

BEFORE THE
Federal Communications Commission
WASHINGTON, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Inquiry Concerning High-Speed)
Access to the Internet Over)
Cable and Other Facilities)

GEN Docket No. 00-185

COMMENTS OF STARBAND COMMUNICATIONS INC.

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Attachment: "Dishing Up a New Link to the Internet,"
Washington Post, November 6, 2000

Summary

StarBand Communications Inc. is a new service provider in the nascent satellite sector of the broadband Internet access market. It offers the first true two-way, high-speed consumer satellite service, permitting direct connection to the Internet from virtually anywhere in the continental United States. StarBand is therefore especially interested in the potential impact of the Commission's proposals on the emergence of this new sector of the broadband industry.

Among the questions posed in the NPRM is whether any regulatory model adopted for cable modem services should also be applied to other means of broadband service delivery. StarBand believes that, at this early stage in the development of the market, FCC intervention into *any* part of the broadband services marketplace is, at best, premature. Competitive pressures already exist in this market sector and promise to increase substantially as new systems are introduced. Even if the Commission decides that intervention in the cable modem services market is warranted, any new regulation of the emerging satellite broadband sector would not be appropriate and could undermine the viability of such services.

The success of the common carrier model for incumbent local telephone companies and their legacy voice telephone technology in accommodating the explosive initial growth of ISPs is no indication that this same regulatory model should be applied to dissimilar companies and technologies under dramatically different market conditions. The introduction of new service approaches will, if allowed to develop, provide new competition to existing and future DSL and cable modem broadband ventures, but all remain in a state of flux and development.

With respect to satellite services specifically, there have historically been multiple service providers. Those seeking access to new spectrum at Ku-, Ka- and V-band include a variety of new entrants and joint ventures that will compete with the existing providers. In the near term, the potential satellite options for users can only be expected to grow, ensuring that there will be no need to alter the historic approach of limited regulation of satellite space segment.

The business model being pursued by StarBand would be particularly ill-suited to imposition of an open access regime, as the company's core business is as an ISP, not as a provider of basic data telecommunications service. While StarBand provides a portion of the conduit for data transport to the Internet backbone, the final link to the Internet user is established through intermediate space-segment capacity leased from others. Requiring it to make part of its uplink capacity available to all interested competitors would be a powerful disincentive to pursuing this business at all. While StarBand would shoulder all of the risks of the enterprise by developing the technology and investing in the required facilities, it could theoretically be called upon to share the benefits of its investment with others – yet there are no insurmountable barriers to their independent entry and access of their own to the same consumers.

Overregulation would also do much to undermine Commission policies promoting intermodal service competition. The Commission has recently noted in its Section 706 Report the importance of multiple service models in providing increased consumer access to high-speed broadband services. StarBand believes that introducing unnecessary regulations in the broadband market, particularly with respect to nascent technologies, would have the result of stifling exactly the sort of innovation and growth of competitive intermodal services that the Commission has always sought to promote.

StarBand also notes that the Commission has sought to foster the growth of advanced telecommunications services to rural and isolated areas of the country, including Indian tribal lands. Satellite broadband service is unique in its capability to provide Internet access quickly and efficiently to such areas. For example, StarBand has recently installed transmit/receive dishes on the Havasupai Indian Reservation in Arizona, which for the first time will permit members of that tribe to access high quality Internet links for communication and information. The ability to serve such users could be placed at risk, however, if mandated open access is imposed. If multiple service providers were permitted to piggyback on the StarBand platform, a larger portion of the capacity could end up being devoted to consumers in urban areas simply because each ISP would need access to sufficient users to make its business viable.

The Commission should continue to adhere to its present course, allowing the broadband service marketplace a chance to develop before considering government regulation. The market for this service is only now being established, and many providers are seeking to offer a variety of broadband access technologies and services to consumers. It therefore appears highly probable that competition in the marketplace will provide consumers desiring high-speed access with more than sufficient alternatives. In any case, the Commission should at least conclude that no regulatory intervention is warranted with respect to new entrants in the broadband marketplace providing satellite-based options to consumers.

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COMMENTS OF STARBAND COMMUNICATIONS INC.

StarBand Communications Inc. (“StarBand”), pursuant to Sections 1.415 and 1.430 of the Commission’s rules (47 C.F.R. §§ 1.415 and 1.430), submits these comments regarding the Commission’s Notice of Proposed Rule Making (“NPRM”) in the above-captioned docket.¹ The Commission has sought public input in connection with its examination of the regulatory treatment that should be accorded to cable modem services offered by cable system operators to provide high-speed Internet services to their customers. The Commission also seeks comment on whether, and how, an approach adopted for these service providers might appropriately be extended to other providers of broadband Internet access.

