

**Before the  
Federal Communications Commission  
Washington, DC 20554**

In the Matter of )  
 ) WC Docket No. 07-52  
Broadband Industry Practices )

**COMMENTS OF THE  
SATELLITE INDUSTRY ASSOCIATION**

The Satellite Industry Association (“SIA”)<sup>1</sup> hereby files Comments in response to the *Notice of Inquiry* (“*NOI*”) released by the Federal Communications Commission (“FCC” or “Commission”) on April 16, 2007, in connection with the above-referenced proceedings.<sup>2</sup> In the *NOI*, the Commission sought comments on a number of issues designed to enhance the FCC’s “understanding of the nature of the market for broadband and related services” including whether providers charge different prices for different speeds or capacities and whether the Commission broadband policy statement should be amended in response.<sup>3</sup> SIA, in response to this *NOI*, offers these Comments describing the availability of satellite broadband and enhancements in satellite-delivered broadband services that have been made and will continue to develop as satellite technology

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<sup>1</sup> SIA is a U.S.-based trade association providing worldwide representation of the leading satellite operators, service providers, manufacturers, launch services providers, remote sensing operators, and ground equipment suppliers. SIA is the unified voice of the U.S. satellite industry on policy, regulatory, and legislative issues affecting the satellite business. SIA Executive Members include: Arrowhead Global Solutions Inc.; Artel Inc.; The Boeing Company; Datapath, Inc., The DIRECTV Group; Globalstar, Inc; Hughes Network Systems LLC; ICO Global Communications; Integral Systems, Inc.; Intelsat, Ltd.; Iridium Satellite LLC; Lockheed Martin Corp.; Loral Space & Communications Inc.; Mobile Satellite Ventures LP; Northrop Grumman Corporation; SES Americom, Inc.; and TerreStar Networks Inc.. Associate Members include: ATK Inc.; EchoStar Satellite LLC; EMC Inc.; Eutelsat Inc.; Inmarsat Inc.; IOT Systems; Marshall Communications Corp.; SES New Skies; Spacecom Corp.; Stratos Global Corp; SWE-DISH Space Corp; and WildBlue Communications, Inc.

<sup>2</sup> FCC 07-31 (released Apr. 16, 2007) (“*NOI*”).

<sup>3</sup> *NOI* at ¶¶ 1, 9-10.

improves. SIA also encourages the Commission to collect data based on multiple speed tiers of broadband offerings, to reflect the benefits consumers can enjoy from the availability of a choice of broadband speeds and capabilities.

## **DISCUSSION**

### **I. Availability of Satellite Broadband.**

Satellite services provide reliable, ubiquitous, cost-effective and easily-installed broadband service throughout the United States. Further, satellite operators and service providers are constantly upgrading their facilities to expand their capacity and functionality to ensure that American consumers have access to the most advanced telecommunications services.

The satellite industry has a proven track record of providing reliable, yet innovative, services to American consumers. The satellite industry currently provides competitive broadband services throughout the United States in the 48 contiguous states, the District of Columbia, Alaska, Hawaii, Puerto Rico and the US Virgin Islands. There are currently over 500,000 satellite broadband consumers throughout the United States and this number grows substantially each year, especially as the cost of subscriber devices continues to decline.

Satellite broadband, provided by both fixed and mobile service satellites, currently offers unique characteristics which make satellites the ideal provider of broadband in rural and hard-to-serve areas of the country. Unlike terrestrial networks which require significant infrastructure, such as towers, fiber optics or coaxial cable, and excavation and installation of fiber/cable to each residence, satellite technology allows

the same infrastructure to be shared across urban and rural areas, requiring only customer equipment<sup>4</sup> for service. Satellite services are, thus, largely immune from the factors that drive up service costs in rural areas, such as rough topography and low population density, enabling an identical cost structure for consumers, whether in rural or urban areas. Moreover, recent improvements both in satellite technology and in spacecraft to be launched in the near future have enabled the earth terminals to be far smaller than was possible just a few years ago, making satellite-delivered services increasingly attractive to consumers. These factors make satellite broadband an essential, if not unique, component of broadband access for all American consumers.

