

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Connect America Fund)	WC Docket No. 10-90
)	
A National Broadband Plan for Our Future)	GN Docket No. 09-51
)	
Establishing Just and Reasonable Rates for Local Exchange Carriers)	WC Docket No. 07-135
)	
High-Cost Universal Service Support)	WC Docket No. 05-337
)	
Developing an Unified Intercarrier Compensation Regime)	CC Docket No. 01-92
)	
Federal-State Joint Board on Universal Service)	CC Docket No. 96-45
)	
Lifeline and Link-Up)	WC Docket No. 03-109

REPLY COMMENTS OF THE SATELLITE BROADBAND PROVIDERS

DISH Network L.L.C., EchoStar Technologies L.L.C., Hughes Network Systems, LLC, Spacenet Inc., ViaSat, Inc., and WildBlue Communications, Inc. (collectively, the “Satellite Broadband Providers”) hereby respond to the comments filed on August 24, 2011 in the above-captioned proceedings, which in turn respond to the Public Notice released by the Commission on August 3, 2011. The record in this proceeding makes clear that the only “industry consensus” is that the ABC Plan and RLEC Plan (collectively, the “Incumbent Wireline Proposals”) do *not* represent the views of the industry as a whole, but rather reflect the parochial interests of a very narrow industry segment—namely, the ILECs that authored them. Indeed, a broad and inclusive cross-section of the industry (including wireline, wireless, and satellite providers), state governments, and public interest groups have soundly rejected those proposals. The Commission should follow suit.

While the Commission can and should reject the Incumbent Wireline Proposals on any number of grounds, it should not credit claims that those plans are defective *because* they rely on satellite technologies to serve the highest-cost households in a given area. These claims are without foundation, and based on mistaken understandings of the capabilities of the “next-generation” satellite broadband networks that will serve the U.S. starting later this year. Satellite providers can and should play an important role in providing high-quality broadband service to unserved and other high-cost households quickly and at low cost.

I. THE RECORD DEMONSTRATES WIDESPREAD RECOGNITION THAT THE INCUMBENT WIRELINE PROPOSALS WOULD HARM CONSUMERS, COMPETITION, AND THE OBJECTIVES OF UNIVERSAL SERVICE

The Satellite Broadband Providers are gratified that they are joined by a wide range of parties—including service providers of all stripes, technology companies, state public utilities commissions, and public interest groups—in opposing the self-serving Incumbent Wireline Proposals.¹ These parties correctly recognize that adopting either of these proposals would harm consumers and competition and undermine the objectives of universal service as set forth in the Communications Act, and of the Connect America Fund (“CAF”) as set forth in the *NPRM*. The Satellite Broadband Providers echo the sentiments of the many parties that have urged the Commission to instead adopt a market-based mechanism for distributing CAF support efficiently in a manner that truly is competitively and technologically neutral.²

¹ See, e.g., Comments of COMPTTEL; Comments of the Rural Independent Competitive Alliance; Comments of XO Communications; Comments of Cellular One; Comments of MetroPCS; Comments of the Rural Cellular Association; Comments of T-Mobile USA; Comments of the American Cable Association; Comments of Time Warner Cable; Comments of Google; Comments of AARP; Comments of the Ad Hoc Telecommunications User Committee; Comments of Free Press; Comments of NASUCA; Comments of the California Public Utilities Commission; Comments of the Maine Public Utilities Commission and Vermont Public Service Board (all filed Aug. 24, 2011).

² See, e.g., Comments of Comcast; Comments of the National Cable & Telecommunications Association; Comments of the Nebraska Public Service Commission (all filed Aug. 24, 2011).

In contrast, those parties that support the Incumbent Wireline Proposals—generally, the service providers that would benefit from those proposals at the expense of consumers and competition—merely parrot the flawed arguments made by the proponents of those proposals. These arguments already have been refuted in the earlier comments of the Satellite Broadband Providers—and in the comments filed by dozens of other parties—and there is no need to repeat that refutation in full here. The Satellite Broadband Providers merely note that the parties that support the Incumbent Wireline Proposals, like their authors, have placed their own interests above those of consumers, while offering no convincing explanation as to why those proposals are in the public interest. In short, the balance of meaningful public interest analysis on the record clearly justifies the rejection of the Incumbent Wireline Proposals, and the Commission should act accordingly.

