

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
International Comparison and Consumer Survey Requirements in the Broadband Data Improvement Act)	GN Docket No. 09-47
)	
A National Broadband Plan for Our Future)	GN Docket No. 09-51
)	
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, as Amended by the Broadband Data Improvement Act)	GN Docket No. 09-137
)	

To: Secretary, Federal Communications Commission
Attention: The Commission

**COMMENTS OF THE UNIVERSITY OF ARIZONA
IN RESPONSE TO NBP PUBLIC NOTICE # 26**

The Arizona Board of Regents for benefit of the University of Arizona provides these comments in response to the Commission’s Public Notice¹ seeking comment in the referenced dockets on spectrum for broadband.

We are the licensee of noncommercial educational television stations KUAT-TV, DTV Channel 30 (Major Channel 6), and KUAS-TV, DTV Channel 28 (Major Channel 27), both in Tucson, Arizona. The University operates KUAT-TV and KUAS-TV through Arizona Public Media, whose mission is to inform, inspire and connect our community by bringing people and ideas together. Station KUAT-TV began broadcasting in 1959 as the

¹ *Data Sought on Uses of Spectrum - NBP Public Notice #26*, GN Docket Nos. 09-47, 09-51, 09-137, Public Notice, DA 09-2518 (rel. December 2, 2009) (the “Public Notice”).

first public station in the state of Arizona, and to this day Arizona Public Media continues to utilize the powerful medium of public broadcasting to offer access to noncommercial children's programming, art, culture, travel, science, and discovery to our entire community, especially those who would otherwise lack access to such programming. For more than a half century, we have delivered consistent, award-winning, in-depth news, public affairs, and entertainment programming, including exceptional original content for and about our local community.

In the Public Notice, with a mind toward finding additional spectrum to allocate for wireless broadband purposes, the Commission seeks specific data on the use of spectrum currently licensed to broadcast television stations. Among other things, the FCC is attempting to account for the value that the country puts on free, over-the-air television. As reflected in the information we provide below, we urge the Commission to find that our use of our licensed television broadcast channels is exceptionally efficient and productive, and brings great value to our community. The cost to us and to our community resulting from the loss or curtailment of our over-the-air transmission service would be enormous.

Comments

Arizona Public Media currently makes use of its two broadcast licenses to provide five (5) distinct broadcast programming streams to the greater Tucson community:

(1) **PBS HD:** features community favorites such as *NOVA*, *Nature*, *Antiques Roadshow* and *Masterpiece*, as well as locally produced programs including *Arizona Illustrated* (a nightly half-hour news and public affairs magazine show), *The Desert Speaks* (a nationally distributed program that features the people, plants, animals, cultures of arid regions across the globe), and local culture and history programs such as the oral history

series *Tucson Remembers*. PBS HD is broadcast on KUAT-TV's 6.1 (DTV Channel 30) and KUAS-TV's 27.1 (DTV Channel 28).²

(2) **PBS Kids:** includes round-the-clock children's educational programming such as time-honored classics *Mister Rogers' Neighborhood* and *Clifford the Big Red Dog*, and new programs such as *WordGirl* and *Dinosaur Train*. PBS Kids is broadcast on KUAS-TV's 27.2.

(3) **PBS World:** features non-fiction programming including documentaries, public affairs and news, including *American Experience*, *PBS NewsHour*, local programming, and international coverage from *Foreign Exchange* and *Global Voices*. PBS World is broadcast on KUAS-TV's 27.3.

(4) **Create:** features twenty-four hour/day broadcasts of "how-to," travel and lifestyle programming, including *This Old House*, *One Stroke Painting*, *Victory Garden*, and *Simply Ming*. Create is broadcast on KUAT-TV's 6.3.

(5) **V-me:** the first Spanish-language public television program service, offering a wide variety of titles including *Viva Voz*, *Sesiones* and *Plaza Sesamo*. V-me is broadcast on KUAT-TV's 6.2.