I. STATEMENT OF INTEREST

As a new service provider in a nascent sector of the broadband Internet access market, StarBand is especially interested in the potential impact of the

¹ See *Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, FCC 00-355, slip op. (released September 28, 2000).

Commission's actions in this docket on the emergence of a broadband services industry, and the benefits to the public expected to result from this new industry. StarBand, which is headquartered in McLean, Virginia, is a new company formed for the purpose of offering the first true two-way, high-speed consumer satellite service permitting direct connection to the Internet. StarBand's strategic partners include Gilat Satellite Networks, Ltd. ("Gilat"), Microsoft Corporation ("Microsoft") and Echostar Communications Corporation ("EchoStar").

StarBand commenced service just last month using very small aperture terminal ("VSAT") technology that has been developed over many years by Gilat. This technology is already being used at over 200,000 businesses locations throughout the United States and the world to support a wide variety of corporate applications. The StarBand system uses a 24 x 36 inch satellite dish mounted on or near the user's home at any point with a clear, unobstructed view of the southern sky.² Connection to the Internet is provided via satellite through regional hub ground stations located within the United States.³ The remote antennas have both transmit and receive capability and thus provide users with two-way communications links that can download content up to 10 times faster than the fastest dial-up service.

Unlike other types of broadband access, the StarBand service is available virtually everywhere in the continental United States, offering consumers high-quality

² StarBand Internet service is currently being provided over two different satellites: the GE American Communications, Inc. GE-4 satellite located at 101° West Longitude (W.L.) and the Loral Skynet Telstar 7 satellite located at 129° W.L.

³ StarBand today acquires its ability to communicate with various satellites pursuant to services agreements with Gilat and Spacenet Inc., a wholly-owned subsidiary of Gilat. Currently, two hub stations are in use, and the company anticipates adding six additional hubs in the future.

Internet access regardless of how far they live from the nearest telephone switch or cable system node. The company's core target market is thus the fifty million rural and suburban U.S. homes that cannot currently be served by cable modems or digital subscriber line ("DSL") service. Indeed, as discussed in greater detail below, StarBand initiated its service with antennas installed at the Havasupai Indian Reservation in Arizona. Its service will permit members of this tribe to gain access for the first time to a wealth of new communications and information opportunities, including e-mail and distance education. *See* Attachment A.

II. DISCUSSION

A. **It Would Be Inappropriate For the Commission To Impose New Regulatory Burdens On Satellite Broadband Access At This Time. (Addressing NPRM Paragraphs 43-46)**⁴

Among the many questions posed by the Commission in the NPRM is whether, consistent with the Commission's statutory mandate, any regulatory model it adopts to deal with cable modem services and platforms should also be applied to other means of broadband service delivery, including wireless, satellite and unlicensed technologies.⁵ As discussed in greater detail below, StarBand believes that FCC intervention into *any* part of the broadband services marketplace is, at best, premature.⁶ In any case, regardless of what action the Commission might take with respect to cable

⁴ These comments do not track directly the order of issues in the NPRM, as encouraged by the Commission; instead, each major heading identifies the specific paragraphs to which the ensuing discussion is addressed as a means of facilitating the Commission's review process. *See* NPRM, FCC 00-355, slip op. at 23 (¶ 60).

⁵ *See* NPRM, FCC 00-355, slip op. at 19 (¶ 44).

⁶ *See* Section II.B., *infra*. StarBand does not address directly the legal issues concerning the Commission's authority to regulate broadband Internet providers as "telecommunications services." These comments assume that the Commission will ultimately reach the issue whether it should impose or forbear from such regulation.

modem services, new regulation of the just now emerging satellite broadband sector not only could strangle these services in the cradle, but would also do much to undermine Commission policies promoting intermodal service competition and encouraging the growth of high-speed Internet access options in rural, insular and unserved areas.

1. Increased Federal Regulation of Satellite Broadband Services Would Be Inappropriate As A Matter of Policy.

As the Commission has acknowledged in its most recent periodic report pursuant to Section 706 of the Telecommunications Act of 1996, “provision of high-speed services over satellite technology is still in the early stages of deployment,” and subscribers number only about 60,000 nationwide.⁷ Indeed, until StarBand began offering its service just a few weeks ago, there was no two-way consumer-oriented service offering direct connection to the Internet by satellite. Because this type of service is so new, no one is in a position to predict exactly how it will develop, nor can anyone reasonably assert that a credible basis exists to conclude that government regulation of its service offerings is justified.

