

**23rd AIAA International Communications Satellite
Systems Conference (ICSSC-2005) and
11th Ka and Broadband Communications
Conference
25–28 September 2005
Aurelia Convention Center
Rome, Italy**

Abstract Deadline: 10 April 2005

ICSSC-2005: New Horizons—New Directions

A significant increase in commercial communications satellite orders appears to signal the end of the industry downturn of the past few years. Satellite Digital Radio Broadcasting systems appear to be following on the footsteps of the extraordinarily successful Satellite Digital Television Broadcasting. New services such as Ka-broadband service to the home, interactive satellite television broadcast, entertainment and Internet services to business and commercial aircraft, and S-band direct audio and video broadcasting from satellites to handheld terminals are already in their initial deployment phases; and L-band broadband services to mobiles will soon be a reality. Satellite navigators are becoming ubiquitous in private automobiles in many developed nations, and this phenomenon is spreading as well to many developing countries.

In the public civil sector, combined navigation and communications services are being considered for inclusion in the European Galileo navigation system. NASA, as well as other space agencies, is considering the development of dedicated data relay satellites to be put into orbit around other planets in the solar system, to relay scientific data back to earth from robotic landers on the surface.

The large-scale terrorist attacks in New York and Madrid have focused the need for higher capacity and more integrated communications systems and information databases to provide real-time intelligence and surveillance information for domestic security and border control. New demands have also been placed on our military infrastructure to update and integrate heritage and new communications systems to collect vastly increased volumes of data from sources such as unmanned reconnaissance aircraft and distributed sensors, process this data, and provide it to the warfighter in an integrated, user-oriented format with minimum delay. The modern digital battlefields require integrated communications using common protocols to support interoperability and independence of the physical transport media for enhanced reliability. In this new world, communications satellites provide unique advantages in terms of their survivability, wide coverage and deployment to rapidly support new theaters as needed.

11th Ka and Broadband Conference

The Ka and Broadband Conference will continue to highlight developments in Ka Band systems, in satellite-aided aircraft navigation and mobile broadband communications at all frequencies.

Objective of the Joint Conference

The objective of the Joint Conference [Hosted by the Istituto Internazionale delle Comunicazioni (IIC)] is to provide an in-depth exploration of the economic, marketing, technical, and regulatory issues affecting these new and planned services. Papers are solicited for both conferences in the following areas:

- New mobile services
- New broadband services
- New navigation services
- Integration and interoperability of systems
- Communications protocols and networks
- Advances in satellite architecture
- Advances in satellite components
- Advances in Earth terminals
- Propagation and mitigation techniques

- Economic and marketing aspects
- Regulatory issues

In addition, papers are solicited for the ICSSC-2005 in the following areas:

- New broadcast services
- New fixed-satellite services
- New data relay services
- Integrated services for disaster relief
- Interactivity via satellite
- Domestic security applications and architectures
- Military applications and architectures
- Advances in payload subsystems
- User applications

The 2005 Joint Conference will have a single registration fee that will provide access to both conferences and all joint plenary and social events. The technical programs of the ICSSC-2005 and Ka and Broadband Conference, however, will be separately organized. All papers will be published on the Joint Conference Web site accessible only to registrants, and on a CD-ROM that will be provided to all registrants. Papers submitted to the Ka and Broadband Conference will, in addition, be published in the form of hard-copy proceedings that will be distributed to all registrants.

The working language of the Joint Conference will be English. For more details on the Joint Conference, visit the IIC Web site at www.iicgenova.it.

Preparation and Submission of Abstracts

Authors are invited to submit one-page abstracts by the due date listed below. Abstracts must include the title, the author's name, affiliation, full postal address, phone and fax numbers and e-mail address, and indicate the lead author. For a fast, accurate submission, we highly recommend that you have your abstract converted into a PDF file prior to submission. If this is not possible, Microsoft Word for Windows format is acceptable. Abstracts should be submitted electronically via the IIC Web site at www.iicgenova.it by following the links for the appropriate conference.

Abstracts and papers should be submitted only to one of the conferences. The organizers reserve the right to reassign any paper from one conference to the other if the paper is judged to be more suitable for the alternate venue.

After the author is notified of acceptance of the abstract, full draft manuscript submissions for the conference will be accepted electronically through the Joint Conference Web site at www.iicgenova.it. For a fast, accurate submission, we highly recommend that you have your paper converted into a PDF file prior to submission. If this is not possible, Microsoft Word for Windows format is acceptable. Paper selection for this conference will be based on a full draft manuscript of the proposed technical paper.

Authors are responsible for procuring any necessary sponsor, employer, and/or government approvals of any abstract or paper with sufficient time to avoid last-minute withdrawal of the paper. The proposed draft papers must be unclassified.

Special Instructions for ICSSC-2005 Authors

AIAA will not consider for presentation or publication any paper that has been published or is currently under consideration for publication elsewhere. Submittal of an abstract is interpreted by AIAA as an intention of the author to attend the conference and to present the final paper. Videotaped presentations by other than one of the indicated authors of a paper are not acceptable.

Authors will be required to sign the standard AIAA Copyright Clearance and Assignment form (Copyright Form B, C, or D, as appropriate), plus an addendum licensing the IIC to publish the paper in the Joint Conference Web site and CD-ROM. These forms can be downloaded from the conference Web site at www.iicgenova.it. Completed forms should be faxed to the Technical Administrative Chair fax number indicated on the Web site.

The AIAA "no paper, no podium" rule will be in effect and enforced by the organizers of the conference. No author will be permitted to make a presentation at this conference if a final copy-ready paper and clearance forms have not been received at the Conference Web site by the deadline listed below.

Authors are also encouraged to also submit their ICSSC-2005

AIAA CALLS FOR PAPERS

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papers to the new online *AIAA Journal of Aerospace Computing, Information, and Communication*. The *JACIC* submissions can be done online at: www.writetrack.net/jacic.

General inquiries relating to the ICSSC-2005 technical program should be directed to the conference Technical Program Chair:

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Special Instructions for Ka and Broadband Conference

Authors

Papers for the Ka and Broadband Conference are restricted to 8 pages. General inquiries relating to the Ka and Broadband technical program or conference details should be directed to the Secretariat of the IIC:

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Important Dates

10 April 2005	Upload of abstracts to Web site due.
30 April 2005	Lead author will be notified of paper acceptance via e-mail.
30 June 2005	Upload of draft manuscripts to Web site due.
30 July 2005	Upload of final copy-ready papers to Web site due.