Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Facilitating the Provision of Spectrum-Based	)	
Services to Rural Areas and Promoting	)	WT Docket No. 02-381
Opportunities for Rural Telephone Companies	)	
To Provide Spectrum-Based Services	)	

COMMENTS OF MONET MOBILE NETWORKS, INC.

Monet Mobile Networks, Inc. ("Monet") responds to the Federal Communications Commission's ("FCC" or "Commission") *NOI* addressing the development of spectrum-based services in rural areas.[1] Monet strongly supports the Commission's goal of enabling service deployment in rural and other underserved areas. As a wireless carrier serving rural America, Monet concludes that this goal can be best achieved through a combination of market-based spectrum management approaches, such as spectrum leasing and joint operating arrangements, and economic incentives, such as bidding credits.

I. INTRODUCTION AND SUMMARY

Monet was formed in 1999 to deploy low-cost, high-speed, mobile wireless broadband Internet access and other advanced mobile data services to rural and other underserved markets. Monet's primary broadband service utilizes affordable wireless

---

[1] *See Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies To Provide Spectrum-Based Services*, Notice of Inquiry, FCC 02-325 (Dec. 20, 2002) ("*NOI*").

modems for connection to personal and laptop computers to provide broadband Internet access to consumers and small businesses. As a new entrant, Monet has already advanced the Commission's goal of deploying advanced wireless services in underserved areas. Monet has acquired broadband Personal Communications Services ("PCS") licenses and deployed advanced mobile wireless services in multiple markets. All but one of Monet's licensed markets have population densities of less than thirty persons per square mile, ranking them in the lower 25th percentile of all markets in terms of population density. None of Monet's licensed markets covers a Basic Trading Area ("BTA") with a total population within the top 100 markets. Because most of the markets targeted by Monet's licensed services are underserved areas that lack ubiquitous broadband Internet access services, Monet's solution to opening the "last mile" bottleneck to the Internet is often the only practical means of broadband Internet access for the customers in these underserved areas.

In 2002, Monet was the first provider in the United States to deploy and launch broadband Internet access service using Qualcomm's CDMA 1xEV-DO ("EVDO") high data rate technology – a so-called "3G" protocol – on a commercial basis. Monet deployed EVDO in such underserved BTAs as Duluth, MN; Eau Claire, WI; Fargo, N.D.; Grand Forks, N.D.; and Sioux Falls, S.D. EVDO technology is a data-only protocol that provides a fifteen-fold increase over currently available wireless technologies in the peak data-rate transmission capacity between the network and the subscriber units.[2] In

[2] Qualcomm's data-only CDMA 1xEV-DO allows data transfers at up to 2.4 Mbps per 1.25 MHz channel, which makes it the most spectrally efficient, commercially available terrestrial wireless data transmission protocol. The most efficient alternative CDMA technology is Qualcomm's CDMA2000 1xRTT technology, which is a hybrid voice/data transmission protocol that provides a peak data rate of 144 kbps per 1.25 MHz channel.

addition to its substantial spectral efficiencies, EVDO will be compatible with many of the other 3G advanced wireless protocols that promise to set the transmission standards for future wireless platforms. Monet also was the first provider to commercially deploy a data-only network using Qualcomm's CDMA2000 1xRTT technology in North America with the initiation of service in Sioux Falls, S.D., in 2001. Monet plans to expand deployment of its service but will require access to additional spectrum before it can expand its service offerings to other rural markets. Monet has found, however, that almost all PCS spectrum is already licensed, even in rural areas.

The Commission should examine advanced service deployment in rural and underserved areas as presenting a two-pronged challenge. First, licensees should be encouraged to return unused spectrum in rural areas to the auction pool. Second, service providers should be encouraged to obtain available, unused spectrum in rural areas and to build it out using advanced technology.

The absence of advanced services in rural areas exists largely because licensees often have little economic incentive to build out lightly populated or rural areas once they have met their initial construction obligations. To encourage the freeing up of unused spectrum in rural areas, the Commission should rely on creative market-based approaches that help licensees economically rationalize service deployment there.