Many satellite companies are in a position to provide capacity for space-based Internet services in the United States, and there are many additional competitors on the horizon that plan to offer dedicated broadband services within the next few years.⁸

Accordingly, despite its early stage of development, competitive pressures already exist

⁷ See *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*, FCC 00-290, slip op. at 52 & 82 (¶¶ 111 & 202) (released August 21, 2000) (“*Second Section 706 Report*”).

⁸ See, e.g., *Second Section 706 Report*, FCC 00-290, slip op. at 82 (¶ 201) & n.289 (noting the plans for deployment of new systems “capable of providing residential and business advanced services over the next several years” by Hughes (Spaceway), AstroLink, iSKY (now WildBlue), CyberStar, SkyBridge, Teledesic and PanAmSat).

in this sector of the market and promise to increase substantially as these new systems are introduced.

In view of the fact that the entire broadband industry is very new, and the satellite component of this industry is newer still, StarBand believes that the only appropriate course of action at this time – even if the Commission determines that data transport offered by new broadband service providers may be subject to regulation as a “telecommunications service” – is to allow competition to develop naturally as market forces dictate. Only after the market has reached an appropriate stage of maturity should the Commission determine whether there has been a market failure that requires regulatory intervention.

Even if the Commission concludes there is a need for regulation of some links to the home, the Commission should intervene only with a scalpel and not with a machete, narrowly tailoring its intervention to the appropriate providers. As Chairman Kennard commented just recently in remarks delivered to the Voice Over Net Conference in Atlanta, “treating incumbents and newcomers in a market the same would only result in creating barriers to new entrants and killing innovation.”⁹ In the context of broadband services, there are no true “incumbents.”

The core issue surrounding “open access” is the ability of Internet service providers and consumers to gain access to each other via various conduits. In the broadband services marketplace, competing access services have developed over both traditional telephone transport networks, which are subject to common carrier regulation,

⁹ “Internet Telephony: America Is Waiting,” Remarks By FCC Chairman William E. Kennard Before the Voice Over Net Conference, at 5 (Atlanta, Georgia -- September 12, 2000) (as prepared for delivery).

and over cable wiring, which is not. Thus, even before the addition of emerging wireless, satellite, and potential unlicensed services, neither consumers nor ISPs are constrained to a single avenue of access. This contrasts with the initial stages of the development of the online computer industry, where the only available method for these two groups to access each other was through telephone lines. Long-standing legal principles required that telephone companies accommodate each reasonable request for service.¹⁰ A large number of ISPs did access this conduit under this inherited regulatory model.¹¹

The success of the traditional common carrier model for incumbent local telephone companies and their legacy voice telephone technology in accommodating the initial growth in the number of ISPs, however, is no indication that this same regulatory model should be applied to dissimilar companies and technologies under dramatically different market conditions. While the degree of consumer choice among ISPs accessed through incumbent local telephone companies has been beneficial, the emergence of additional modes of data transport for end users should add more options for consumers and continue to ensure competitive choices. There is no demonstrated need to extend telecommunications service-type regulation to these new modes in order to preserve these benefits; indeed, as discussed below, imposing regulatory burdens may inhibit new entry. Absent any government mandate, it can be expected that within the next few years many U.S. consumers will have access to multiple providers of DSL service, at least one cable

¹⁰ See 47 U.S.C. § 201.

¹¹ A recent Government Accounting Office study estimated that there are approximately 7,000 ISPs providing service in the United States, and 92% of U.S. consumers have seven or more ISPs from which to choose. See "Technological and Regulatory Factors Affecting Consumer Choice of Internet Providers," GAO-01-93, Report to the Subcommittee on Antitrust, Business Rights and Competition, Committee on the Judiciary, United States Senate, at 29 (October 2000) ("GAO Report").

modem service provider,¹² multiple wireless services, multiple satellite broadband providers, and potentially other “last mile” services offered on an unlicensed basis. Even if it were a side-effect of a less rather than more regulatory approach, as noted in the GAO Report, many industry analysts believe that a reduction of consumer choice at the ISP layer is not a concern so long as there is adequate competition among providers of physical transport to the Internet.¹³

The rationale against extending a regulatory framework to the broadband services market is especially salient with respect to the satellite sector of the market. Today, no providers of satellite service within the U.S. dominate the satellite market. StarBand has procured capacity from some of these providers to offer its direct-to-home data services, and other satellite-based two-way broadband services are imminent (including joint ventures and start-up companies that have proposed dedicated broadband satellite systems).¹⁴ These various approaches will provide new competition to existing and future DSL and cable modem-based broadband ventures and to each other, but are still in a state of flux and development.

