

Before the  
Federal Communications Commission  
Washington, DC 20554

In the Matter of )  
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High-Cost Universal Service Support ) WC Docket No. 05-337  
 )  
Federal-State Joint Board on Universal Service ) CC Docket No. 96-45  
 )  
Merits of Using Auctions to Determine High- )  
Cost Universal Service Support )  
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To: The Joint Board

**COMMENTS OF THE SATELLITE INDUSTRY ASSOCIATION**

The Satellite Industry Association (“SIA”) hereby files these comments in the above-captioned proceeding seeking comment on the merits of reforming the universal service mechanism to use “reverse auctions” to determine the amount of universal service support available for carriers serving rural and high-cost areas.<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.<sup>2</sup>

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<sup>1</sup> *Federal-State Joint Board on Universal Service Seeks Comment on the Merits of Using Auctions to Determine High-Cost Universal Service Support*, WC Docket No. 05-337, CC Docket No. 96-45, Public Notice, 21 FCC Rcd 9292 (2006) (“*Public Notice*”).

<sup>2</sup> SIA’s Executive Members include: Artel Inc.; The Boeing Company; 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  
(continued on next page)

As discussed in greater detail below, SIA believes that the use of reverse auctions warrants further exploration as a potential step on an important path towards making eligibility for, and distribution of, universal service support more competitively and technologically neutral. Ultimately, universal service support mechanisms should enable America's rural consumers to have access to the same services that are available in the nation's urban areas, and to do so in a cost-effective manner. That goal can be achieved by allowing cost effective competitive providers such as the satellite industry to play a greater role in bringing the communications revolution, including broadband and other advanced services, to rural America.

#### **I. SATELLITES CAN AND SHOULD PLAY A KEY ROLE IN PROVIDING ESSENTIAL UNIVERSAL SERVICE, ESPECIALLY IN RURAL AREAS**

As the Commission has noted, the universal service support system has brought enormous benefits to businesses and individuals in rural areas and increases the value of the nation's telecommunications network as a whole.<sup>3</sup> While universal service historically supported basic voice telephony, in recent years broadband connectivity has become increasingly important.<sup>4</sup> In this way, universal service funding is part of the Commission's strategy for

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Americom, Inc.; and TerreStar Networks Inc. Its Associate Members include: ATK Inc.; EMC Inc.; Eutelsat Inc.; Inmarsat Inc.; IOT Systems; Marshall Communications Corp.; SES New Skies; Spacecom Corp.; and Stratos Global Corp.

<sup>3</sup> See, e.g., *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 8783 ¶ 8 (1997) (subsequent history omitted) (“*First Universal Service Order*”).

<sup>4</sup> Although broadband is not currently a supported service, the Commission has acknowledged that “the network is an integrated facility that may be used to provide both supported and non-supported services,” and the Commission is committed to “ensuring that appropriate policies are in place to encourage the successful deployment of infrastructure capable of delivering advanced and high-speed services.” *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, *Order and Order on Reconsideration*, 18 FCC Rcd 15,090, 15,096-97 (2003) (“*Supported Services Order*”).

pursuing national broadband policy goals,<sup>5</sup> as well as ensuring continued basic connectivity in rural areas.

For example, satellite technology is in many respects ideally suited to delivering service to rural and high-cost areas. Initially used for business applications, satellite providers' offerings have expanded in recent years such that, today, many satellite providers offer mass-market services, including broadband Internet access services similar to DSL or cable modem service. Most importantly, satellite technology allows the same distribution infrastructure to be shared for both urban and rural areas. Indeed, satellite service furthers universal service goals by having a cost structure that equalizes costs between, and quality of service to, urban and rural areas. A customer in rural Montana can get the same satellite service as a customer in downtown Chicago. Not only are satellites efficient in their own right but they also avoid the need for the most costly elements of wireline networks in rural areas (e.g., multiple small switches or long loops and the attendant infrastructure such as towers, poles or trenches). Indeed, because satellite service is delivered from a spacecraft, it is largely immune from the considerations, such as rough topography and low population density, that drive up service costs in rural areas for terrestrial telecommunications technologies. In addition, certain satellite providers' recent authorization to provide an ancillary terrestrial component to their service will allow some providers to offer the benefit of both satellite and terrestrial service.

