

TESTIMONY

OF

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BEFORE THE

SENATE COMMITTEE ON
COMMERCE, SCIENCE, AND TRANSPORTATION

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My name is Charlie Townsend and I am the President and Founder of Aloha Partners. I have been in the telecommunications industry for the past 25 years and have been President of three cellular companies and one cable TV company. I founded, expanded and eventually sold two of the three cellular companies. About five years ago, I concluded that the wireless broadband business had the potential to be as successful as the cellular telephone business is today. However, the key to that success will be the spectrum that is used to deliver the service. I believe that 700MHz is the optimum spectrum to deliver wireless broadband. As a result, I founded Aloha Partners in 2001 and was the largest buyer of licenses in the original 700MHz auction.

ALOHA'S PERSPECTIVE

Aloha has invested over \$100 million in 700 MHz licenses. It is now the largest 700 MHz licensee, holding licenses that cover over 175 million people, roughly 60 percent of the United States population.

Aloha has been actively evaluating potential uses for 700 MHz spectrum for the past three years and is planning on launching several market trials in the next twelve months. Aloha also has been approached by a number of Fortune 500 companies about potential joint ventures and uses of its spectrum.

As a result, Aloha is in a unique position to provide this Committee with information regarding potential uses of 700 MHz spectrum; who is likely to bid for the remaining licenses in the 700 MHz auction; and what the benefits of the DTV Transition are likely to be.

The DTV Transition offers five major benefits for U.S. households:

- (1) Better Television Picture Quality
- (2) More Broadband Competition
- (3) New Wireless Services
- (4) Better Emergency Communications
- (5) Value to the U.S. Economy

BETTER TELEVISION PICTURE QUALITY

Nearly ten years ago, the Senate passed the original DTV legislation. You envisioned that consumers would receive better picture quality and more channels. That vision is as true today as it was a decade ago. Digital TV will significantly improve television pictures for everyone... not just for those who have digital TV sets. Digital TV signals are less affected by interference than analog signals and usually provide clearer pictures than traditional analog reception. Digital signals eliminate the ghosting and snow that many Over-The-Air households currently experience. Most people have focused on the benefits that people with new digital sets and high definition sets will receive. These newer television sets are primarily in cable and satellite homes. Little attention has been focused on the significant improvement that will be seen on analog sets in Over-The-Air homes. I would like to focus on the benefits that people with

analog Over-The-Air sets will receive. Last week, I personally visited Motorola's office here in Washington and was able to see a demonstration of their latest digital set-top box. This allowed me to compare what a DTV signal looks like when you use a converter for your analog Over-The-Air television. Motorola showed side-by-side comparisons of the current Over-The-Air analog picture and the new Over-The-Air digital picture when seen on an analog set. I am glad to report that I did not need an electrical engineering degree to tell the difference. While I am not a technical expert on television picture quality, I would say there was a significant improvement in the digital signal viewed on the analog set, probably a 25-50% improvement. Not only was the picture quality more vivid and bright with the digital Over-The-Air picture, but the snow and picture fade that I could see on the analog television set was absent from the digital picture. My conclusion was that if you can give everyone access to that those new digital signals, you are going to have a lot of very happy Over-The-Air television viewers out there.

MORE BROADBAND COMPETITION

Broadband has the potential to be one of this country's key economic engines for the next ten years. Unfortunately, the United States is falling behind countries like China, Japan, Korea, and even Iceland, with respect to broadband. This is due in considerable part to two factors: the lack of availability of broadband in rural regions of the U.S. and the lack of broadband competition in urban markets. Last year, the Pew Charitable Trust conducted an extensive study of broadband in rural and urban areas. That study showed that 25 percent of all American homes only have access to one or no broadband providers. The study also showed that nearly one in three rural homes do not have access to any form of broadband. 700 MHz frequencies have the potential to solve both of these problems because 700 MHz is the most cost-effective frequency available to provide wireless broadband.

Studies have consistently shown that 700 MHz can provide broadband service in rural areas at half to one third the cost of the 1900 MHz personal communications services frequencies used by the cellular carriers (see Attachment). 700MHz can provide broadband services in rural areas at one fourth to one sixth the cost of the 2400 MHz Wi-Fi and MMDS (now BRS) frequencies used by unlicensed owners and by companies such as Sprint and Nextel. 700 MHz has the advantage of traveling further and being able to penetrate walls, dense foliage and other obstructions without the deterioration of signal experienced with either 1900 MHz or 2400 MHz wireless transmissions. These features make 700 MHz the ideal frequency for providing wireless broadband in both rural and urban markets. Not only can 700 MHz be used to provide high speed internet access, but it can also offer low-cost VOIP service for voice customers. What this means is that rural areas that were previously "unreachable" can now get broadband service on an affordable basis.

THE DIGITAL DIVIDE CAN BE CLOSED

America has always been a land of opportunity. However, the advancements in internet access have not made those opportunities available to everyone. Late last year the NTIA announced results of an additional study of broadband in rural and urban areas. The NTIA

findings were very similar to those in the Pew internet study. NTIA concluded, however, that differences in broadband penetration are due not to lack of *interest* in broadband, but rather to lack of broadband *availability* in rural areas. Almost one out of four homes in rural areas have no access to broadband service, compared to urban areas where 95% of homes can get at least 1 broadband provider. The NTIA concluded that wireless technologies using frequencies like 700 MHz “are better suited at present than cable or DSL for providing high speed internet access in areas whose population density is low.” In essence, broadband has created two groups of households: the haves and the have-nots. The 700MHz spectrum can close that gap.