It is clear that continuous developments in satellite technology will expand the quality and availability of satellite broadband services in the future. New fixed and mobile service satellite systems -- needed to accommodate the projected substantial increase in satellite broadband subscribers -- are planned for launch and deployment in the next few years. For example, several mobile satellite system operators are launching more powerful satellites than ever launched commercially before, specifically to provide integrated satellite-terrestrial services at broadband speeds. Further, fixed satellite service operators are launching new satellites that will provide substantially higher speed services using ever smaller earth station antennas. At the same time, satellite operators and customers are deploying new phased array antennas and auto-pointing systems that

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<sup>4</sup> Even though satellite broadband providers heavily subsidize the cost of the customer premises equipment for subscribers, today the cost to the consumer is above typical consumer electronic equipment. However, as with all other consumer-focused services, as the take up rate increases and new systems come online, these prices will be substantially reduced over time. A relevant case study is available in the direct-to-home satellite television industry, where reaching a critical mass of subscribers has enabled DirecTV and DISH Network to offer CPE for free when subscribers sign up for annual contracts. Furthermore, recent authorization of mobile satellite service with an ancillary terrestrial component enables satellite operators to take better advantage of the economies of scale for equipment. This will enable these providers to offer consumer electronic priced devices, making satellite broadband services even more affordable to American consumers.

allow for mobile and quickly deployable portable broadband solutions. These satellites and systems will provide increased access to a wide array of broadband services in the near future, leading to increased consumer choice and lower prices for services and equipment.

## **II. Broadband Deployment Should be Measured Using Multiple Speed Tiers**

Fixed and mobile satellite broadband offerings are currently available at a variety of service speeds and with various capabilities, irrespective of the users distance from a network hub. SIA urges the Commission to recognize the benefits that consumers enjoy from having a choice of speeds and capabilities. Consumers should have a choice of varying broadband offerings, based on the considerations that are important to them, including cost, speed and other capabilities. One size simply does not fit all. SIA believes that consumers should be able to choose “advanced telecommunications capability” according to their needs, and, that the FCC should not focus on a concept of “broadband” that limits consumer choice and industry service offerings.

As SIA noted in its Reply Comments in the companion 706 proceeding,<sup>5</sup> broadband services must be flexible enough to meet the needs of different technologies and environments, such as mobile and fixed, and should not be defined according to an artificial speed threshold that will inevitably be appropriate for some technologies and users, but inappropriate for others. As SIA noted, speed thresholds vary among different services, and all of these services can be valuable offerings to consumers. For example, mobile broadband applications are likely to have slower speeds than fixed applications

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<sup>5</sup> *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, GN Docket No. 07-45, FCC 07-21 (released April 16, 2007).

because of the inherent characteristics of spectrum-based offerings, yet they can be highly valued by consumers.

Satellites are launched with a speed and capability that will remain fairly static throughout their lifetime; once launched, they cannot be updated with the continuous advances in satellite broadband technology. Many satellites offer broadband services consistent with the term “advanced telecommunications capability” in Section 706(c)(1) of the Communications Act<sup>6</sup>, and these offerings are highly valued by consumers, especially in hard-to-serve areas. It would be erroneous for the FCC to establish a broadband policy statement that effectively downgrades the broadband services that consumers enjoy today by excluding them from the scope of “broadband” in the Commission’s framework. Accordingly, SIA submits that broadband data should be collected in a manner that reflects multiple tiers of speeds, starting with 200 kbps and working upwards to the considerably higher speed services that will be available in the future. This approach would enable the Commission to accurately measure and track different types of broadband service, while ensuring that its reporting structure accommodates a variety of broadband offerings without discriminating among them. SIA thus fully supports the use of speed tiers as a vehicle for measuring the deployment and success of various kinds of advanced telecommunications capabilities across different customer and geographic markets.

## **CONCLUSION**

For the reasons discussed above, SIA urges the Commission to recognize the nationwide availability of satellite broadband, and satellite industry support for a


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<sup>6</sup> See Section 706(b) of the Telecommunications Act of 1996, Pub. L. 104-104, 110 Stat. 56 (1996) (1996 Act), reproduced in the notes under 47 U.S.C. Section 157.

broadband policy which recognizes the value of flexible approach to defining and measuring broadband services. Broadband service providers should be encouraged to offer consumers a choice of broadband speeds and capabilities, available even in the most hard-to-serve areas of the country.

Respectfully submitted,

SATELLITE INDUSTRY ASSOCIATION

A handwritten signature in black ink, appearing to read "David Cavossa". The signature is fluid and cursive, with a large loop at the end.

June 15, 2007

David Cavossa,

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