With respect to satellite services specifically, there have historically been multiple service providers. While those seeking access to new spectrum in the Ku-band, or at higher frequencies (Ka- and V-band) include existing service providers, such as PanAmSat, GE Americom and Loral, they also include a variety of new entrants and

¹² The GAO cites January 2000 FCC figures that 210 communities in 28 states have awarded franchises to competitive cable systems, known as “overbuilds.” See GAO Report, GAO-01-93, at 24 n.28.

¹³ See GAO Report, GAO-01-93, at 30.

¹⁴ For example, DirecTV plans to launch a two-way version of its DirecPC service early next year.

joint ventures that will compete with the existing providers.¹⁵ With the exception of satellite services offered by companies otherwise engaged in telephone common carriage, there has never been a compulsion for satellite service providers to hold themselves out indifferently to the public and subject themselves to full common carrier regulation; indeed, most have operated as private carriers. In the near term, the potential satellite options for users can only be expected to grow, ensuring that there will be no need to alter the historic approach of limited regulation of satellite space segment.

2. Imposition of An Open-Access Regime Upon Satellite Broadband Service Providers Would Significantly Impede The Development of New Services, Such As StarBand. (Addressing NPRM Paragraphs 47-48)

The particular satellite business model being pursued by StarBand would be particularly ill-suited to imposition of an open access regime in that the company's core business is as an ISP, not as a general provider of basic data telecommunications service via satellite. That is, while StarBand provides a portion of the conduit for data transport to the Internet backbone using its own ground segment facilities, the final link to the Internet user is established through intermediate space-segment capacity that is leased from others.

From a technical/security perspective, it is critical that StarBand, just like any other ISP, be able to guarantee its subscribers a secure on-line environment. This is accomplished by offering users firewall applications to protect them from hackers and by initiating sessions through a user authentication process at the outset of each on-

¹⁵ See note 8, *supra*.

line session. In order to complete the authentication process, it is necessary for a subscriber to attach to the host's servers where the member information is stored.

Member experience is also notably enhanced by the ability to connect directly to the ISP's homepage because this site serves as a central repository for member information, including e-mailboxes, message boards, subscriber account information, ISP policy information (e.g. privacy policy) and new subscriber service offerings. Because the primary means of communication between an ISP and its subscribers is on-line, it is necessary to maintain some measure of continuity with the subscribers by presenting them with the ISP homepage immediately after the authentication process. Indeed, subscribers expect that the ISP will use this medium as a means of keeping them informed of changes in service, as well as site content.

Continuity with subscribers is also important from a commercial standpoint. ISPs typically generate revenues from access charges, the monthly subscription rate for Internet connectivity, and also from non-access revenue, comprised of various e-commerce and ancillary service offerings that can be selected by subscribers. Both revenue streams are critical to the success of an ISP, and broadband models are built on the assumption that significant non-access revenues will be generated by offering rich media content that will be attractive to subscribers. In order to generate non-access revenue, however, ISPs need to attract customers to proprietary content and services from which the ISP can derive a revenue share. In a broadband offering, these non-access revenues are generated through traditional and contextual advertising, pay-per-view offerings, customized subscriptions, product sales and affiliations with other on-line services. These non-access revenues therefore are a key component of an overall ISP

business plan without which there is no sound commercial basis for offering service. If satellite ISPs were to be deprived of this critical source of revenue, they would be likely to forego entering the business, thus lessening competition, rather than increasing it.

Requiring an entity such as StarBand to make available a portion of its uplink capacity to all interested competitors would be a powerful disincentive to pursuing such a business undertaking at all. While StarBand would shoulder all of the risks of the enterprise by developing the technology and investing in the required facilities, including leased satellite capacity, it could theoretically be called upon to share the benefits of its investment with any other ISP interested in using the same data transport mechanism. This, in turn, would undermine the three critical bases that permit ISPs to develop a close association with their subscribers and establish themselves in a very competitive market: technical security, unique member experiences and on-line, non-access revenue streams. No ISP would pursue an approach that would deny it the opportunity to develop these critical elements of business success.

Conversely, any interested ISP could establish its own satellite transmission arrangements simply by developing the required technology, or leasing available technology and equipment, and procuring its own satellite capacity. There are no insurmountable barriers to entry in these circumstances and no reason to require one new entrant to shoulder the burdens of other new entrants who themselves can have ready access of their own to the same consumers.

