



2nd European SatCom Day

“Key messages defining SatCom priorities”

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Report

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1. Introduction

The ISI (Integral SatCom Initiative) European Technology Platform, in cooperation with the European Commission, organized the second European SatCom Day on April 24th, 2009 in Rome. The objective of this event was to bring together representatives from Institutions, Industries, Research Centers, User Communities and Academia in order to deal with the fundamental aspects which will drive the future evolution of European Satellite Communications.

The Satellite Communication Consultation Event was intensively supported by a wide number of participants and contributors representing European and Members States Institutions together with the main stakeholders of the Satellite Communication domain.

The structure of the event was divided into the following main sections addressing the most relevant SatCom issues for European industry and citizens:

Main key-note speakers:

- **Mr. Joao da Silva** – Director “Converged Networks and Services” European Commission, who presented a speech on “The European Commission policy on Communications Networks and Services. The initiatives for the ‘Internet of the Future’”
- **Mr. Jose Maria Casas** – Senior Advisor to the Director of Telecommunications and Integrated Applications – ESA. He presented “The ESA Programmes for the development of European Satellite Communications”
- **Mr. Vincenzo Fogliati** – ISI Chairman. His speech focused on “The ISI proposals and contributions to meet emerging European Citizens needs. The ISICOM initiative”

Thematic Sessions:

- Thematic Session 1: “The satellite communications systems capabilities and contributions to the Future Internet and Broadband Communications “How the different EU operators intend to meet the “Internet for All” objective?”.
- Thematic Session 2: “Complementarity and integration of mobile satellite communications with wireless terrestrial systems. The development of integrated networks to the benefit of European citizens”
- Thematic Session 3: “Broadband communications networks and global Internet availability to be assured both during normal life and during emergencies and disasters: the importance of the “security and safety dimension”.
- Thematic Session 4: “Regulatory, frequency, market and legislative barriers to economic developments within ICT domain: possible measures to solve critical issues”

1.1 *The ISI European Technology Platform*

ISI is the European Technology Platform on Satellite Communications, whose membership embraces all relevant and interested private and public stakeholders from Satellite Communications and Space sectors.

The ISI European Technology Platform activities deal with and address together, for the first time in a unified, industry-led body, all research, technology and innovation aspects related to satellite communications, including mobile, broadband, and broadcasting applications.

ISI objective is to foster and develop the entire industrial SatCom sector, maximize the value of European research and technology developments in the SatCom domain and contribute to European Union (EU) and European Space Agency (ESA) policies.

During the last three years, ISI has defined and updated the Strategic Research Agenda for SatCom, working continuously for the development of the SatCom sector in Europe, promoting strategic development initiatives, stimulating R&D efforts and addressing the main challenges that Europe SatCom sector is facing.

Activities within ISI are internally organized into the following Working Groups:

- R&D Working Group
- Users Working Group
- Regulatory Working Group
- Security Working Group
- Future Internet Working Group

ISI has defined and is currently developing the “ISICOM” (Integrated Space Infrastructure for global Communications) initiative. ISICOM is the ISI proposal for an advanced European Satellite Communication System fully integrated with the Global Communication Networks of the Future and able to complement Galileo and GMES by adding important value and functionalities.

Furthermore, ISI has contributed to the European activities on the Future Internet, starting from the endorsing of the “Bled Declaration: Towards a European approach to the future Internet”, also elaborating documents and position papers highlighting the role of Satellite Communications within the Future Internet domain.

The ISI reference and working documents are publicly available on the [ISI Website](#). These include among others the following:

- ISI Vision document.
- ISI Strategic Research Agenda.
- ISICOM overview.
- ISI Position Paper on Future Internet.

2. Keynote Speeches

On behalf of the European Commission, Mr. Joao da Silva illustrated what's going on at EU level on Future Internet, also presenting a wide picture about FI size and future evolution main triggers (e.g. access bit rates increase, video and mobile applications and security aspects). Mr. da Silva also asked SatCom actors to have a high innovation profile, properly defining the SatCom role and contributions to the Future Internet. He encouraged ISI members to be proactive, and to assume the important role that SatCom industry should have, anticipating the work and participating actively in European initiatives such as the Future Internet discussions, where SatCom should play a fundamental role.

On behalf of the European Space Agency, Mr. Jose Maria Casas showed during his intervention the extraordinary importance that telecommunications satellites have for the European Space Industry, although considering certain threats that shall be properly considered and faced. Mr Casas presented some of the key issues that should be considered and the European Space Agency Telecommunications Long Term Plan as main ESA tool to promote innovative initiatives among European SatCom sector players as the most effective mean to fight those threats and issues.

