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# BRASIL-

Broadband to Rural America over Satellite Integrated Links

IST Summit Workshop 2007

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# BRASIL

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Broadband to Rural America over Satellite Integrated Links  
EU FP6 SSA Contract no.: 045546





- BRASIL project introduction
  - Motivation, Purpose and goals
- Partners and Workplan
- Status of Project
- Visions



- Latin America needs improved broadband connection for several applications
  - Brazil is a representative country for the region
- Positive attitude to European partnerships and technology
  - Europe has relevant technology and solutions
    - Open DVB broadband satellite solutions
- BRASIL partners have strong interest in sharing open technology.
  - Involved in activities related to standards and regulatory matters
    - ETSI, DVB, ESA, EU, ISI etc.



- Support increased and sustainable relationship between Latin America and Europe in the field of DVB-RCS broadband satellite communication.
  
- Key Tasks:
  - Investigate needs for, and impact of satellite technologies in bridging the digital divide
  - Support networking, exchange of information through workshops and symposia
  - Identify relevant topics for future joint research and potentialities for deeper strategic cooperation
  - Establish privileged partnerships for the joint development of DVB / satellite technologies, applications and services.

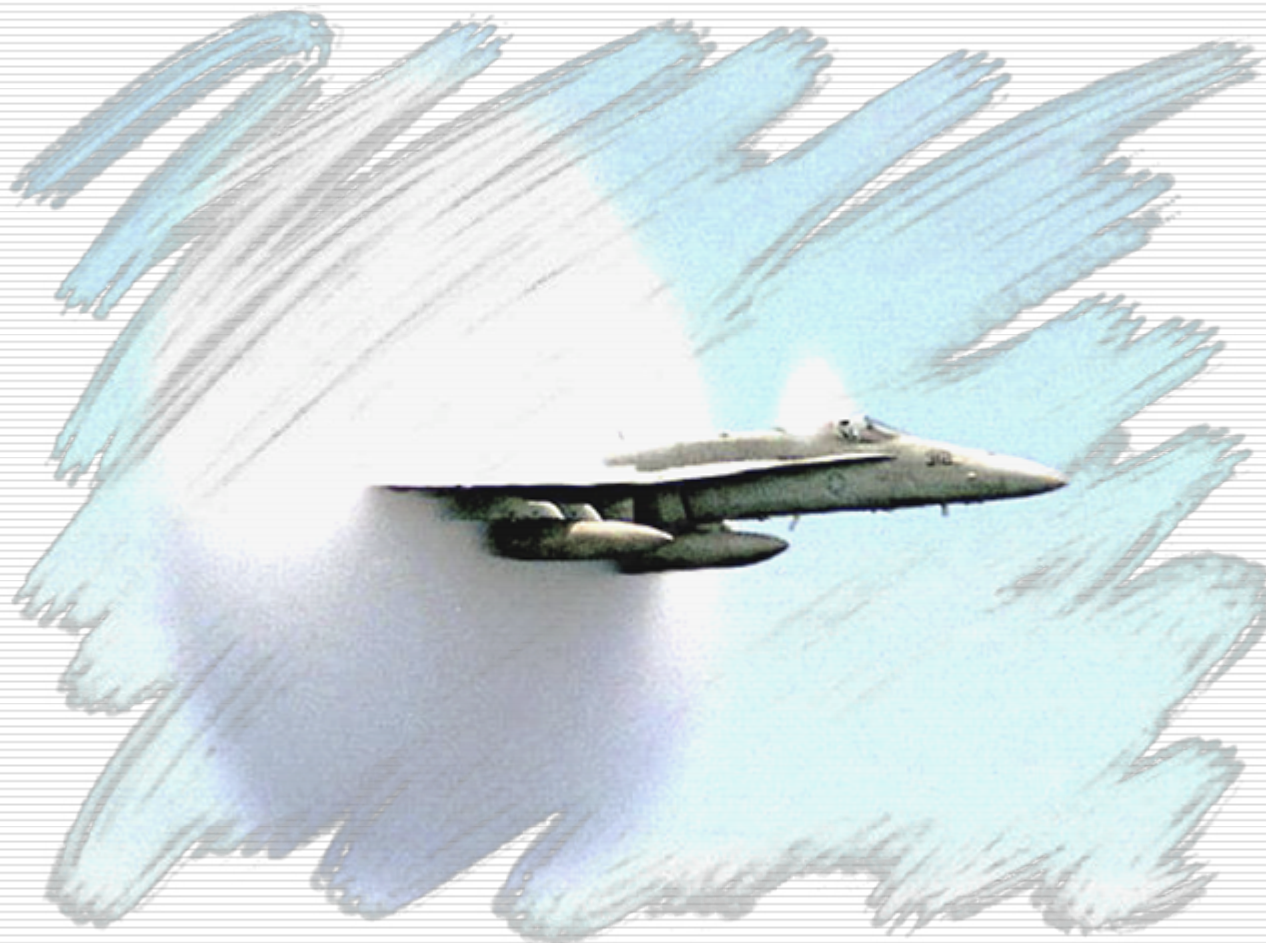


- Target region Latin America, spec. Brazil.
  - Significant potential for European technology
- SME cooperation between Europe and Latin-America an important element of deeper strategic cooperation
  - Europe's satellite market driven by SMEs.
  - Small networks with technical and service expertise in DVB-RCS across the two continents.
- Advanced applications will be supported by proactive SME cooperation.
  - Exploiting recent DVB-RCS development



- DVB-RCS the only open broadband satellite standard with multiple vendors
- LA/Brazil can contribute to solutions
  - And even benefit from funding (FP7)
  - LA can be more than “technology consumer”
  - Brazil and LA can more actively influence
- BRASIL aims to develop a joint satcom / telecom research between Europe and LA