THE RURAL PARADOX

Some broadcasters have portrayed rural areas as having the most to lose in the DTV transition. Paradoxically, rural areas are likely to lose the least and gain the most from the DTV transition. Compared to urban areas, rural areas will likely face fewer transition issues because cable and satellite service penetration rates already are high, and rising, in rural areas. At the same time, broadband availability is low and unlikely to rise unless 700MHz spectrum is freed up for this purpose.

For example, Montana has an estimated 86 percent of its homes covered by satellite and cable. That leaves about 50,000 of the households that are receiving TV Over-The-Air and potentially in need of assistance to complete the transition. On the other hand, more than 175,000 households are estimated to be unable to receive broadband because they live in low density areas. In other words, the number of households in Montana that are being deprived of broadband is over three times as large as the number of households that may be affected by the DTV transition. Montana is not an isolated case. A number of states represented on this committee face the same situation: Arkansas, Louisiana, Maine, Mississippi, Nebraska, North Dakota, South Carolina, Virginia, and West Virginia. The beauty of the DTV transition is that these states will be the biggest beneficiaries of the transition because the DTV transition not only will solve their broadband problem, but also will deliver better TV reception to Over-The-Air households in the process.

ALOHA INTRODUCTORY MARKETS

Aloha plans to conduct several trial markets to demonstrate the 700 MHz benefits for wireless Broadband. Later this year, Aloha will launch a trial in Tucson, Arizona to demonstrate the 700 MHz coverage advantages in both rural and urban areas. In the first half of 2006, Aloha will launch a trial in a top 20 market to demonstrate how public safety groups and commercial broadband can be combined on the same network and integrated together.

NEW WIRELESS SERVICES

Based on discussions Aloha has had with a number of Fortune 500 companies, Aloha expects the 700 MHz auction to be highly competitive. Aloha believes that these companies

plan to use 700MHz for a number of new wireless services. The potential bidders probably will fall into two groups: 1) companies planning to use 700 MHz for WiMax Broadband technology and 2) companies planning to use 700 MHz for Mobile TV.

Aloha believes that the companies that may participate in the 700 MHz auction include major cable companies like Comcast, Cox and Time/Warner. These companies recognize that they need a wireless product to bundle with their telephone and video offerings. Major ISPs like AOL, AT&T, and Covad recognize that they can no longer rely on the Bell operating companies to deliver their broadband product and that they will need 700MHz spectrum to bridge the last mile. Large satellite companies like EchoStar and DirecTV and wireless operators like T-Mobile, Alltel and Clearwire also will be interested in using 700 MHz WiMax to compete in both the data and VOIP markets.

Aloha believes that the second group of bidders is interested in offering Mobile TV and Mobile Music. Qualcomm already owns some 700MHz spectrum and has announced an \$800 million commitment to roll out Mobile TV and Music services nationwide. Crown Castle also owns spectrum and plans to roll out Mobile TV and Music services in major markets next year. Major entertainment companies are likely to recognize that Mobile TV and Music services will be the next major growth opportunity in the media entertainment business. As a result, potential bidders may include companies like Sony, Disney, and Time Warner that will want to control the technology and method of distribution for this new market.

However, it is important to appreciate that all of these companies recognize that “time to market” is critical for their success. At present, it appears that the remaining 60MHz of 700MHz spectrum will not be available for another three years. Any further delay in getting to market is likely to influence their willingness to participate in the auction or pay significant sums for the spectrum.

BETTER EMERGENCY COMMUNICATIONS

Many people have discussed the value that 700MHz can bring public safety through voice communications and low speed data. However, there are also some significant benefits that can come from 700MHz high speed internet access as well. Police can compare on-line finger prints and watch videos real time to monitor emergency situations. Fire Departments can view schematics of buildings and hazardous material locations while at the scene of a fire. And EMTs can transmit EKGs and send videos of injuries from the location of the emergency.

VALUE TO U.S. ECONOMY IS SIGNIFICANT

Aloha has estimated in previous filings with the House Commerce Committee that the remaining 700MHz spectrum could generate between \$20 to \$30 billion for the U. S. Treasury if an auction were held in the near future. Since that filing, a number of noted economists have indicated that the benefits to the U.S. economy should not be viewed solely in terms of one time auction revenues, but also in terms of broader economic potential. Coleman Bazelon, noted economist and Vice President of the Analysis Group, has estimated that the 700MHz spectrum could generate up to \$475 billion in benefits to the U.S. economy.

THE SOONER THE 700 MHZ AUCTION THE BETTER

There has been some discussion that delaying the 700 MHz auction may be beneficial. However, it is unclear to me who will benefit from any further delays. The sooner the spectrum is auctioned:

1. The sooner millions of US television viewers will see significantly improved pictures.
2. The sooner there will be additional broadband competition in urban and rural markets.
3. The sooner new wireless services will be available throughout the country.
4. The sooner emergency communications will be improved.
5. The sooner the U.S. economy will generate up to \$475 billion in economic benefits.

CONCLUSIONS

Aloha has been fortunate to purchase a large block of 700 MHz and be exposed to many opportunities to use 700 MHz for Wireless Broadband and Mobile TV and Music services. Aloha is prepared to bid on additional 700 MHz licenses as soon as they are available. The United States economy, TV households, rural communities, and first responders will all be direct beneficiaries of the auction of 700 MHz spectrum. Aloha urges the Senate Commerce Committee to accelerate the DTV transition so that these benefits will be realized sooner rather than later.