The Commission also should consider enabling market-based spectrum management approaches, such as spectrum leasing and joint operating arrangements. These mechanisms would encourage licensees to make unused spectrum available to other entities in an efficient manner. The Commission should consider economic incentives, such as bidding credits, to encourage deployment of services in rural areas

where service deployment is otherwise uneconomical. A rural area bidding credit, for example, could be offered in exchange not only for constructing and offering service in a rural area, but also for returning unused rural spectrum to the Commission for reauction. In addition, the Commission should consider broadening the eligibility criteria for high-cost Universal Service Fund ("USF") support to include advanced spectrum-based services. Finally, the Commission should avoid regulatory approaches, such as mandatory spectrum partitioning, that do not address the underlying economics of deploying service in rural areas.

II. THE COMMISSION SHOULD CONSIDER MARKET-BASED APPROACHES TO ENCOURAGE ACCESS TO AND USE OF RURAL SPECTRUM

Spectrum in rural areas is usually underutilized because geographic area licensees often have little incentive build out rural spectrum in their widely dispersed licensed markets, once they have achieved their minimum construction requirements. To address this issue, the Commission should consider market-based approaches that would make it more attractive for licensees to make their unused spectrum available to entities that will value and develop it. Specifically, the Commission should allow such measures as spectrum leasing, franchising, joint operating arrangements, management agreements, and joint marketing agreements among licensees and prospective users of their spectrum.

The Commission has recognized that many of its licensing rules produce inefficient results. In the *2000 Secondary Markets Policy Statement*, for example, the Commission concluded that "a robust and effective secondary market for spectrum usage rights could help . . . mak[e] unused or underutilized spectrum held by existing licensees more readily available to other users and uses and help to promote the development of

new, spectrum efficient technologies."[3] More recently, acting on a mandate to review the Commission's spectrum policies, the Spectrum Policy Task Force recommended that the Commission consider market-based solutions to make rural spectrum more accessible.[4] Spectrum leasing, for example, reduces the transaction costs associated with partitioning and disaggregating spectrum, making it easier and more efficient for service providers to enter rural markets. Similarly, joint operating arrangements reduce deployment costs through facility sharing arrangements.

The Commission also should consider technical rule changes that might reduce the number of facilities required to serve lightly populated areas, such as increasing power limits, provided that the increased limits do not increase the potential for interference. Finally, as explained below, adoption of a bidding credit tied to service deployment in rural areas also could provide an incentive for licensees to return unused rural spectrum to the Commission's auction pool or otherwise make it available to other entities that value it.

---

[3] *Principles for Promoting the Efficient Use of Spectrum by Encouraging the Development of Secondary Markets*, Policy Statement, 15 FCC Rcd 24178 (2000) ("*2000 Secondary Markets Policy Statement*"). As the Commission further acknowledged in the Secondary Markets NPRM, market-based spectrum management approaches promote spectrum use by reducing administrative delays and transaction costs. See *Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets*, Notice of Proposed Rulemaking, 15 FCC Rcd 24203, 24211 ¶20 (2000) ("*Secondary Markets NPRM*").

[4] *See* Spectrum Policy Task Force Report, ET Docket No. 02-135 at 59 (Nov. 15, 2002) ("To improve providers' ability to gain access to spectrum in rural areas, the Commission should promote the development of an efficient and flexible secondary markets regime that, in addition to partitioning, facilitates the leasing of spectrum
Footnote continues….

III. THE COMMISSION SHOULD CONSIDER INCENTIVES TO HELP MAKE THE DEPLOYMENT OF SERVICE IN RURAL AREAS ECONOMICALLY FEASIBLE

The lack of sufficiently dense subscriber bases to support the initial and on-going costs of deploying and maintaining network facilities – which, in turn, makes it difficult to raise capital to fund such deployment – is one of the principal impediments to deploying advanced spectrum-based services in rural and other underserved areas. To address this problem, the Commission should consider affirmative measures that would offset the initial costs of construction, making service deployment more economically viable.