In this regard, Commissioner Powell has noted recently that “regulatory intervention necessarily directs the course of a market and may distort it by diverting

capital away from certain enterprises and towards others.”¹⁶ Accordingly, Commissioner Powell went on to observe that “when dealing with vibrant markets in their infancy, [the Commission] should be very reluctant to accept the propriety of a regulatory solution.”¹⁷ Instead, the Commission should continue to monitor the market, but decline to intervene absent conclusive evidence that the market is failing to provide consumers with adequate options for Internet access. Such a circumstance is clearly not present in the satellite broadband sector of the market, which presently accounts for only a tiny portion of overall high-speed Internet service, and unwarranted intervention could actually stifle the development of this broadband access alternative.

**3. Impeding the Development of Satellite Broadband Service
Would Undermine Other Significant Commission Policy Goals.**

a. The Benefits of Intermodal Competition.

One of the best ways that the Commission can prevent anyone from dominating a particular market is to ensure that there are multiple means through which the service can be provided. For example, prices for mobile telephone service have dropped substantially during the past decade with the entry of digital personal communications services and other wireless services offered by a variety of companies using spectrum made newly available for these services. These services, in turn, are now beginning to compete more directly with the incumbent wireline telephone companies. The development of such intermodal competition has long been a significant policy goal

¹⁶ Statement of Commissioner Michael K. Powell, *En Banc Hearing, Applications of America Online, Inc. and Time Warner, Inc. for Transfers of Control*, CS Dkt. No. 00-30, at 1 (July 27, 2000).

¹⁷ *Id.* at 2.

of the Commission as a means of ensuring that telecommunications consumers have access to the broadest range of service offerings and the lowest prices.¹⁸

In its recent Section 706 report, the Commission noted the importance of multiple service models in providing increased consumer access to high-speed broadband services. In addition to examining the availability of cable modem and DSL lines throughout the country, the Commission also studied the development of fixed wireless services in several different bands, different approaches to satellite delivery, and use of unlicensed spectrum bands for provision of service. The Report noted that “competition among providers within certain technologies is emerging and that there is the potential for several different technological options for providing advanced services.”¹⁹

The danger to the emerging success of these new service providers is that the introduction of unnecessary and heavy-handed regulations that have no applicability to the types of businesses that these companies are engaged in will stifle their development. As Chairman Kennard noted at the recent VON Conference, as the telecommunications marketplace transitions to greater competition among different delivery mechanisms, “the answer is not to saddle nascent technology with the increasingly obsolete legacy regulations of the past.”²⁰ StarBand believes that

¹⁸ See, e.g., *American Telephone And Telegraph Company, et al.*, 7 FCC Rcd 136, 138 (¶ 21) (1992) (“[Intermodal] competition will give service providers and other users greater choice in selecting facilities and thus will enable them to maintain, or improve and enhance, the economy and efficiency of their operations. The opportunity to choose among a range of facilities further allows service providers to be more responsive to customer needs in terms of price, service quality, and service availability.”)

¹⁹ See *Second Section 706 Report*, FCC 00-290, slip op. at 83 (¶ 203).

²⁰ “Internet Telephony: America Is Waiting,” Remarks By FCC Chairman William E. Kennard Before the Voice Over Net Conference, at 5 (Atlanta, Georgia -- September 12, 2000) (as prepared for delivery).

introducing such regulations in the broadband market would have the result of stifling exactly the sort of innovation and growth of competitive intermodal services that the Commission has always sought to -- and should, as a matter of policy -- promote.

b. Service to Isolated Areas and Tribal Lands

StarBand also notes that this Commission has made a particular priority the extension of advanced telecommunications services to areas of the country that are isolated and insular, including Indian tribal lands.²¹ The Commission has also specifically observed that "satellites are an excellent technology for delivering both basic and advanced telecommunication services to unserved, rural, insular or economically isolated areas, including Native American communities, Alaska, Hawaii, and Puerto Rico" ²² Indeed, satellite broadband service is unique in its capability to provide such access quickly and efficiently, and, as noted above, provision of service to areas that have no cable service and are located many miles from the nearest telephone switching office is the core of StarBand's business plan. StarBand's service launch thus offers new impetus toward the realization of the Commission's goal of providing service to parts of the country that currently lack options for Internet access.

As a recent article in the *Washington Post* illustrates, StarBand is very much aware of its service's capability to provide rapid benefits in isolated communities

²¹ See *Extending Wireless Telecommunications Services To Tribal Lands*, 15 FCC Rcd 11794 (2000).

