BEFORE THE NEBRASKA PUBLIC SERVICE COMMISSION

In the Matter of the Commission,)	
on its own motion, to increase)	
broadband adoption among low-)	
income consumers through the)	Application No. NUSF-91
development of a Nebraska)	¥
broadband telephone assistance)	
program)	

COMMENTS OF THE SATELLITE BROADCASTING & COMMUNICATIONS ASSOCIATION

The Satellite Broadcasting & Communications Association ("SBCA") supports the efforts of the Nebraska Public Service Commission ("PSC") to increase the use of broadband services. In order to maximize that goal in a state with a geography and population as diverse as Nebraska, SBCA urges the PSC to implement a "technologically neutral" program. By empowering consumers to select the technology platform that best suits their needs, the PSC can expedite the deployment and resulting benefits from broadband services.

I. ABOUT SBCA

SBCA is the national trade organization representing the consumer satellite industry. It is committed to creating value added programs to improve the long-term growth and sustainability of our member companies through member benefits, skills assessments and training. SBCA also provides industry leadership in protecting the ability of consumers and technicians to access the best in satellite delivered services at a fair price.

¹ Additional information on the SBCA is available on the web at http://sbca.org.

Two members of SBCA provide internet broadband services via satellite. They are ViaSat and Hughes Network Systems. A third member, DISH Networks, LLC provides telecommunications and wireline broadband in Nebraska through its subsidiary, dishNET Wireline, L.L.C.²

II. SATELLITE BROADBAND SERVICES

The satellite broadband industry is seeing explosive improvements in capacity and performance. For example, state-of-the art satellites that have been designed for residential services offer capacity of 130 gigabits per second. ³ That represents an improvement factor of 1,000 over the initial satellites launched in the early 1970s.

Consumers in Nebraska can receive high-quality satellite broadband solutions with speeds up to 5/1 Mbps. In addition, these services also have the important benefit of low jitter (*i.e.* fluctuations in latency) and can support Voice over Internet Protocol applications. These characteristics make satellite services ideal for the most popular Internet applications such as video streaming, peer-to-peer networking, e-mail and web surfing.⁴

² DISH Network's, LLC affiliate company dishNET Wireline L.L.C. provides local exchange, exchange access and interexchange services in Nebraska. See: *In the Matter of the Application of Liberty-Bell Telecom LLC, Denver, Colorado, seeking authority to provide local exchange, exchange access and interexchange services throughout the state of Nebraska*. Application No. C-4283, Sept. 27, 2010.

³ Satellite Service Can Help to Effectively Close the Broadband Gap, Exhibit A to comments of ViaSat Inc., *In the Matter of the Connect American Fund, WC Docket No. 10-96, A National Broadband Plan for our Future, On Docket No. 09-51; Establishing Just and Reasonable Rates for Local Exchange Carriers, WC Docket No. 07-135; High-Cost Universal 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; and Lifeline and Link-Up, Docket No. 03-109; Federal Communications Commission, filed April 11, 2011; (collectively "National Broadband Plan dockets").*

⁴ See Cisco Visual Networking Index: Forecast and Methodology, 2009-2014, at 10 (June 2, 2010).

Other popular applications such as distance learning, telecommuting and telehealth are available via satellite service.

The Federal Communications Commission ("FCC") has acknowledged the improvement in satellite services. In its recent broadband report, the FCC included satellite technology for the first time:

While in the past we have collected and released raw data on satellite performance, we have not reported on test results from this technology, as we recognized the industry was on the verge of a major transition. In 2011, the satellite industry began launching a new generation of satellites offering performance as much as 100 times superior to the previous generation, leading to the entry of new satellite-based broadband providers. Consequently, we are now able to include comparisons between satellite and wireline technologies in this report. ⁵

The report also indicated that ViaSat was best in the nation by providing service at 140 percent of its advertised download speeds.

Satellites that provide consumer broadband services cover a large portion of the United States and both Hughes and ViaSat have plans to launch additional high capacity satellites. The PSC can increase the likelihood that Nebraska consumers will have access to next generation satellite broadband by allowing satellite broadband providers to participate fully and directly in any programs designed to support broadband deployment. Such program participation by satellite broadband providers helps build the business case to attract the capital investment necessary for new satellites.

⁵ 2013 Measuring Broadband America February Report, "A Report on Consumer Broadband Performance in the U.S," Federal Communications Commission Office of Engineering and Technology and Consumer and Governmental Affairs Bureau, Background & Overview, page 4.

III. NEBRASKA TELEPHONE ASSISTANCE PROGRAM ("NTAP")

In its request for comments, the PSC focuses on whether it should add a broadband lifeline component to its existing NTAP program for low-income consumers. SBCA believes that the benefits outweigh any downside for a program that expands access to broadband services to low-income or hard to serve areas, especially if those programs are structured so that they are technologically neutral and capture the economic benefits of efficient providers.

SBCA believes that Nebraska should begin with the concept of "competitive neutrality" as adopted by the FCC in its *USF First Report and Order*. There the FCC adopted the guiding principle that "universal support mechanisms and rules [should] neither unfairly favor nor disfavor one technology over another." The FCC focused on adopting rules to minimize competitive and technological bias and recognized that such rules would "facilitate a market-based process whereby each user comes to be served by the most efficient technology and carrier."