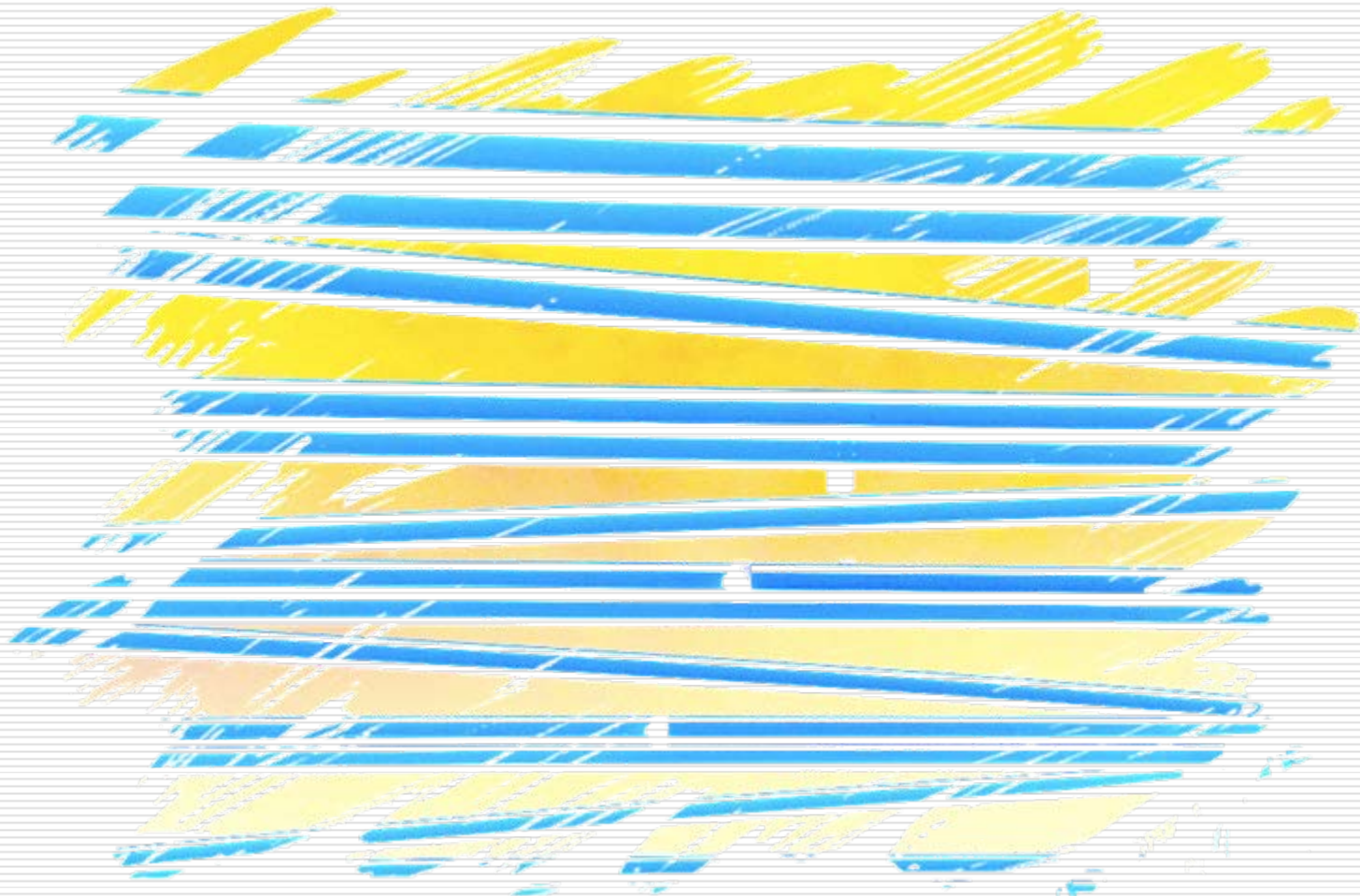


- Partners with large networks and demonstrated interest in the satellite community
- 5 partners from Europe and 2 partners from Brazil.
  - Chairman of the DVB-RCS group
  - Chairman of the Advanced Satellite Mobile System Task Force (ASMS-TF)
  - Chairman of Integral Satellite Initiative (ISI)
  - Ex Satellite Network Of Excellence (SatNEx) chair
  - Previous chair of ETSITCSES
  - Founder and previous chair of ETSI WG BSM
  - FUTURECOM Organizer, main LA Telecom event
  - DVB GS ad hoc group chair
  - Brazil representative of Global VSAT Forum (GVF)



- AnsuR (N) (coordinator)
- DLR (D)
- TriaGnoSys (D)
- University of Bologna (I)
- Unisat (BR)
- Provisuale (BR)
- Norintec (N)





- For supporting DVB-technologies in Latin America and building a framework for deeper strategic cooperation :
  - BRASIL will organize satellite symposiums focusing on DVB-RCS.
  - Specifically FUTURECOM in Brazil
    - Also other locations TBD



- Latin America market survey
  - Potential for hybrid satellite network technologies and services
    - DVB-RCS, BGAN, GSM and UMTS.
      - Aim to identify new satellite services
    - Joint SMEs in Europe and Latin America.
- LA in Integral Satellite Initiative (ISI)
  - Input to EU on satellite policies
  - Support for FP7 applications



- SME network Latin-America/Europe.
  - Assistance for other SMEs in satcom
- R&D topics for future joint projects
  - Prepare for joint FP7 proposals.
- Disseminate DVB-RCS information
  - Brochures and white papers.
- Explore airplane industry of Brazil
  - GSM over satellite systems.



- Interaction between BRASIL and SatNex.
  - Enable LA to interact with European research.
- Link to organizations relating to satellite
  - ESA, SatLabs, GVF, EU, ETSI and DVB-RCS
- Workshops and meetings on smaller scale
  - Prepare for the targeted actions.
- Publish technical and popular satellite communication papers
  - Main focus on DVB-RCS.



- Trials focus on combining Radio and Satellite into multi-user networks.
  - “Satellite Integrated Links”
