



# CONNECT

ESA Telecommunications Newsletter

## **Workplans for 2005 available**

The new ARTES-1 and ARTES-5 activities have been selected based on the "ARTES Call for Ideas 2004", recommendations for follow-up studies resulting from completed ARTES-1 activities during the 2003/2004 period, and internal Executive inputs. The workplans for 2005 that are in place are in line with the objectives of the Telecommunications Long-Term Plan and can now be found online at:

<http://telecom.esa.int/workplan2005/artes1> and <http://telecom.esa.int/workplan2005/artes5>

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## **SatLabs Interoperability Qualification Programme: A milestone for DVB-RCS**

The SatLabs Group has launched its Qualification Programme. This event marks an important milestone in the implementation of interoperability testing and certification for the DVB-RCS standard.

The SatLabs Group is an international, not-for-profit association whose members are service providers, satellite operators, system, equipment and technology manufacturers interested in promoting two-way satellite networks based on the DVB-RCS open standard. Under the leadership of ESA Telecom, the main goal of SatLabs is to achieve interoperability between DVB-RCS terminals and networks.

Interoperability is a key factor in ensuring that all the benefits of an open standard are accomplished, namely providing a choice of suppliers to users and service providers, competition between suppliers, and the development of economies of scale in the production of equipment.

The SatLabs Qualification Programme was defined to achieve DVB-RCS interoperability testing and certification. The major part of the Programme is an exhaustive testing using a testbed that was specially developed for the needs of DVB-RCS interoperability testing. In qualification testing, a terminal must demonstrate its ability to pass about 100 tests contained in the SatLabs Compliance/Interoperability Test Plan. Terminals passing all of the tests will be granted a SatLabs certificate and will be allowed to carry the SatLabs Mark.

The SatLabs testbed, developed under an ESA contract, successfully passed a thorough validation campaign, before being transferred to CETECOM, the test laboratory selected by the SatLabs Group to carry out independent testing of DVB-RCS terminals.

After a short start-up phase aimed at checking out every detail of the Qualification Programme in its target environment, the laboratory is expected to start interoperability test operations in spring 2005.

For more information about the SatLabs Qualification Programme and the procedure for enrolling, please visit [www.satlabs.org](http://www.satlabs.org), where a list of certified products will also be posted in due course.

For further information about ESA Telecommunications visit our website at:

<http://telecom.esa.int>

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## **AmerHis Successfully Completes Ground- Segment Tests**

Ground-segment tests for the AmerHis 'Switchboard in Space' were successfully completed at separate locations in Spain on 4 February 2005. They mark the first combined use of in-orbit and ground-segment equipment.

This latest news follows the announcement last December of successful in-orbit testing. These series of tests have confirmed the AmerHis payload's capability to deliver multimedia content across Latin America and beyond. Pilot operations are scheduled to begin soon, with the intention of providing pre-operational services in the first half of 2005.

Launched aboard Hispasat's Amazonas satellite on 5 August 2004 and now located in geostationary orbit at 61 degrees West, AmerHis heralds a new era in satellite communications. As the first European telecommunications satellite with onboard processing, AmerHis will enable Hispasat to provide high-performance interactive multimedia services to North America, South America and Europe.

The ambitious project is the product of a collaboration between Alcatel Espacio, Mier Comunicaciones, Indra Espacio, Alcatel Space, EMS Technology and Nera ASA. It is funded by the European Space Agency (ESA) and supported by the Spanish Centre of the Industrial and Technological Development (CDTI).

For more information, please visit: <http://telecom.esa.int/amerhis>



*Video-conferencing via AmerHis*

Image: Alcatel Espacio

# NECT

*"The European Space Agency (ESA) inspires the vision for Europe's future in space and, through a diverse range of projects, develops the strategies needed to see it realised"*

## **Pilot Phase of High-Speed Broadband on Thalys Trains Begins**

Train travellers journeying between Brussels and Paris are now getting more than a just smooth fast ride. Thanks to support from ESA Telecom, the UK-based company 21Net has begun a pilot service bringing High-Speed Broadband Internet access to all passengers taking a trip on Thalys.

The initial three-month pilot phase that is now underway will test the performance of the technology as well as gather customer feedback. The system developed by 21Net ensures that all carriages provide the same access to data, allowing the passengers to connect to the Internet with Wi-Fi-enabled laptops.