The FCC also acknowledged that competitive neutrality requires an inclusive approach to funding mechanisms. Thus the FCC found that providers using any technology are eligible for Universal Service Fund ("USF") support as long as they meet the statutory criteria set forth in Section 214(e)(1) of the Telecommunications Act. "The principles of competitive and technological neutrality" demand that "non-landline telecommunications providers should be eligible to receive universal service support even though their local calls

 $^{^6}$ Federal-State Joint Board on Universal Service, Report and Order, 12 FCC Rcd 8776 at \P 48 (1997) ("USF First Report and Order").

are completed via satellite." The FCC also found that any wholesale exclusion of a class of carriers would be "inconsistent with the language of the statute and the pro-competitive goals of the 1996 Act."

If guided by these principles, as well as those of Nebraska law, the question left for the PSC is whether satellite broadband providers can make a meaningful contribution to extending broadband services through the NTAP program. In comments to the FCC, the PSC suggested that satellite providers should be considered for Connect America Fund ("CAF") support only after the FCC found no other eligible telecommunications carrier ("ETC") was "willing and able to provide broadband capable service to consumers in a particular high-cost area." SBCA believes that such an approach would only harm the NTAP fund and prevent it from capturing the lower cost efficiencies provided by satellite service. By favoring one technology or ignoring the cost and performance benefits of satellite providers, it would be it would be "arbitrary and capricious" to exclude satellite broadband providers from any revised NTAP program.

A. Definitions, standards and obligations adopted by the PSC should recognize the evolving nature of "broadband" service.

In Questions 3 (d), (e) and (f), the PSC asks for guidance on whether it should adopt speed tiers, rates or other requirements tied to the NTAP broadband discount. SBCA believes that if the PSC adopts such criteria, they must be flexible enough to accommodate

⁷ Federal-State Joint Board on Universal Service, Fourth Order on Reconsideration, 13 FCC Rcd 5318, at ¶10 (1997).

 $^{^{8}}$ USF First Report and Order \P 145.

⁹ Nebraska Public Service Commission Comments at 23.

technological advances. "Broadband" is best viewed as a multidimensional concept, characterized by factors including: peak and provisioned speed, security, availability, burst capabilities, latency in the sending and receiving of communications, jitter, price and mobility. Any combination of factors can render a service technically and economically feasible in a particular situation. Arbitrary definitions or requirements that fail to focus on the end result of expanding broadband usage can eliminate a workable solution from consideration.

Latency provides such an example. It would make no more sense to focus on latency in a satellite application than to focus on jitter characteristics when considering the value of a mobile wireless technology. Jitter is just another form of latency and varies over time. And jitter impacts a greater volume of Internet traffic than the time delay associated with a geostationary satellite link. Latency is imperceptible in most broadband applications. SBCA believes the PSC's goal should be for end users to be able to balance the technical characteristics, price and other benefits of a given technology and make their own value determination.

In the absence of government-mandated definitions of, or performance criteria for, "broadband," consumers will apply their own performance "thresholds." That process will vary from consumer to consumer in large part based on their needs and what is available in their geographic area. This market-based process will give rise to a variety of services that will emerge as "broadband." If the PSC imposes a "command-and-control" model of "broadband," it will disrupt that evolution. Thus any definitions and conditions – adopted

by the PSC -- must be flexible enough to encompass these value judgments and variations as well as the evolution of consumer expectations for broadband service.

B. The PSC should consider easing the requirements of the ETC Designation Process particularly for "Nationwide" Broadband Providers.

Unlike terrestrial network providers that deploy facilities in the specific area they wish to serve, satellite broadband operators are truly "national" providers. SBCA believes that the traditional process of state certification followed by qualification as an ETC would be inappropriate and burdensome for the satellite industry. Since satellite broadband providers offer VoIP services over their broadband connections, they should not be required to qualify as a competitive local exchange carrier to provide services or draw support from an expanded NTAP fund. Instead, SBCA supports the existing registration requirement for VoIP providers.

The broader question of qualifying as an ETC remains. The PSC should modify its ETC obligations to ensure that they are flexible, neutral and reflective of modern technology and network infrastructure. For example, the definition of voice services eligible for support under NTAP should be competitively neutral and not turn on a specific technical capability. In addition, the PSC should clarify that "voice" can be treated either as a separate service or as an application of a broader "broadband" service. This would allow the broadband provider to offer broadband service and would not necessarily require a separate voice component.

C. Other states support satellite broadband in other proceedings

Like Nebraska, many states are considering the impact that satellite broadband service can have in the context of the FCC's CAF. Multiple public utility commissions support full access to CAF funding for satellite providers. As the Ohio PUC wrote, "[s]satellite broadband providers should be permitted to bid" because "categorically excluding any broadband provider from the bidding process raises questions about whether the most efficient provider will be selected to provide broadband service at the lowest cost."¹⁰

IV. CONCLUSION

Satellite broadband can and should play a key role in expanding the adoption of broadband services through the Nebraska TAP fund. SBCA urges the PSC to adopt reforms that are technologically neutral and that will allow consumers to select the broadband platform that best suits their needs.

¹⁰ National Broadband Plan dockets, Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, FCC, (Rel. Feb. 9, 2011) ("NPRM") Ohio PUC Comments at 30-31. See also California PUC Comments at 7-10.

Respectfully submitted,

On behalf of

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