- Demos focus on applications of DVB-RCS
  - As a unique satellite communications solution
  - With e.g. GSM, Wi-Fi / WiMAX access
- Applications for development of rural communities
  - eEducation, eMedicine, eGovernment etc.
    - Selection of applications is part of the work



- WP's identify relevant applications
  - Demonstrations may spark other ideas
  
- BRASIL aims to provide an environment to demonstrate applications
  
- Hispamar is offering services on the regenerative DVB-RCS payload Amerhis on the Amazonas satellite.
  
- Goal to trial in some rural communities.









- Getting the project.....
  - Idea to proposal, winning, negotiations, KO
- Collaboration with e-Brasil
- Collaboration with ESA
- Identification of applications
- Preparing market surveys
- Deployment plans for e-health DVB-RCS
- DVB-RCS support at Futurecom
- Advisory Board support
  - Connection Spain, Portugal, Brazil, Ecuador...



- Kick Off Q1/2007, lasting 36 months
  - First meeting in Rio de Janeiro March 6-7 2007
- Main focus of 2007 is identification of key applications and solutions
  - Building partnerships and preparing progress
  - e-Brasil, ESA, tele-medicine, e-education
  - How to maximize benefits
- Main event 2007 planned during Futurecom 2007 in Brazil, October 2007.



- Connect Europe (Spain, Portugal) and LA (Brazil, others)
  - Connect schools, exchange e-culture and “e-roots”...
- Connect satcom education/research
- Apply Amazonas/Amerhis
- Apply, support and co-develop DVB-RCS







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# THANK YOU!

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- Key objective:
  - Future technical benefits for society
  - Sustainable LA-European relationships
- University and academia
  - Future R&D activities
    - LA link to SatNE<sub>x</sub> and standardization activities
- Industry
  - Today's available technology and applications
  - Survey, benchmark systems, QoS measures
  - LA link to ISI
- SME
  - LA link to ISI,
  - Europeans SME organizations in satellite
  - Near-term future technology

