

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

In the Matter of)
Federal-State Joint Board on) CC Docket No. 96-45
Universal Service:)
Promoting Deployment and
Subscribership in Unserved Areas, Including
Tribal and Insular Areas

COMMENTS OF MICROCOM
ANCHORAGE, ALASKA

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We applaud the Commission's concern on serving rural Alaska and holding a public hearing in Anchorage to obtain testimony from Alaskans. Rural Alaska is increasingly being left behind technologically and the issue in many cases is not money. We view the regulatory structure in place both at the Federal and State levels as a large impediment to providing affordable access to high bandwidth information services as well as lifeline services. Pursuant to the proposed rulemaking, Microcom hereby submits these comments.

I. INTRODUCTION

Twenty five years ago, Alaska took a big step forward in satellite communications by providing telephone service to virtually every community and village in the State. Over time this has evolved and improved but it still only provides basic telephone service. At the same time, the State began a rural television initiative that has endured and evolved from a single channel service to one providing three channels. The prospect of Alaska evolving further is limited by lack of access to one of the basic commodities of universal service, bandwidth. In rural Alaska, bandwidth means satellite, and satellite bandwidth is the most expensive there is and in Alaska quality bandwidth is limited. The reason for this lack of bandwidth is failure of the regulatory structure to follow through on promises and policies that perpetuate the existing structure and inhibits innovation.

II. SPECIFIC COMMENTS

Paragraph 14, 18, 19, and 28. Rural Alaska has limited or no access to direct broadcast satellite, VSAT Service, or satellite based Internet services as is found in the forty eight states. The Ku band satellite deployment that dramatically changed the satellite industry in the 1980's still has not hit rural Alaska after almost twenty years. Direct broadcast service is still a big dish affair over most of the State and simply not available at all in many areas of rural Alaska. Satellite based Internet services are all deployed on satellites with excellent coverage of the forty eight states, South and Central America, the Pacific Rim, but almost no coverage of Alaska. We see four basic reasons for this situation:

(1) Licensing of current orbital slots discourages slot owners from launching hybrid satellites when replacing aging C-band satellites since any change to use of the slot restarts the whole application process. Most of the US Ku band satellite resources in the FSS are in orbital positions east of 110 degrees. Any satellite in a position east of 110 degrees is simply not capable of serving all of Alaska due to physics. We are equally unsure of the service Ka band satellite systems in the arc east of 110 degrees will provide to rural Alaska. While Spaceway contends that it will serve Alaska, we feel it is safe to say they will not have full coverage of the rural areas, and we will find ourselves in a "have and have not" situation in rural villages. Since there are no firm plans for deployment into the western positions, the first Ka band opportunity for all of Alaska may lie with Teledesic. However, we are concerned that Teledesic may take the approach of GlobalStar and limit coverage to areas south of the Arctic Circle. This would deny much of rural Alaska access to this key technology. Consequently, over the next 4-6 years, VSAT type services in rural Alaska will only be available using Telstar 7 or Galaxy 10R, if it is successful. Even then, these services will require larger dishes and higher power than used in the 48 states.

(2) Lack of enforcement of the geographic service provision rules of IB 95-168 has allowed DBS operators to deploy satellite constellations that do not provide rural Alaska access to these key sources of high bandwidth for the foreseeable future. The FCC has yet to rule on what constitutes service to Alaska and has not ruled on the viability of service to Alaska from the 101 degree orbital position. Meanwhile both DirectTV and Dish Network have launched new satellites in the last 60 days that have not materially changed the availability of DBS in rural Alaska.

(3) Lack of a meaningful set of technical standards for operation of

satellite systems near the boundary of ITU Regions 1 and 2 allowing high power service to all of Alaska. This is a design issue for satellites in the BSS and FSS. The FCC has left the issue of exceeding PFD limits near the border of Region 1 and 2 up to the satellite operator, placing on them the burden of negotiating with the affected administration in the ITU for exceeding PFD limits. We feel this shifting of responsibility is allowing satellite operators to field limited power services in Alaska, since it is not worth their time to negotiate with the affected administration for such a limited market.

(4) The existing universal service rules are excellent at supporting the status quo, but woefully inadequate at deploying new services. Couching access to universal service funds in terms of telephony and carriers is archaic when the commodity is bandwidth and the issue is affordable access. The system of subsidizing the carrier and not the consumer, means the consumer gets what the carrier offers, at the level of service they provide with no alternative. Deploying advanced services in rural areas will not get very far unless this paradigm changes.

III. CONCLUSION

Microcom feels the current set of FCC regulations is the largest impediment to fielding advanced telecommunications services in rural Alaska. From limited Ku band capacity to poor DBS service, regulation and the actions of the regulators should improve affordable access to bandwidth. The Commission must remember the needs of rural Alaska when it is making decisions on the authority to launch and operate a space station. Furthermore, we do not believe the current method of universal service funding for basic services will result in long term improvements in technology because it is a barrier to market entry for businesses with a better idea.