II. THE RECORD DEMONSTRATES THAT NEXT-GENERATION SATELLITE NETWORKS WILL SUPPORT HIGH-QUALITY, LOW-COST BROADBAND SERVICES THAT MEET AND EXCEED THE REQUIREMENTS OF THE ACT

As discussed above, the comments in response to the Public Notice highlight numerous flaws in the Incumbent Wireline Proposals, and demonstrate that those proposals are inconsistent with the interests of consumers and competition, as well as the objectives of universal service. In attempting to discredit the Incumbent Wireline Proposals, some parties have made unfounded statements about satellite technologies generally and their ability to support high-quality, cost-effective broadband services that would advance the objectives of universal service, consistent with the requirements of the Act.³ More specifically, these parties claim that: (i) satellite technologies are “inferior” to terrestrial technologies and (ii) the Incumbent Wireline Proposals’

³ *See, e.g.*, Comments of the Rural Independent Competitive Alliance (Aug. 24, 2011); Comments of the Nebraska Rural Independent Companies (Aug. 24, 2011). The Rural Associations make similar arguments, although they do so in an apparent effort to appease certain rural wireless carriers. *See* Comments of NECA, NCA, OPASTCO, and WTA (Aug. 24, 2011).

reliance on satellite technologies to serve the highest-cost households in a given area therefore would fail to meet the “reasonable comparability” standard set forth in Section 254(b)(3).⁴

Simply put, these claims are unfounded. There is no factual basis for concluding that satellite technologies are “inferior” to terrestrial technologies such that they should be denied access to universal service support. Rather, satellite broadband technologies can and should play a key role in providing truly ubiquitous broadband access in a timely and affordable manner that meets the “reasonable comparability” standard of Section 254(b)(3). Thus, while the Incumbent Wireline Proposals are justifiably assailable on many grounds, the reliance on satellite technologies to solve part of the problem is not one of them.

A. Satellite Technologies Can and Should Play an Important Role in Serving High-Cost and “Unserved” Households

As an initial matter, the Commission should reject any suggestion that satellite technologies are inferior to their terrestrial counterparts because such assertions ignore the impressive capabilities of the next-generation satellite broadband networks that are being launched starting this fall. Indeed, most of the parties criticizing satellite broadband technologies base those criticisms on systems that are currently congested due to oversubscription of their services. They fail to provide any tangible evidence in support of their claims about satellite technology *per se*.⁵ These parties ignore the fact that, over the past few years, satellite broadband providers have invested billions of dollars of private capital to develop next-generation broadband networks that are designed to overcome the congestion on legacy satellite networks, and are optimized to provide a broadband experience on par with many terrestrial solutions. These efforts will bear fruit over the next year with the launch of the ViaSat-1 and Jupiter satellites, which will drive a quantum shift in

⁴ 47 U.S.C. § 254(b)(3).

⁵ *See, e.g.*, Comments of the Texas Statewide Telephone Cooperative (Aug. 24, 2011) (asserting that “the majority of the telecommunications industry acknowledges that satellite technology today cannot support even quality voice service, much less the more stringent technical requirements for broadband service expected and demanded by customers . . .”).

the speed and quality of satellite broadband service, while simultaneously increasing available capacity and ultimately allowing satellite broadband providers to serve millions of additional customers.

Those who have seen next-generation satellite broadband technology in action—including Commission staff—have been impressed with its capabilities. Both ViaSat and Hughes have conducted highly successful demonstrations of their next-generation technologies at the Commission over the past year,⁶ and in the process have reshaped perceptions of what satellite broadband is and can be. In particular, ViaSat and Hughes demonstrated that next-generation technologies can support an excellent user experience for the most popular broadband applications (that also consume the most Internet bandwidth)—including video streaming, peer-to-peer networking, e-mail, and web surfing,⁷ while also providing a high-quality VoIP service that is on par with terrestrial wireless solutions. Indeed, for virtually all applications the difference in latency between next-generation satellite broadband and terrestrial wireless broadband will be imperceptible and will not affect the user experience. Moreover, satellite broadband service will provide many significant advantages over terrestrial technologies, such as DSL.⁸

While the benefits of satellite technologies are far more extensive than mere technical specifications would suggest, next-generation broadband satellites will support speeds of 12/3 Mbps and above—far higher than the speeds offered by many terrestrial providers. Speed is recognized as one of the most critical factors in supporting applications such as telemedicine,

⁶ See *Advisory: Panelists Announced for April 27 Workshop on Modernizing Universal Service for Broadband* (Apr. 22, 2011) (announcing public demonstrations of satellite broadband service by ViaSat).