Satellite-delivered service has the further benefit of greater survivability in the event of natural or man-made disasters. Most recently, during last year's hurricane season, satellite

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<sup>5</sup> President Bush has called for universal broadband access by 2007. See [http://www.whitehouse.gov/infocus/technology/economic\\_policy200404/chap4.html](http://www.whitehouse.gov/infocus/technology/economic_policy200404/chap4.html). The then-Chairman of the FCC said that he "looked forward to working ... to deliver on this vision for the American people." *Powell Comments on President's Call for Universal, Affordable Broadband*, News Release (March 26, 2004).

communications once again proved their essential value when all other forms of communication were wiped out in the Gulf region following the devastation caused by hurricanes Katrina, Rita and Wilma. When the terrestrial telephone and broadcast networks went down, satellite networks maintained service, connecting first responders with governmental entities, individuals with their loved ones, and displaced families with vital services.

## **II. ANY REFORM OF THE USF PROGRAM SHOULD BE DESIGNED TO MEET CONSUMER NEEDS THROUGH THE MOST COST-EFFECTIVE TECHNOLOGY**

One benefit of a properly structured reverse auctions process would be its potential to reveal various providers' relative cost of providing service in rural and high-cost areas. As technology has evolved over the past half-century, new delivery platforms have emerged – including satellite – that can bring communications services to rural communities more efficiently and at lower cost. As described above, satellite technology is ideally suited to delivering service to rural areas very economically, and presents added benefits in disaster survivability. Basing universal support support on the most efficient technology for rural areas benefits all consumers by driving down the total burden of the fund while delivering essential communications services to rural consumers. American consumers should receive the greatest possible benefit for their universal service expenditures.

Some form of reverse auctions have been used in the universal service or universal access programs in Chile, Colombia, India, Peru, and South Africa.<sup>6</sup> It appears that a key to its success at driving financial support down to more efficient levels is ensuring that new entrants utilizing innovative technologies are eligible to participate in the program.<sup>7</sup> Indeed, in some cases

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<sup>6</sup> See, e.g., “Universal Access Funds,” Intelcon Research (2001) at 3.

<sup>7</sup> See, e.g., Roger G. Noll and Scott J. Wallsten, “Universal Telecommunications Service in India,” in *The India Policy Forum 2005-06* (Sage Pubs. 2006) (comparing Indian auctions in (continued on next page)

satellite providers have competed successfully to receive universal service subsidies awarded in this manner in other countries.<sup>8</sup> Building on these international experiences, the FCC should look at all platforms to meet the country's universal service needs.

Thus, if the Joint Board recommends, and the Commission pursues, universal service reform that includes reverse auctions, the program rules should be structured to allow participation by all competitive providers, including satellite providers, that are able to offer communications service more efficiently, ubiquitously, and at more reasonable cost, using innovative technologies.<sup>9</sup> In order to ensure that satellite providers can participate effectively in reverse auctions, the Commission must structure any such auctions in a manner that is competitively neutral. First, the program rules should not include provisions that award set-asides, credits, or other more favorable treatment to incumbent providers. Second, the rules should be structured to permit those satellite providers (and others) that currently offer

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which only the incumbent participated, where bids were at the reserve price, to auctions where competitive providers (including wireless providers) participated, where bids were significantly below the reserve price).

<sup>8</sup> See, e.g., *Datafile of Latin American Telecommunications*, "Chile," CIT Publications (available at [http://banners.noticiasdot.com/termometro/boletines/docs/telcos/consultoras/citpubs/2000/cit\\_chile.pdf#search=%22%22global%20village%22%20telecom%20satellite%20chile%20service%22](http://banners.noticiasdot.com/termometro/boletines/docs/telcos/consultoras/citpubs/2000/cit_chile.pdf#search=%22%22global%20village%22%20telecom%20satellite%20chile%20service%22)) (noting that, at the end of 1997, GTH Latin America, known at the time as Global Village Telecom (GVT), was one of five companies awarded licenses to provide local telephony services using satellite technology to 1,500 rural communities in Chile, with the costs of the rollout supported by the government's rural development fund).

