workshop

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## 4 2<sup>nd</sup> Workshop: High Speed Broadband via Satellite

#### 4.1 Context

The European Commission has set in its Digital Agenda, the objective to bring basic broadband to all Europeans by 2013 and seeks to ensure that, by 2020, (i) all Europeans have access to much higher Internet speeds of above 30 Mbps and (ii) 50% or more of European households subscribe to Internet connections above 100 Mbps. Satellite operators are currently promoting the use of in orbit resources (KaSat, Hylas 1, Astra Ka & Ku) for the 2013 milestones.

The SatCom research community should also promote innovative Satellite network infrastructures based on High Throughput Satellites for 2017 - 2020 timeline with respect to EC financial instruments among which *Horizon* 2020.

The planned ISI Workshop takes part in the definition the above mentioned financial instrument that will be finalised by mid 2012.

#### 4.2 Workshop Organizer

The following position is a possible candidate for the Panel organization:

Leader of the Policy & Promotion Working Group

The Panel organizer will be in charge of:

- inviting the Panelist;
- identifying the moderator among the invited panelist on the basis of the experience and skills of spur discussion on the Panel topic;
- producing a list of key questions to be addressed by the Moderator to the Panelists;
- producing a list of key questions to be used by selected ISI members in the audience to keep alive the discussion;
- identifying four or five ISI members to be serve as facilitator of the discussion (see previous bullet points).

Following these guidelines, Nicolas Chuberre (ISI Chairman and Policy & Promotion WG Leader) has been selected as moderator of this Workshop. Nima Azarmgin (Policy & Promotion WG Vice-Leader) will support him in the organization.

#### 4.3 Workshop Objective

This Workshop will constitute an opportunity to discuss with MEPs and key European Officials of the relevance to provision financial support for an innovative deployment of very high speed broadband access service via a pan European and innovative satellite infrastructure.

The Workshop shall be informative but allow interaction with the participants and should trigger a decision process among policy makers as well as business stakeholders.

#### 4.4 Panel Participants

A panelist will be invited from the following categories:

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- Standardization bodies (ETSI, DVB, IEEE, ITU, etc.)
- Manufacturers
- Service operators and providers
- R&D Institutions
- European Commission
- European Space Agency
- Other ETP representatives

The invited panelists from the above categories will be selected on the basis of their involvement in the satellite market areas.

#### 4.5 Workshop Agenda

The preliminary Agenda of the Workshop is reported below:

- 14:00: Workshop opening: Key note speech from TBD representative of Commissionner Kroes
- 14:15: 1<sup>st</sup> Panel discussion with questions from a moderator
- 15:00: Coffee break (30 minutes for networking)
- 15:30: 2<sup>nd</sup> Panel discussion with questions from a moderator
- 16:15: 3<sup>rd</sup> panel discussion with questions from a moderator
- 17:00: Wrap-up
- 17:30: End of workshop

# 4.5.1 1<sup>st</sup> Panel discussion: "Current Broadband access service offer via satellite: Positioning with respect to the DA 2020 objective?"

**Moderator:** M. Baudry from IDATE (m.baudry@idate.org)

Participants: Internet Service providers via satellite, satellite manufacturers, research centres.

**Panel objective:** to understand the market acceptance of the current satellite offer and its capability and to identify the gaps associated to the current Satellite BB service offer with respect to the Digital Agenda 2020 Objectives.

# 4.5.2 2<sup>nd</sup> Panel discussion: "Very high speed Broadband access via satellite: business model challenges"

**Moderator:** Anastasius Gavras from Eurescom (gavras@eurescom.eu)

**Participants:** TBD

Satellite operators: Graham Peters (head of Avanti communication consulting services), Patrick Biewer

(Head of SES Broadband services)

**Telecom operators:** jose.guerraexposito@telefonica.com

**ISPs:** TBD

**Panel objective:** the operators' views on the economical aspects associated to the service deployment of Very high speed Broadband access via satellite and about the impact of integration with terrestrial networks.

#### 4.5.3 3<sup>rd</sup> Panel discussion: "How to make it happen in Europe to fulfil the digital Agenda?"

Moderator: M. Yardley from Analysys Mason (matt.yardley@analysysmason.com)

**Participants:** DG Infso (P. Jauhiainen), DG Entreprise (?), ESA (E. Rammos ?), European Investment Bank, Members of European Parliament, Kangaroo representative, European Council (Michael Praet).

**Panel objective:** the views of institutions and politics on the possible support to the service deployment of Very high speed Broadband access via satellite.

#### **4.6** Workshop Demonstrations

Look and feel BB access demo will be organised in parallel to the Workshop:

- Gilat/SES already volunteered but need to check its feasibility.
- Newtec is interested but need to check its feasibility.

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#### 5 "SatCom Research" Workshop

In addition to the two Workshops organized on the occasion of the 5<sup>th</sup> ISI SatCom Day, another ISI Workshop on prioritization of SatCom Research areas and topics will be organized on April 10, 2012, after the 15<sup>th</sup> ISI General Assembly. This workshop will be open only to the ISI Membership and observers.

#### 5.1 Workshop objective

In the framework of the EU Framework Programme for Research and Innovation, Horizon 2020, it is crucial to identify research priorities for SatCom community.

This workshop will aim at identifying SatCom research priorities for the Horizon 2020 on the basis of the prioritization of SatCom R&D topics from the ISI Strategic Research and Innovation Agenda (SRIA).