The satellite link is via a tracking antenna located on the roof of the train. The innovative antenna design includes specially developed software that maintains the link with the host satellite over long distances even while travelling at high speed.

The system includes onboard video servers, providing news, weather reports and even films, all streamed straight to a passenger's laptop.

*"This quickly emerging need to access the Internet while on the move requires flexible solutions. Having access to e-mail or web-browsing capabilities at reasonable speeds and costs enormously improves what is called 'the*

*travel experience'. Putting industry, service providers, train operators and, of course, passengers in a win-win situation,"* says Mr Alvarez Lopez, ESA's Technical Officer for the project.

Beyond this pilot project, ESA is interested in actively promoting a European-wide initiative to facilitate the uptake and subsequent consolidation of the broadband Internet to trains opportunity. In this respect, the Agency is coordinating a train-operators forum to promote pan-European solutions.

For more information, please visit:

<http://telecom.esa.int/bb2train>





## **Questionnaire on the Use of Satellites for Civil Protection**

Can space help in the case of a catastrophe? What are the needs of the professionals who have to intervene on the ground? ESA and the Directorate of Civil Defence and Security (DDSC) of the French Interior Ministry have started a collaboration on this important question, which recent tragedies have put under the spotlight.

The aim is to find a European consensus on the actions required to enable full and complete use of space telecommunications in civil protection. To this end, a questionnaire has been sent to civil-protection institutions. It contains questions about how and how often space telecommunications is used in these organisations, its strengths and weaknesses, its future use, and about its use in training.

The results of the survey will be presented to, and recommendations submitted for the approval of, the heads of civil-protection authorities during a one-day conference on 29 April 2005 at the Palais du Luxembourg - 15 ter, rue de Vaugirard in Paris VI.

More information and the agenda can be found at:

<http://telecom.esa.int/civilprotection/conference/April2005>





## Telecom Projects Catalogue Now Available

ESA Telecom is making a Catalogue available that contains Fact Sheets on both current and completed projects. The Fact Sheets include up-to-date information on selected projects funded by ESA Telecom, as well as detailed contact information for both companies and Project Officers.

The PDF version of the ESA Telecom Projects Catalogue is available to anyone interested in ESA Telecom activities by visiting:

<http://telecom.esa.int/projectcatalogue>. To order hard copies, please submit the online form available at: <http://telecom.esa.int/brochures>



## Receive regular updates from ESA Telecom by e-mail

Would you like to be kept updated on Current Opportunities, the Start-up Initiative, Calls for Ideas and the many other things happening at ESA Telecom? In order to receive information regularly via e-mail, subscribe by completing a short webform, selecting the particular type of information that you wish to receive:

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News about ESA Telecom projects and events in the area of telemedicine.

**E-mail alert 'SatLabs':**  
News from SatLab Group, an international, non-profit association, committed to bring the deployment of the DVB-RCS standard to large-scale adoption.

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Your opportunity to influence the shape of ESA's future programmes.

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## Fifth Round of the Start-up Projects Initiative



(b) Financial support of up to 50% (max. 150 000 Euro) for integration and demonstration activities based on existing technologies tailored to pre-operational products, systems and applications, with identified market opportunities.

Any small or medium-sized business from an eligible country is allowed to apply. Current participating countries are Austria, France, Finland, Germany, Greece, Italy, Ireland, Luxembourg, Norway, the Netherlands, Portugal, Spain, Sweden and Switzerland.

Particular attention will be paid to proposals from companies that have never previously had a contract with ESA Telecom.

Outline Proposals for the Fifth Round of the ESA Telecom Start-up Projects Initiative will be accepted from 29 March to 9 May 2005. From 20 June to 26 August 2005, Full Proposals for the Fifth Round will be accepted from companies that have successfully passed the Outline Proposal stage.

More information is available at: <http://telecom.esa.int/startup>

### CONNECT

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To date, ESA Telecom has launched four rounds of the Start-up Projects Initiative to help Small and Medium Enterprises (SME) enter the satcom sector. Previous results have encouraged ESA Telecom to expand and refine the scheme in order to build on the initial successes.

The scheme provides for the award of development contracts with values up to 300 000 Euro for propositions that include the satcom component as an essential element. Two possible funding levels depending on the commercial maturity of the proposition will be applied:

(a) Financial support of up to 100% (max. 300 000 Euro) for validation of concepts in the early stages of development that involve innovative technologies with perceived high commercial and/or technical risks.