On behalf of the ISI European technology Platform, Mr. Vincenzo Fogliati presented the main priorities of the ISI Vision, including the support to the SatCom role and contribution to the Future Internet, the definition and development of the ISICOM initiative and the R&D activities based on the ISI Strategic Research Agenda. A specific focus on ISICOM was then made, presenting the main elements of the first ISICOM Overviews Report, presented during the last ISI General Assembly and available in the ISI Web Site

3. Thematic Sessions – 13 key messages defining SatCom key priorities

3.1 Thematic Session 1: "The satellite communications systems capabilities and contributions to the Future Internet and Broadband Communications "How the different EU operators intend to meet the "Internet for All" objective"?"

1. Aarti Holla-Maini (ESOA):

"A million extra businesses or households in rural areas can connect to broadband via satellite by the end of 2010 using only half of the EU's broadband package allocation."

2. Christine Leurquin (ASTRA):

"Only Satellite can provide the coverage to bridge the digital divide, now and in the future. Satellite provides an immediate solution to digital divide, with less capital investments, guaranteeing equalitarian access to all European citizens. Demand aggregation and public support are key aspects to take into consideration."

3. Nicolas Chuberre (Thales Alenia Space):

"Still 10% of population (5-10 millions of households) remain unserved distributed over

50% of territory. Ka band SatComs can efficiently contribute to solve digital divide and support disaster management in Europe.”

4. Roberto Cusani (University of Rome “La Sapienza”):

“The satellite system must be part of the Cognitive Framework for Future Internet, participating in its “thinking core” and not being slave of terrestrial network decisions.”

5. Ilias Andrikopoulos (Space Hellas):

“Satellite Communications are well positioned to offer technologically feasible, economically viable and socially useful solutions.”

3.2 Thematic Session 2: *“Complementarity and integration of mobile satellite communications with wireless terrestrial systems. The development of integrated networks to the benefit of European citizens”*

6. Matilde Parraga (DLR):

“The potentialities of S-Band Mobile Satellite Services in the field of emergency communications are tremendous. An overlying alerting system that is capable of using several communications standards for fixed/mobile and terrestrial/satellite networks can reach a significant part of the population.”

7. Sandro Scalise (DLR):

“A Satellite component is essential for ubiquitous and dependable mobile services, and European industry is well positioned in this sector, but it is extremely important to invest in all necessary innovations to ensure that European industry will continue at the forefront of R&D in the area of hybrid satellite/terrestrial networks.”

3.3 Thematic Session 3: *“Broadband communications networks and global Internet availability to be assured both during normal life and during emergencies and disasters: the importance of the “security and safety dimension”.*

8. Antonio Saitto (Telespazio):

“Satellite networks are entering in a new strategic vision based on full IP networks and network centric approach, which are ease interoperable with terrestrial ones and allow implementing solutions to digital divide and safety applications.”

9. Francois Millon (EADS Astrium):

“Satellite Communications will be a key component of future GMES architecture allowing faster and optimised data collection to enhance reactivity of GMES service providers, providing better service quality for the benefits of end-users.”

10. Diego Gimenez (Isdefe):

“Satellite Communications networks must take part as fully seamless integrated element

within Next Generation Public Networks (NGPN), emphasizing its role in emergency scenarios, providing worldwide coverage, best availability and connectivity and a quicker development.”

11. Enrico del Re (University of Florence and CNIT):

“Satellite-assisted localization and communications systems for emergency services, based on integrated Navigation/communication systems is a robust reliable, flexible and deployable way of providing assistance and support in emergency situations”

3.4 Thematic Session 4: *“Regulatory, frequency, market and legislative barriers to economic developments within ICT domain: possible measures to solve critical issues”* :

12. Antonio Alfaro (Rose Vision):

“Given the main characteristics of Satellite Communications, it is extremely important for a successful development of the global communications network of the future to guarantee a stable and harmonized regulatory framework, as well as open standards and international coordination”

13. Aarti Holla-Maini (ESOA):

“Considering coverage capabilities of Satellite Communications, it is of the utmost importance to take into account ITU recommendations, and ECC decisions since international coordination of spectrum usage is an essential aspect for Satellite Communications”

4. Conclusive Remarks

The European SatCom Day concluded its work and discussions through some conclusive remarks made by Mr. Joao da Silva and Mr. Vincenzo Fogliati.

Mr. Joao da Silva made his conclusive remarks focusing on these aspects:

- Referring to one of the presentation made, observed that the best approach for the SatCom community to adopt in the regulatory bodies like ITU is to be proactive, anticipating the work and initiatives of others and not limiting to act with some delay, after actions performed by others, (trying only to “contrast” their activities). (Note: is there here a stronger role for ISI to play in the future?)
- About ISICOM, he said that one aspect which is to be appreciated is the “System” approach followed while defining the ISICOM concept: the “System” approach avoids a “partial and fragmented” approach seeing only single small elements of the global system. In addition also the “Innovation oriented characteristic” of ISICOM is important, ISICOM being not only constituted by technologies already fully or partially developed but implying an R&D&Innovation vision, able to enhance European competitiveness in the space sector on a global scale.

- About the “technological neutrality” concept, he commented saying that certainly a too “dogmatic and abstract” approach should be avoided, since a right concept should be to consider a technological neutrality vision inserted within a wide and coherent industrial development policy.