#### 5.2 Workshop Organizer

The following position is a possible candidate for the Panel organization:

• Leader of the R&D Working Group

The Panel organizer will be in charge of:

- inviting the Panelist;
- identifying the moderator among the invited panelist on the basis of the experience and skills of spur discussion on the Panel topic;
- producing a list of key questions to be addressed by the Moderator to the Panelists;
- producing a list of key questions to be used by selected ISI members in the audience to keep alive the discussion;
- identifying four or five ISI members to be serve as facilitator of the discussion (see previous bullet points).

Following these guidelines, Sandro Scalise and Alessandro Vanelli-Coralli (R&D WG Leaders) have been selected as moderators of this Workshop. TNO volunteers to support them in the organization.

#### 5.3 Workshop organization

To reach the objectives of the Workshop, a Survey on the ISI SRIA topics prioritization has been submitted to the ISI Membership to gather feedback on the perceived level of importance they give to the different proposed SatCom areas and R&D topics.

The results of this Survey will be discussed during the Workshop and then reported in the deliverable D4.5.2 "SatCom event report- 2<sup>nd</sup> year".

The details of the Survey are reported in the Annex A to this document.

#### 5.4 Workshop Agenda

The preliminary Agenda of the Workshop is reported below:

- 14:00: Workshop opening: Opening presentation from ISI chairman
- 14:15: Short Short Presentations of the panellists: TNO, ESA, and industrial representatives

- 15:15: Coffee break (30 minutes for networking)
- 15:45: Panel discussion: R&D SatCom topics prioritization
- 17:15: Wrap-up
- 17:30: End of workshop: Closure by ISI chairman

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#### **6** Conclusions

This deliverable describes the ISI SatCom events which will be organized during the second year of the project, in terms of objective, scope, format, invited external stakeholders, as defined by WP4 of the FISI project.

In particular, details related to the organization of the two Workshops on "Security" and "Broadband Satellite" in occasion of the 5<sup>th</sup> ISI SatCom Day are reported along with some information related to the ISI Workshop on "SatCom Research".

ISI Governance is putting much effort in the organization of such events and in making them more attractive with respect to the previous editions in order to increase the participation of ISI and non ISI members, people from other ICT sectors, and end-users which could benefit from using SatCom technologies.

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### 7 Annex A – Survey on SRIA topics prioritization

The survey on SRIA topics prioritization aims at sifting through the ISI SRIA topics and collecting feedback on the level of importance perceived by ISI Membership on each SatCom Area and related topics.

The survey is available at the following link: <a href="http://www.isi-initiative.org/sria">http://www.isi-initiative.org/sria</a>

In particular, the results will be used during the "SatCom Research Workshop", co-located with the 15<sup>th</sup> ISI General Assembly, which will be held in Brussels, Belgium, on April 10, 2012.

The Survey was organized in the following 3 sections structured as multiple choice questions or open questions.

#### 1) Personal information

- Name
- Family name
- Organization
- E-mail

#### 2) SatCom Research and Innovation Areas & related R&D Topics

Please express your perceived level of importance of each area.

• Space segment: High-Throughput, Flexibility and Reconfigurability (No importance, Slightly, Moderately, Very, Extremely)

Select your priority for each topic (Low, Moderate, High, Very High)

- Markets and Resources
- Capacity and Throughput
- Flexibility and Reconfiguration
- Interference and Management
- **Ground Infrastructure: Distributed Processing** (No importance, Slightly, Moderately, Very, Extremely)

Select your priority for each topic (Low, Moderate, High, Very High)

- High capacity feeder links
- Multigateway architectures for distributed processing of feeder links signals
- Distributed radio resource management algorithms for fully meshed networks
- Advanced Interference management and cancellation techniques

• Radio Interfaces Efficiency and Robustness (No importance, Slightly, Moderately, Very, Extremely)

Select your priority for each topic (Low, Moderate, High, Very High)

- Cognitive radio
- Cooperative techniques
- Multi beam/feed transmission techniques
- Interference management techniques
- Waveform design
- Fading and channel impairments countermeasures
- Channel modelling
- Flexible radio interfaces for QoS
- **Networking Integration and Convergence** (No importance, Slightly, Moderately, Very, Extremely)

Select your priority for each topic (Low, Moderate, High, Very High)

- Network management harmonisation between satellite and terrestrial networks
- Adaptive middleware to cope with new approaches e.g., dynamic spectrum management and cooperative techniques
- De-centralised radio resource management algorithms
- Flexible resource management among different radio interfaces
- Vertical handover techniques between terrestrial and satellite interfaces
- SatCom Role in Future Internet
- Terminals: User-Friendliness and Reconfigurability (No importance, Slightly, Moderately, Very, Extremely)

Select your priority for each topic (Low, Moderate, High, Very High)

- Consumer and Professional Handheld
- Collective Mobile Broadband and Broadcast
- Fixed Broadband and Broadcast
- M2M and SCADA

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• Services and applications: Ubiquity and Dependability (No importance, Slightly, Moderately, Very, Extremely)

Select your priority for each topic (Low, Moderate, High, Very High)

- Ubiquitous Broadband Access
- Emergency Bidirectional Communications and Backhauling
- Ubiquitous Messaging Services (SMS over Satellite, M2M, SCADA, Smart Infrast.)
- Enhanced Broadcast Experience
- 3) Which specific R&D topics would you like to be discussed in the "SatCom Research" Workshop, co-located with the 15<sup>th</sup> ISI General Assembly on April 10, 2012?

The "SatCom Research" Workshop will be co-located with the 15th ISI General Assembly on April 10, 2012.

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### **Appendix: FISI internal document control**

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