

Call for Papers

Abstract Deadline: 2 October 2006

25th AIAA
International Communications Satellite Systems Conference
(ICSSC 2007)

**“Evolution Toward a
Ubiquitous Network Society”**

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10-13 April 2007
COEX, Seoul, Korea

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Ubiquitous Network Society”**

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www.aiaa.org/events/icssc07
www.icssc2007.com

"Evolution Toward a Ubiquitous Network Society"

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Important Dates to Remember

2 October 2006
Abstracts Due

27 November 2006
Author Notification

9 March 2007
Final Manuscripts Due

10 April 2007
Pre-conference Colloquium

11-13 April 2007
ICSSC 2007

SESSION TOPICS

Since the advent of the first communications satellite, satellite systems have been evolving for advanced communications, broadcasting, and positioning services, while harmonizing or competing with terrestrial networks. To gain insight into the future evolution of satellite systems, ICSSC 2007 will offer a unique opportunity for in-depth discussion of not only the technical issues but also the economic, marketing, and regulatory issues related to satellite systems.

To that end, papers are solicited in a wide range of fields, addressing, but not limited to, the following topics:

- Regulations and spectrum sharing
- Satellite economics and market issues
- New systems and services
- Broadband systems
- Broadband mobile systems
- Satellite and terrestrial integration
- Inter-satellite links
- Data relay
- Broadcasting systems
- Mobile broadcasting systems
- Disaster relief systems
- LEO communications satellite networks

- High altitude communications platforms
- GEO clusters and small satellite
- Navigation and positioning systems
- Military satellite communications
- Propagation and rain fade mitigation
- Modulation and coding
- Advanced communication techniques
- Ground systems
- Payload systems
- Payload RF technology
- Digital signal processing
- Antenna technology
- Communication protocols
- Network and resource management
- Traffic and QoS management
- Satellite bus

Organized by

Asia-Pacific Satellite Communications Council



AIAA-Japan Forum on Satellite
Communications

JFSC

American Institute of Aeronautics and
Astronautics



CONFERENCE SCOPE

Telecommunication technologies have been evolving toward broadband and ubiquitous networks at a very fast pace. In the future this evolution will lead to a ubiquitous network society, where anyone can be networked at any time in any place and various services can be provided to enrich human life. This dream of telecommunications will come true before long.

In the forthcoming ubiquitous network society era, communication services are expected to become increasingly convenient and accessible with high-speed Internet access from vehicles, ships, and aircraft; highly accurate positioning and time information acquisition services for mobiles and pedestrians; and remote control of electric appliances at home from outside.

How can we construct truly ubiquitous networks? The ubiquitous network environment is coming close to being real in urban areas, due to the rapid growth of terrestrial broadband communication services by optical fiber networks, cellular phone networks, and high-speed wireless LAN provided in those areas. On the other hand, there still exist many places with insufficient communication services because of geographical and economical barriers. In addition, destruction of communication network infrastructures by natural disasters such as earthquakes and tsunamis can cause enormous damage to social life, both physically and economically. These problems need to be settled to move on toward a truly ubiquitous network society, where satellite systems are expected to play a prominent role.

Satellite systems for communications, broadcasting, and positioning services have unique features such as wide coverage, resistance to natural disasters, and capability of flexible services from space. By taking advantage of systems—including low earth orbit satellite systems and multi-beam satellite systems—various advanced satellite technologies have been developed. New satellite technologies also continue to be developed, contributing to future ubiquitous network infrastructures in which satellite systems are used not only to supplement terrestrial networks but also to create new applications.

The 25th AIAA International Communications Satellite Systems Conference (ICSSC) will focus on the theme of "Evolution Toward a Ubiquitous Network Society." ICSSC 2007 will explore the evolutionary directions of advanced satellite technologies, as well as the possible means to vitalize satellite markets by new technologies toward a ubiquitous network society.



ABSTRACT SUBMITTAL GUIDELINES

Abstract Deadline: 2 October 2006

Abstract submissions for the conference are now being accepted electronically through the AIAA Web site at www.aiaa.org. The electronic submission process is as follows:

1. Click "Conferences & Events" on the AIAA home page.
2. Select this conference from the conference calendar and click "Submit Paper."
3. From the conference Call for Papers screen, identify the topic to which the prospective paper is best correlated, and click the "Select" link next to that topic.
4. Verify the topic selection and click "Select" again, then verify the rules and regulations on the subsequent page.
5. Answer the prompts to enter paper title, corresponding author information (including e-mail address), and A/V requirements.
6. When this information is complete, authors will be prompted to upload the abstract in any one of five formats: MS Word, WordPerfect, Text, RTF, or PDF.