²² *Id.* at 11812 (¶ 50), citing *Establishment of Policies and Service Rules for the Mobile-Satellite Service in the 2 GHz Band, Notice of Proposed Rulemaking*, 14 FCC Rcd 3893, 4886-87 (¶ 95)(1999). See also GAO Report, GAO-01-93, at 46 (satellite systems "can be particularly beneficial in bringing services to remote or rural areas that are unlikely to obtain services from wireline providers.")

and on Indian reservations. As the article explains, StarBand has recently installed six of its transmit/receive dishes on the Havusupai Indian Reservation in Arizona – which lies “at the bottom of the Grand Canyon, a two-hour drive and an eight-mile walk” from any town, in an area that even radio broadcast technology has not reached.²³ These six VSAT terminals, including links at the Head Start Office, the Indian Child Welfare Office, and the tribal school, will for the first time permit members of the tribe to utilize high quality Internet links for purposes such as distance education, exploration of substance abuse programs, and communication with students who have left the reservation to continue their education.²⁴ This last use is of particular significance in that many young Havusupai that leave the reservation to further their education return home without a diploma due to problems adjusting to isolation and disconnection from home and family.²⁵

The ability to serve such customers could be placed at risk, however, if traditional telephone-type regulation and/or mandated open access is imposed. Affordable service to rural and isolated areas is made possible, in part, by the fact that substantial numbers of such users across the country can be aggregated with those in densely populated areas, so that all benefit from economies of scale. If multiple service providers were permitted to piggyback on the StarBand platform, a larger portion of the capacity could end up being devoted to consumers in urban areas simply by virtue of the need for each individual ISP to gain access to a critical mass of users to make its business

²³ See Attachment A at 1, Peter S. Goodman, “Dishing Up a New Link to the Internet,” *Washington Post*, Page A01, November 6, 2000.

²⁴ *Id.* at 2.

²⁵ *Id.*

viable. In the worst-case scenario, too many service providers seeking to use the same facilities could render all unprofitable through division of the available consumers, ultimately causing the failure of the service. Even in the absence of this result, available capacity for rural users could be significantly reduced.

There is thus a substantial risk that, in endeavoring to enhance consumer broadband access options through market intervention, the Commission could undermine its important goal of guaranteeing that all Americans actually gain timely access to advanced telecommunications capability. The Commission should be mindful of this risk, and proceed in a careful and deliberate manner that ensures that no disincentive is created to deployment of facilities that can serve rural and insular areas, such as Indian lands.²⁶

**B. There Is No Sound Basis For Increased Federal Regulation of Any Broadband Services At This Time.
(Addressing *NPRM* Paragraphs 35-42)**

As discussed above, StarBand's concerns are not limited to satellite broadband services, as it believes that extension of regulations traditionally applied in the old monopoly local voice services market to any portion of the nascent broadband services market could be damaging.²⁷ The Commission should continue to adhere to the

²⁶ Section 706 of the Telecommunications Act of 1996 specifically directs the Commission to encourage deployment of "advanced telecommunications capability to all Americans" by means including "regulatory forbearance" and "other regulating methods that remove barriers to infrastructure investment." See 47 U.S.C.A. § 157 (statutory note).

²⁷ In any case, it is far from clear that a workable open access standard can be successfully mandated by regulation. As observed in the recent GAO Report concerning consumer choice of Internet service, the Canadian experience in attempting to impose regulation on this market to promote "open access" has thus far been problematic, at best. Four years after Canadian cable service providers were officially required to facilitate access by multiple ISPs, no actual open access regime has been finalized, and GAO notes that no

course set out by Chairman Kennard in connection with the approval of the AT&T-Media One merger, when he observed that “there are powerful marketplace incentives to ensure that consumers have . . . choices,” and that the Commission should therefore “allow the nascent broadband marketplace a chance to develop before imposing a government-ordered regime.”²⁸ While satellite service is the newest part of this market sector, the sector as a whole is just one small part of the online computer service industry. This entire industry needs more time to develop before the Commission evaluates whether any marketplace failure exists that would warrant federal intervention.

Canadian users obtaining Internet access by cable modem currently have a choice of ISPs. *See* GAO Report, GAO-01-93, at 59-60.

²⁸ Statement Of Chairman William E. Kennard, *In the Matter of Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from MediaOne Group, Inc. to AT&T Corp*, CS Docket No. 99-251, at 2 (released June 5, 2000).

III. CONCLUSION

For the foregoing reasons, StarBand respectfully urges the Commission to refrain from imposing any sort of open access regime on broadband Internet service providers. The market for this service is only now being established, and many providers are already seeking to offer a variety of broadband access technologies and services to consumers. It therefore appears virtually certain that competition in the marketplace will provide consumers desiring high-speed access with sufficient alternatives. In any case, the Commission should decide that regulatory intervention is unwarranted with respect to new entrants to the broadband marketplace providing new satellite-based options to consumers.

