



## ICO mim - A New Direct Broadcast Satellite Service for the U.S.

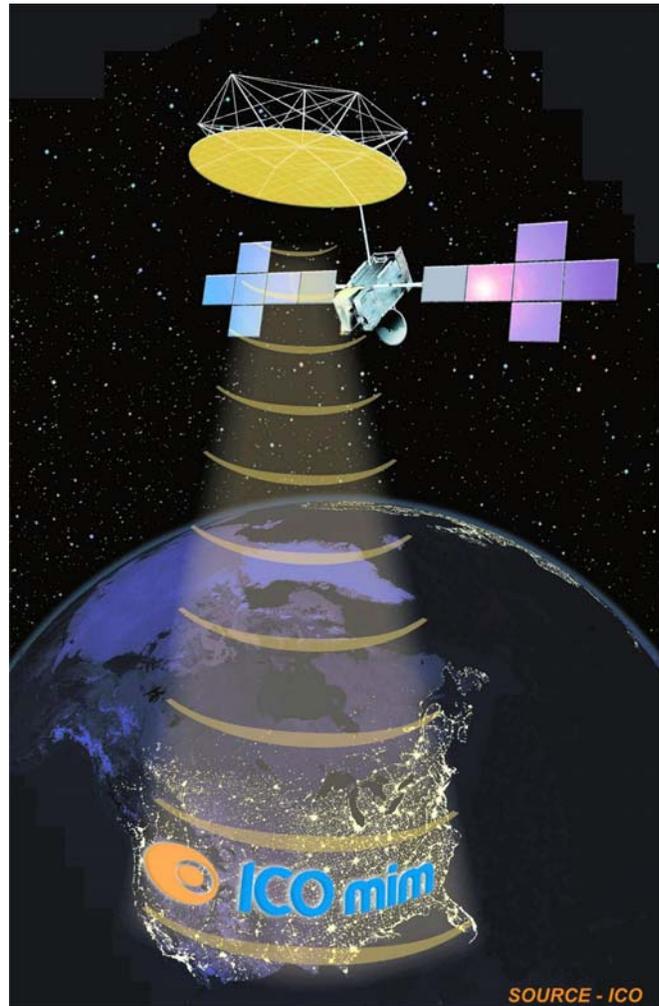
The largest commercial satellite ever built, ICO G1, was launched into space on April 14, 2008, headed for geosynchronous orbit over the U.S. to provide a new mobile satellite service (MSS) starting in 2009. ICO G1 is the first commercial satellite to utilize a ground-based beam forming system to determine the contours of the satellite's multiple spot beams. ICO (Reston, VA, [www.ico.com](http://www.ico.com)) will use this satellite to support a mobile interactive media service, ICO mim™, feature mobile video, interactive navigation, and emergency to communications services for consumers. According to ICO, alpha trials for ICO mim will take place later in 2008 in Raleigh-Durham, NC, and Las Vegas, NV.

ICO's planned system infrastructure includes the following:

- The ICO G1 satellite operating in a "bent pipe" fashion, "reflecting" the signals between the end-user equipment and the gateway ground station;
- A land-based transmitter network (Ancillary Terrestrial Component or ATC) that will complement the ICO G1 satellite signals, with the goal of providing seamless, gap-free coverage to end users (similar to the terrestrial repeater network in use by SDARS providers Sirius and XM);
- Ground-based beam forming (GBBF) equipment, located at the gateway ground station in North Las Vegas, NV), allowing the satellite to dynamically form up to 250 spot beams of varying sizes throughout the satellite's coverage area in both the uplink and downlink paths. This will allow ICO to dynamically accommodate traffic, power, and coverage requirements from the ground, and represents the first such application of this technology;
- A core switching/routing segment, consisting of equipment used to route voice, video, and data traffic between the ICO network and public data, telephone, Internet and mobile networks;
- End-user equipment capable of supporting both satellite-only and dual-mode (satellite/terrestrial) services.

The FCC has assigned 20 MHz of 2 GHz band (also known as the "S" band) MSS spectrum to ICO (10 MHz each for uplink and downlink), and when the spacecraft arrives at its final position at 92.85° west longitude, it will be able to provide geographic coverage to all 50 states as well as Puerto Rico and the U.S. Virgin Islands. If appropriate regulatory approval is granted by other countries, the ICO G1 satellite is also capable of providing service beyond the U.S. to other parts of North America.