When submitting through the Web site, be sure to indicate to which technical topic your paper best correlates (e.g., advanced communication techniques). The deadline for receipt of abstracts via electronic submission is **2 October 2006**.

Authors having trouble submitting abstracts electronically or those with questions should e-mail AIAA technical support at paper_tech_support@aiaa.org. Letters of official acceptance and instructions for preparation of manuscripts will be sent on or about **27 November 2006**.

Warning—Technology Transfer Considerations

Prospective authors are reminded that technology guidelines have considerably extended the time required for review of abstracts and completed papers by U.S. government agencies. Internal and external review can consume 16 weeks or more. Government review, if required, is the responsibility of the author. Authors should determine the extent of approval necessary early in the paper preparation process to preclude paper withdrawals and late submissions.

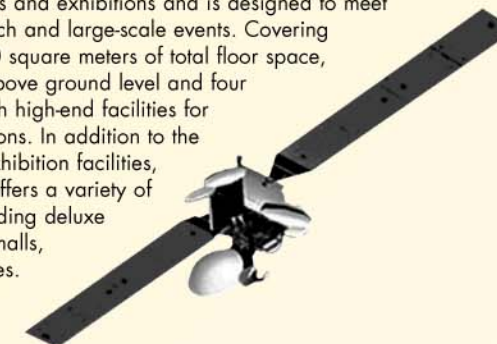
CONFERENCE INFORMATION

Working Language

The working language of the conference is English. English will be used for all printed materials, presentations, and discussions.

Conference Venue

ICSSC 2007 will be held at the Convention and Exhibition Center (COEX), located in the center of the southern part of Seoul and 46 km from Incheon International Airport. COEX is the state-of-the-art venue for international conventions and exhibitions and is designed to meet the demands for high-tech and large-scale events. Covering approximately 225,000 square meters of total floor space, COEX has four floors above ground level and four below, all equipped with high-end facilities for conference and exhibitions. In addition to the main convention and exhibition facilities, the multi-complex also offers a variety of auxiliary facilities, including deluxe hotel rooms, shopping malls, and entertainment venues.



ORGANIZERS

Asia-Pacific Satellite Communications Council (APSCC)

APSCC is a non-profit international association representing all sectors of satellite and space related industries. APSCC membership is open to any government body, public and private organization, association, or corporation that is involved in satellite and space related industries with interests in the Asia-Pacific region.

APSCC aims to exchange views and ideas on technologies, systems, policies, and outer space related activities in general along with satellite communications including broadcasting for the betterment of the Asia-Pacific region. Conferences, forums, workshops, summits, symposiums, and exhibitions are organized through regional coordination in order to discuss issues that affect the industries and to promote and accelerate the efficient introduction of outer space activities, new services, and businesses via satellites.

In order to disseminate industry-related information, APSCC publishes a quarterly satellite magazine as well as monthly e-newsletter, which are distributed worldwide to members and others. The quarterly magazine and other publications are available on the Web at www.apsc.or.kr/.

AIAA-Japan Forum on Satellite Communications (AIAA-JFSC)

AIAA-JFSC was established on 20 November 1998 to encourage and facilitate networking among space satellite communications professionals around the world and to address critical satellite communications issues in Japan. AIAA's Technical Committee on Communications Systems (TCCS) unanimously approved the creation of the AIAA-JFSC as a subcommittee of the TCCS. AIAA-JFSC has carried out various activities to provide information exchange about the industry and about AIAA's activities in this area. These activities include holding exhibitions; co-organizing various technical conferences, including AIAA ICSSC held in Japan; and issuing its flagship Web-based magazine, *Space Japan Review* (www2.nict.go.jp/mt/b150/SJR/English/). Dr. Yasuo Hirata now chairs AIAA-JFSC.

American Institute of Aeronautics and Astronautics (AIAA)

AIAA is the largest professional society devoted to the progress of engineering and science in aviation and space. AIAA's mission is to advance the arts, sciences, and technology of aerospace, and to nurture and promote the professionalism of those engaged in these pursuits. The organization was established in 1963 through the merger of two organizations: the Institute of Aeronautical Sciences and the American Rocket Society. For more information about AIAA, visit www.aiaa.org.