⁷ See *Cisco Visual Networking Index: Forecast and Methodology, 2009-2014*, at 10 (Jun. 2, 2010).

⁸ Although some parties claim that satellite broadband networks will be unable to provide quality service due to weather, new coding schemes, technologies, and network configurations have been employed to mitigate these factors. Line-of-sight issues have not been a meaningful impediment to deploying satellite broadband service to date. In any

distance learning and high definition video conferencing. These next-generation satellites also will be capable of operating with low jitter and providing symmetrical speeds that are needed to support high-definition video conferencing. By contrast, most DSL networks are asynchronous, with upload speeds too slow to support many applications such as telepresence, telemedicine, remote education, high-definition video downloading and high-definition video conferencing.⁹ In an absolute sense, long-loop DSL has significant speed limitations as well—with a maximum download speed of approximately 4 Mbps. In many cases, long-loop DSL would be unable to meet the proposed 1 Mbps upstream standard at all.

B. The Use of Satellite Technologies Is Fully Consistent with the Requirements of Section 254 of the Act

Several parties claim that the Incumbent Wireline Proposals would fail to meet the requirements of the Act because their reliance on satellite technologies to serve the highest-cost households in a given area would fail to meet the “reasonable comparability” standard set forth in Section 254(b)(3) of the Act. As discussed in the previous section, satellite broadband technologies have been shown to provide a user experience that is better than many of the terrestrial services that *today* receive support. Thus, the factual premise of this argument is flawed, rendering it moot. Moreover, the Commission has recognized *for years* that satellite technologies can qualify for universal service support under the Act. In 1997, the Commission determined that providers using *any* technology, including satellite technologies, are eligible for USF support as long as they meet the requirements of the Act and the Commission’s rules¹⁰—and specifically found that “*non-*

event, terrestrial wireless technologies face line-of-sight issues, while terrestrial wireline providers often have difficulty reaching unserved households with physical plant.

⁹ See, e.g., THE BROADBAND AVAILABILITY GAP, OBI Technical Paper No. 1, at 86. See also Federal Communications Commission, *Internet Access Services: Status As of June 30, 2010*, at 23, Tbl. 7.

¹⁰ *Federal-State Joint Board on Universal Service*, Report and Order, 12 FCC Rcd 8776, at ¶ 145 (1997) (“*USF First Report and Order*”). The Commission also concluded that “any wholesale exclusion of a class of carriers by the Commission would be inconsistent with the language of the statute and the pro-competitive goals of the 1996 Act.” *Id.*

*landline telecommunications providers should be eligible to receive universal service support even though their local calls are completed via satellite.”*¹¹

That said, it is worth noting that those parties that criticize satellite misinterpret the “reasonable comparability” standard and the manner in which it has been implemented by the Commission. Critically, that standard does not require the Commission to ensure that rural Americans have the best service *available* in urban areas, which most *urban* households do not enjoy. Rather, that standard merely requires that the Commission ensure that rural Americans have access to certain “core” services that are available in urban areas.¹² The Act provides a specific mechanism through which the Commission must define these “core” services—namely, the list of “supported services” defined in accordance with Section 254(c)(1) of the Act.¹³

The Satellite Broadband Providers welcome the inclusion of broadband service on the list of “supported services,” and urge the Commission to establish minimum thresholds for speed and provisioning (*e.g.*, 4/1 Mbps with a “BHOL” of 160 kbps) in doing so. However, any requirements included in the list should be specified in a competitively neutral manner, in terms of capabilities, and not specific technology or system architecture. Eligibility for support should be based on whether a provider’s service—be it satellite or terrestrial—is capable of meeting these objective criteria.

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¹¹ *Federal-State Joint Board on Universal Service*, Fourth Order on Reconsideration, 13 FCC Rcd 5318, at ¶ 10 (1997).

¹² *See USF First Report and Order* ¶¶ 60 *et seq.* (defining “core” services pursuant to Section 254(c)(1) in order to fulfill Section 254(b)(3)’s “reasonable comparability” mandate).

¹³ *See* 47 C.F.R. § 54.101(a).

CONCLUSION

For the reasons set forth above, the Satellite Broadband Providers urge the Commission to reject the universal service aspects of the Incumbent Wireline Proposals, without foreclosing satellite broadband providers from playing an important role in whatever CAF mechanism eventually is adopted by the Commission.

Respectfully submitted,

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