<sup>9</sup> In this regard, SIA notes that the Discussion Proposal attached to the *Public Notice* would permit only two entities to receive support, one of which would be expected to provide broadband connectivity. *Public Notice*, 21 FCC Rcd at 9299. This role would be set aside, however, for the ILEC, at the ILEC's option, for at least the first 10 years. *Id.* This proposal could deprive consumers and the overall program of the full benefits of a competitively and technologically neutral approach by favoring the incumbent provider over other, potentially more cost-effective solutions that can serve a larger number of rural communities.

broadband services on a non-common carrier basis to retain that status.<sup>10</sup> Third, the mechanism's design should not contain artificial restrictions that would disadvantage certain providers over others, such as service areas or other features that favor incumbents. For example, a significant cost element for the deployment of satellite telephony or Internet access is the cost of the equipment that allows the consumer to communicate with the satellite – equipment that might be considered “customer premises equipment” but which nevertheless should be supported in order to provide a level playing field.<sup>11</sup>

Broader participation by providers such as satellite-based service providers will increase the options available to consumers, encourage the deployment of new technologies, and benefit the entire telecommunications sector by reducing the total subsidy burden. As noted above, a primary benefit that could flow from properly structured universal service reform is the ability to determine the lowest amount of subsidy necessary given technological advances. Thus, if the Joint Board and the Commission determine that reform of the universal service process will

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<sup>10</sup> Currently, cable modem and DSL providers may elect to offer their broadband services on a non-common carrier basis. The Discussion Proposal attached to the *Public Notice* proposes to require one ETC in each area to offer broadband service; thus, the possibility of adding broadband to the list of supported services is in play. A number of satellite-based providers offer broadband services in rural areas on a non-common carrier basis. The universal service system should capitalize on this opportunity to the greatest extent statutorily permissible. *See* 47 U.S.C. § 214(e)(2), (6).

<sup>11</sup> *See, e.g.*, Advanced Telecommunications and Opportunities Reform Act, H.R. 5252, 109<sup>th</sup> Congress (2006) § 251 (adding 47 U.S.C. § 254A(b)(2), providing specifically that “deployment of satellite broadband service customer premises equipment shall be considered to be a project eligible for support from the Program”). The satellite industry’s corollary to “building out” a terrestrial communications network is the deployment of satellite user equipment (handset, “dish” and/or modems) and installation (depending on the satellite service). Once satellites are in orbit and the related hub earth stations are built to switch the telephony and broadband traffic, the only network element remaining to effectively extend satellite service to rural communities is the satellite customer premises equipment and installation, as appropriate.

improve the universal service system, a competitively neutral approach will ensure that the potential benefits of any new program are best realized.

### **III. PILOT PROGRAMS COULD REVEAL VALUABLE INFORMATION ABOUT NEW TECHNOLOGIES' ABILITY TO DELIVER SERVICE TO UNSERVED AREAS AND INDIVIDUALS**

One way to flesh out the potential benefits of satellite technology for universal service applications would be to begin with targeted pilot projects. For example, reverse auctions could be used to award contracts to provide service to areas or individuals that currently lack access to any telecommunications services. These projects could focus on specific *areas* that have not historically been served by traditional telephony providers (such as tribal lands), or could seek to extend service to *individuals* that persistently lack access to voice telephone and/or broadband services.<sup>12</sup> Such pilot projects could demonstrate satellite providers' ability to bring the benefits of universal service to the most difficult to serve areas. Moreover, the projects could bring the promise of universal connectivity to those hardest to serve.

### **CONCLUSION**

Universal service is a crucial element of American telecommunications policy. As we move into the new millennium, universal service policy should recognize the enormous efficiencies possible with new means of delivering basic voice and broadband services. Satellite technologies are particularly well-suited to deliver these services efficiently and inexpensively in rural areas. If the Joint Board and the Commission wish to pursue the potential of universal

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<sup>12</sup> Despite the nation's relative success at extending service to a large percentage of the population, there remain thousands of individuals in each state who, while technically located within the "study area" of a local exchange carrier, could only receive service upon payment of a prohibitively expensive "line extension charge," often totaling thousands (or even tens of thousands) of dollars.

service reform, the new mechanism should be designed to encourage the participation of new and innovative technologies, including satellite-delivered services.

Respectfully submitted,

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