Mr. Vincenzo Fogliati made his conclusive remarks focusing on these aspects:

- Welcomed and highly appreciated the comments made by Joao da Silva on ISICOM, underling the importance of its “System oriented and highly innovative characteristics”, as a way also to fill-in some existing European technological gaps with respect to other very advanced Countries and having the possibility to produce a favourable impact in terms of innovative services and applications development;
- Observed that during the SatCom Day, a coherent “Red Line” was followed, as a common denominator of the various interventions, which finally succeeded in showing the substantial technological, social and economic reasons justifying the important role to be played by the SatCom technologies and services both for the increase of the percentage of population able to access Internet broadband services worldwide and for the considerable enhancement of the capabilities to face security and emergency threats.
- Finally underlined the fact that the SatCom Day interventions were based on the assumption that only a hybrid approach, complementing terrestrial and satellite communications networks, is able to meet the complex user requirements, also considering that an important commonality between terrestrial and satellite technologies is the convergence towards a Future Internet centric vision.

During the European SatCom day it was shown that there is a need and a social requirement for Satellite Communications, as highlighted by all the stakeholders during the event, both in order to solve digital divide problems in Europe, and in the field of emergency communications..

The concept of ISICOM, understood as a comprehensive systemic approach towards the definition of the future SatComs network and its role within the Future Internet networks, as well as a number of associated research challenges for the SatCom community have been widely endorsed at the occasion of this event.

The Event participants agreed that the importance of SatCom in the future communications networks must be considered, not only as a temporary complement but as a fully integrated part of the future integrated communications networks.

Finally, appreciation was expressed by the participants to University of Rome Sapienza for the hosting of the European SatCom Day.

5. Annex I: Agenda



SATELLITE COMMUNICATIONS DAY

Organised by the ISI European Technology Platform,
in cooperation with the European Commission

Date: April, 24th, 2009.
Venue: ROME (“Sapienza” University,
Faculty of Engineering - Via Eudossiana, 18)

Web Registration: <http://www.isi-initiative.org>

Agenda	
09h30-10h00	Registration
10h00-10h15	Welcome (University of Rome “Sapienza”, ISI)
10h15-11h15	<p>Keynote Speeches</p> <p>“The European Commission policy on Communications Networks and Services. The initiatives for the “Internet of the Future” Joao Da Silva – Director “Converged Networks and Services” European Commission</p> <p>“The ESA Programmes for the development of European Satellite Communications” Jose Maria Casas – Senior Advisor to the Director of Telecommunications and Integrated Applications – European Space Agency</p> <p>“The ISI proposals and contributions to meet emerging European Citizens needs. The ISICOM initiative” Vincenzo Fogliati – ISI Chairman</p>
11h15-11h45	Coffee Break
11h45-13h00 Thematic Session 1	<p>Thematic Working Sessions - Part 1</p> <p>“The satellite communications systems capabilities and contributions to the Future Internet and Broadband Communications. How the different EU operators and service providers intend to meet the “Internet for All” objective” Presentations by A. Holla (ESOA), C. Leurquin (SES-ASTRA), N. Chuberre (Thales Alenia Space), R. Cusani (“Sapienza” University), I. Mertzanis (Space Hellas), Maria Jose Sedo (Atos Origin),</p>



13h00-13h30 Thematic Session 2	<p>“Complementarity and integration of mobile satellite communications with wireless terrestrial systems. The development of integrated networks to the benefit of European citizens” <i>Session coordinator: Sandro Scalise (DLR)</i></p>
13h30-14h30	Lunch Break
<i>Thematic Working Sessions – Part 2</i>	
14h30-15h45 Thematic Session 3	<p>“Broadband communications networks and global Internet availability to be assured both during normal life and during emergencies and disasters: the importance of the security and safety dimension”. <i>Presentations from A. Saitto (Telespazio), M. Piccinni (Thales Alenia Space), F. Millon (EADS Astrium), D. Gimenez (Isdefe), E. Del Re (University of Florence/CNIT).</i></p>
15h45-16h00	<i>Coffee Break</i>
16h00-16h30 Thematic Session 4	<p>“Regulatory, frequency, market and legislative barriers to economic developments within ICT domain: possible measures to solve critical issues”. <i>Session coordinators: Julian Sesena / A. Alfaro (Rose Vision).</i></p>
<i>Conclusive Sessions</i>	
16h30-17h10	<p>“Summary of main aspects from Thematic Sessions; Open floor Debate & Questions and Answers session”. <u>Main debate issue:</u> “The emerging needs versus responses that Satellite Communications can offer to provide technologically feasible, economically viable and socially useful solutions. Possible means to move forward”</p>
17h10-17:30	<p>Concluding Remarks <i>(Joao Da Silva, Vincenzo Fogliati)</i></p>

6. Annex II: References to presentations and other relevant documents

Second European SatCom day – Presentations ([link](#))