Respectfully submitted,

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ATTACHMENT

“Dishing Up a New Link to the Internet”
By Peter S. Goodman

Washington Post
November 6, 2000

Dishing Up a New Link to the Internet

By Peter S. Goodman
Washington Post Staff Writer
Monday, November 6, 2000; Page A01

SUPAI, Ariz. — The first thing that happened after the high-speed Internet arrived in this Indian village was that some people started listening to the radio.

An unremarkable occurrence, until one considers that the Havasupai Indian reservation sits at the bottom of the Grand Canyon, a two-hour drive and an eight-mile walk from anything resembling a town. Its squat wooden houses are encased by the canyon walls. Radio never reached here before.

"If you don't know me by now. . . ." The song seeps through the tinny speakers of a desktop computer in the child welfare office. It has traveled from an oldies station in El Paso, Tex., through the wires of the Internet to a data center in Marietta, Ga., and up to a satellite 23,000 miles above the earth. Then down to a rooftop satellite dish in this creek-side settlement in the cottonwoods, home to 500 people on the red dirt of the canyon floor.

Radio is now here, along with the rest of the World Wide Web, because of a two-way satellite Internet service run by a McLean-based company called StarBand Communications Inc.

Today, StarBand is launching its venture on a national scale--the first such service ever directed at consumers. The company is seeking to establish satellites as a leading route for the high-speed Internet, alongside souped-up cable television on wires and DSL, a technology that rides over phone lines.

Though StarBand began its service here, amid the sagebrush and prickly pear cactus of this Indian reservation, it chose the venue merely to prove the point that its system can deliver a signal far from the domain of cable and DSL. It aims to sell service on less remote ground, in suburban and semirural areas that sit beyond major population centers. It is targeting the 50 million U.S. households that now have no links to the high-speed Internet, or "broadband," a medium expected to enable a host of data-intensive services such as interactive television, digital music and video on demand.

"It's the only technology that you can put anywhere in the U.S.," StarBand chief executive Zur Feldman said. "If you can see the southern sky, we can put in a terminal."

But formidable issues confront the launch of StarBand--for one, the specter of competition from such industry heavyweights as Hughes Network Systems, which has grabbed the lead in the delivery of satellite television service with DirecTV. Hughes plans to introduce a competing service later this year.

Though wires on the ground are not foolproof conduits for the high-speed Internet either, satellite systems entail tricky technical problems. Lightning can impede transmission and wind can blow the dishes out of alignment. Two of the dishes in Supai, for example, were recently put out of order for this reason.

Not least, StarBand must confront fundamental questions about the role of space in the communications universe and the economics of satellite technology. Once viewed as an elegant means to transcend basic geographic limits, some consumer satellite services have more recently gained infamy for the great expense it takes to deploy them before the revenue can start to roll in.

But if these challenges can be navigated, analysts say StarBand could gain rapid success for the simple reason that great stretches of the map are now devoid of links to the high-speed Internet.

Cable television systems upgraded for two-way Internet traffic are the leading route, but they don't go everywhere. DSL only works within three miles of a telephone central office, where the switches and other equipment are kept, leaving millions of households and businesses out of reach.

"There's so much hype around broadband, but when you look at it in terms of its penetration of total households, it's less than 4 percent," said Fritz McCormick, an analyst at Yankee Group in Boston. "There's a lot of ground to be covered still in the market and a lot of very interested consumers."

An Internet Education

It was Sally Tilousi who first dreamed up the idea of bringing broadband to Supai. The director of the village Head Start office, she is facing federal requirements to ensure that her teachers are all certified by 2005. Trouble is, only two Havasupai tribal members have ever graduated from college, Tilousi being one of them. The degree programs are far away in Flagstaff, Phoenix and Las Vegas. Family obligations and lean finances keep her staff rooted here.

Tilousi went looking for help at Northern Arizona University, which uses videoconferencing and the Internet to broadcast higher-education classes to the isolated tribes of the high desert.

An administrator there made inquiries at StarBand, which is a joint venture between an Israeli satellite maker, EchoStar Communications Corp., whose Dish network sells satellite television service, and Microsoft Corp., which views the enterprise as a key way to deliver its MSN Internet access to customers in rural areas.