ICO mim will support a full set of service offerings including wireless voice, video, data and/or Internet and telematics (vehicle tracking), and is expected to provide multiple channels of high-quality mobile video including 10-15 live channels of premium television content to portable, larger-screen (4.5 to 10 inch) user devices. The ICO G1 satellite architecture is flexible and is expected to be compatible with existing radio protocols including





W-CDMA, GSM, DVB-SH, CDMA and OFDM, and to be able to support communications with a wide variety of user devices and handsets, many similar in size to existing cellular phones (see photo).

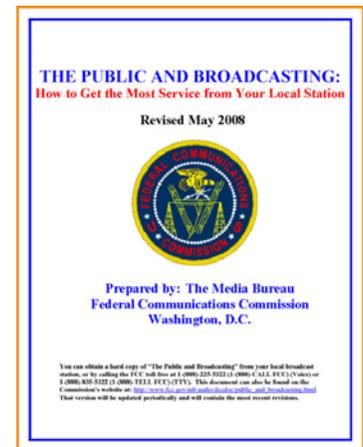
The mobile television component of ICO mim will use the DVB-SH standard. Video content providers for the alpha trials to take place later this year include Discovery Communications and NBC Universal. The Discovery channels available for the ICO mim trials include Discovery Channel, TLC and Discovery Kids. Navigation features of ICO mim will include real-time traffic and weather alerts, re-routing, and access to destination information, which will combine with ICO mim's unique integrated applications allowing users to pre-program tasks and activities into their system. ICO mim will also offer a roadside assistance and emergency messaging capability, with satellite-connected emergency voice and text messaging assistance,

Additional information on ICO mim is available on the Internet at [www.ico.com/about/tech/mim.php](http://www.ico.com/about/tech/mim.php).

## FCC Updates “The Public and Broadcasting”

The FCC's Media Bureau has released an updated version of a document entitled “The Public and Broadcasting.” This publication, which every broadcaster is required to have a copy of in their public inspection file, provides an overview of the FCC's regulation of broadcast radio and television licensees, describes how broadcast stations are authorized, and explains the various rules and policies relating to broadcast programming and operations with which stations must comply, including the obligation to serve their local communities. It also explains how members of the public can become involved in assessing whether local broadcast stations are complying with these requirements. The publication is also intended to make the public aware of FCC procedures and the tools at their disposal, in the event that they conclude that any of their local stations do not meet these responsibilities.

In addition to having this document in the public inspection file, broadcasters must provide a copy of this publication to any member of the public who requests one. The current version is available on the FCC's web page at [www.fcc.gov/mb/audio/decdoc/public\\_and\\_broadcasting.html](http://www.fcc.gov/mb/audio/decdoc/public_and_broadcasting.html).



Also, effective with the release of this latest version, two Broadcast Information Specialists, one in the Media Bureau's Audio Division and one in its Video Division, will now serve as contact points for the public, accessible via toll-free phone numbers, facsimile, or e-mail. These individuals will be available to provide information to persons interested in becoming involved in the Commission's processes, and will answer questions about how to do so, including inquiries about the FCC's complaint or petitioning procedures or the filing and status of the license renewal, modification or assignment or transfer application for a particular station. The Broadcast Information Specialists can be contacted as follows:

If the inquiry relates to a radio station:  
 Phone: (866) 267-7202 (Voice) or (877) 479-1433 (TTY)  
 Fax: (202) 418-1411  
 E-Mail: [radioinfo@fcc.gov](mailto:radioinfo@fcc.gov)

If the inquiry relates to a television station:  
 Phone: (866) 918-5777 (Voice) or (866) 787-6222 (TTY)  
 Fax: (202) 418-2827  
 E-Mail: [tvinfo@fcc.gov](mailto:tvinfo@fcc.gov).

If the inquiry relates to both a radio and a television station, or is general in nature, the FCC indicates that either Specialist may be contacted.

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Whether you are a satellite uplink operator, engineer or even a technical manager who just wishes to become more familiar with satellite communications, NAB's Satellite Uplink Operators Training Course is for you. This four-day course is designed to instruct students in the proper technical and operational practices that will ensure safe, successful and interference free satellite transmissions. The course will be offered June 2-5, 2008 in at NAB's headquarters in Washington DC. For more information call Cheryl Coleridge at (202) 429-5346 or go to [NAB Satellite Uplink Operators Seminar](#).