Arizona Public Media's average data rate allocations are 13 megabits/second for KUAT-TV's and KUAS-TV's HD streams, and 3 megabits/second for each of the station's two SD subchannel streams. Our stations currently utilize the maximum throughput to

² Notably, Arizona Public Media must utilize both KUAT-TV and KUAS-TV to effectively reach the Tucson area and population with PBS programming due to terrain issues, such that their simultaneous carriage of PBS HD is not a duplicative or inefficient use of spectrum. The smaller KUAS-TV over-the-air signal serves a "fill-in" role by reaching areas and population that KUAT-TV is unable to reach due to its transmitter site location atop Mt. Bigelow, northeast of downtown. Although a segment of the Tucson metro population residing in the foothills of the mountain is "shadowed" by the terrain and cannot receive the KUAT-TV

provide these multiple programming streams, and would be forced to sacrifice bandwidth (compromising our present quality and content of service) if compelled to share channel capacity with other broadcasters or users.

Approximately 14% of households in the Tucson market receive broadcast television signals over-the-air only. Based on the Tucson market's total of 456,030 households (as of January, 2009), that means that well over 60,000 families rely on over-the-air service to view the noncommercial educational programming of KUAT-TV and KUAS-TV. Moreover, in the event that the availability of KUAT-TV and KUAS-TV's over-the-air options are curtailed, many viewers may no longer be able to receive the same educational programming content by other means. Satellite providers DISH Network and DIRECTV currently provide the Tucson market with only two (PBS-HD and V-me) of the five programming streams that Arizona Public Media broadcasts over-the-air for local viewers. In addition, Arizona Public Media fears that the loss of the over-the-air service would most directly and negatively impact low income elderly, Hispanic and Native American residents, who constitute a large segment of our over-the-air viewers and may face greater economic and logistic difficulties in obtaining access to our public TV content by means other than over-the-air reception.

In addition, any measures which serve to decrease Arizona Public Media's over-the-air capacity or services (including our various HD and SD program offerings) would render useless much of the vast expenditures only recently completed to convert KUAT-TV and KUAS-TV to digital operation and to establish their five-stream program content transmissions. To date, Arizona Public Media has already invested over \$6.5 million on its

signal, the KUAS-TV transmitter (situated atop Tumamoc Hill, just west of town), was intended to, and now provides, a receivable signal for those areas.

DTV transition and broadcast facility infrastructure. Of that total, approximately \$2.5 million came from Arizona's taxpayers, and another \$1.5 million was raised from local individual donors. It would not only be impossible to justify those expenditures if KUAS-TV's and KUAS-TV's over-the-air signals were to end, but it would render useless approximately \$2.5 million in costs specifically required for the over-the-air broadcast transmission portion of our digital transition.

In sum, Arizona Public Media makes extraordinarily efficient and productive use of its existing channel capacity, through two HD streams and four SD streams broadcast over KUAT-TV and KUAS-TV. By managing the current capacity of our two public television stations, we are able to provide five distinct broadcast programming content streams to the Tucson community and Southern Arizona, offering local viewers a variety of quality educational and cultural content, including both English and Spanish-language programming. Tens of thousands of residents in our market remain reliant on over-the-air television programming, including many viewers for whom alternatives are not viable or affordable. Arizona Public Media has just completed the expenditure of an enormous sum of money – much of it publicly-financed or donated – to convert its stations to their current digital broadcast configurations, and has already reorganized its entire broadcast programming approach in order to take full advantage of the opportunities its digital stations and capacity currently provide. Any loss of spectrum would not only defeat the purpose of those efforts and costs, but would also harm the viewing public which relies on Arizona Public Media for noncommercial educational and cultural material.

Conclusion

Based on the foregoing reasons, we urge the Commission to find that our use of our television broadcast channels is efficient and productive, and abundantly serves the public interest. Our over-the-air transmission capabilities must be protected in any effort that the Commission might undertake to allocate more spectrum for wireless broadband systems.

Respectfully submitted,

**ARIZONA BOARD OF REGENTS FOR
BENEFIT OF THE UNIVERSITY OF ARIZONA**

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