The university tapped into a federal grant to pay for the installation, and two months ago a team of StarBand technicians arrived. They affixed six satellite dishes on the rooftops--one at the Head Start office, another across the path at the Indian Child Welfare Act office, a third at the tribal court, another up the road at the tourist lodge and two at the school.

Tilousi is working to get the degree programs beamed in to Supai. At the tribal court, the clerk plans to use the Web to explore substance-abuse programs to address a widespread drug and alcohol problem, a factor in 90 percent of the criminal cases on her docket.

The principal at the school, Ronald Arias, is pursuing plans to use the Internet to give his eighth graders a sense of the outside world, before they venture off to boarding schools scattered across the West. It is a trip that often ends badly: Disconnected from home and family, many students turn to drink and drugs. Three of four students return without a diploma.

Some wonder if the Internet might be harnessed to create a kind of virtual high school so children won't have to leave at all.

"This is a turning point for our community," Tilousi said. "Now we're able to access resources on the outside."

Shrinking the Satellite Dish

The deployment in Supai also was a kind of turning point for StarBand. In tandem with the launch there, StarBand set up a dish on the Upper East Side of Manhattan, illustrating the point that its technology can work pretty much anywhere.

"The sweet spot is the 50 million households not passed by a cable or DSL line," said David C. Trachtenberg, StarBand's president and chief marketing officer. "But there's also going to be customers out there who just don't want to deal with the local telephone company or the cable company, or are frustrated with installation problems."

StarBand's chief selling point, though, will be its availability in remote areas and not necessarily its price. Cable or DSL service typically costs \$40 to \$60 a month, depending on the provider and speed of service.

StarBand has yet to detail its prices. But MSN has been quietly offering the satellite service at kiosks inside RadioShack stores across the country, selling it for about \$60 a month as part of the purchase of a computer and a \$395 satellite dish. EchoStar now plans to begin selling StarBand Internet service in a package with its Dish network television service for at least \$60 a month. A special satellite antenna capable of handling both services is required and is to be sold for about \$400.

For years the industry assumed that satellites would be no more than one-way vehicles to transmit the Internet. They were well suited for bringing vast quantities of video and computer data down from space at rapid speed, but sending up information was another matter: It would require a huge dish, far larger than the pizza-size contraptions that made satellite television an appealing option.

DirecPC, a unit of Hughes, now sells one-way high-speed Internet access using satellites. When the customer transmits a signal out--for example, sending e-mail or requesting a Web page--the data travel over a phone line, which requires a dial-in connection. That undercuts one of the chief selling points of broadband--its "always on" connection, meaning a user need not dial in and wait for modems to connect before venturing online.

The Israeli satellite maker leading StarBand, Gilat Satellite Networks Ltd., has built two-way satellite dishes for years, but they typically cost thousands of dollars and are much larger than the consumer variety. StarBand owes its launch to an engineering achievement: Gilat shrank the dishes and dropped the price to less than \$400.

The company now claims the much-coveted distinction of being the first to market with a two-way system for consumers, but it isn't likely to last long. DirecPC already is trying out its new two-way system. Once DirecPC formally begins the service later this year, its powerful brand name and marketing muscle will count as considerable assets.

But if satellites are to become profitable conduits for broadband, they will have to overcome a recent history that is rich in disappointment.

Last year Iridium LLC, a global telephone venture backed by Motorola Inc., landed in bankruptcy and elected to let billions of dollars in satellites burn in space. ICOGlobal Communications Ltd., another telephone enterprise, met a similar fate. Globalstar, a business backed by defense giant Loral Space & Communications Ltd., could well be next: Its stock has plummeted this year, to less than \$3 at one point from more than \$53, as it struggles to gain customers. The stock closed Friday at \$6 a share, up 6

cents.

Analysts say these disasters all share something in common--the unexpectedly rapid spread of terrestrial technologies. As cell towers proliferated farther away from major cities, they brought customers within reach of their cheaper technologies, carving into the market for satellite telephone service.

The question now is whether DSL and cable will similarly be introduced fast enough to take a big chunk of the market away from the satellite companies.

"There have been so many issues in the satellite space lately that there's almost a tendency to say, 'Let's not bother with that,' " said Andy Belt, an analyst at Adventis Corp. "There are pockets out there that are highly attractive," he said, referring to sophisticated users and people with real needs. "The question is, does it amount to something sufficient to pay for these high-cost satellite services? There's a significant fixed cost in keeping these things flying."

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CERTIFICATE OF SERVICE

I, Barbara Robinson, hereby certify that a true and correct copy of the foregoing "Comments of StarBand Communications Inc." was this 1st day of December, 2000, served by hand delivery to the following, as well as by diskette as noted:

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