Adoption of a flexible, transferable Rural Area Bidding Credit ("RABC"), for example, could provide an economic incentive to enable facility and service deployment in rural areas in at least three ways. First, the RABC could be offered to existing licensees that already have met the construction requirements for their licensed markets as an incentive to further construct and offer service in the unused rural areas within those markets. For example, a licensee that has met the construction requirements for a licensed market by constructing and serving the more densely populated zones within its market should be eligible to obtain the RABC as an incentive to deploy and offer service in rural sections of its market which otherwise would be uneconomical. Second, the RABC could be offered to licensees in exchange for returning their unused rural spectrum to the FCC for reauctioning, which would make the spectrum available for future use.

---

usage rights in rural areas, which would significantly lower transaction costs.").

Third, the RABC could make it easier for entities to acquire unused rural spectrum from existing licensees. Specifically, entities seeking to acquire rural spectrum from licensees might be able to tender more attractive offers for the spectrum, understanding that they would qualify for a RABC from the Commission for building out and offering service on the spectrum once it is assigned from the initial licensee. In each of these cases, the RABC could be retained by the grantee for its own use in some future auction but also would be transferable. The Commission has utilized a transferable auction discount voucher, which is similar to a fungible bidding credit, in the past, and this mechanism has proved to be both administratively simple and workable.[5]

The Tribal Lands Bidding Credit ("TLBC") could serve as a model for the RABC. The TLBC was envisioned, among other things, as a credit that could offset the costs of building out network infrastructure on remote Tribal Lands which lacked population bases sufficient to economically support the construction of facilities on these lands.[6] The size of the RABC could be tied to the population density of the rural area to be served, using a formula that approximates the costs of deploying facilities.[7] To ensure

---

[5] *See Qualcomm Incorporated*, Order, 16 FCC Rcd 4042 (2000). *See also*, FCC Public Notice, *Auction of Licenses in the 747-762 and 777-792 MHz Bands Scheduled for June 19, 2002; Further Modification of Package Bidding Procedures and Other Procedures for Auction No. 31*, 17 FCC Rcd 5140 (2002).

[6] As the Commission put it, the TLBC allows carriers to recoup "a significant portion of their infrastructure costs for serving tribal areas [yet would] prevent windfalls." *Extending Wireless Telecommunications Services to Tribal Lands*, Report and Order and Further Notice of Proposed Rule Making, 15 FCC Rcd 11794, 11804 ¶ 27 (2000) (codified in part at 47 C.F.R. § 1.2110(f)(3)) ("*Tribal Lands Report and Order*").

[7] As the Commission explained in the *Tribal Lands Report and Order*, it adopted the baseline TLBC of $300,000 for the first 200 square miles of qualifying tribal land served because "[t]he $300,000 figure represents our rough estimate of the approximate infrastructure costs (including acquisition, tower construction, and equipment costs) for a representative tower facility." *Id.* at 11804 ¶ 26. As the Commission also noted, "[t]ying the credit to infrastructure investment provides a correlation between the financial commitment made by the carrier to the deployment of facilities and the financial benefit derived in the auction." *Id*. at 11803 ¶ 24.

performance, recipients of the RABC could be required to self-certify, within some specified time frame, that they are affirmatively offering service in the area covered (as opposed to having merely constructed facilities capable of serving the area).

Finally, any RABC developed by the Commission should not be limited to "rural telco," "small business" or "very small business" service providers. If the Commission's goal is to bring advanced spectrum-based services to rural areas, the RABC should be available to any entity that is prepared to make that goal reality. Monet, for example, does not meet the statutory definition of "rural telco," yet it has nonetheless demonstrated a commitment to deploying advanced wireless services in rural and other underserved areas. The Commission can better achieve its objectives for bringing advanced spectrum-based services to rural and underserved areas if it includes entities like Monet that desire to – and in Monet's case, actually do – serve these areas. Moreover, restricting eligibility of the RABC probably would reduce its effectiveness, because it appears that the majority of licensees with unused rural spectrum are not "rural telcos," "small business" or "very small business" entities.

Relaxation of the eligibility requirements for receiving high-cost USF support also could effectively reduce the costs of deploying advanced spectrum-based services in rural areas. Under the Commission's rules and policies, to qualify as an Eligible Telecommunications Carrier ("ETC") eligible to receive high-cost support, commercial mobile radio service providers must, among other things, provide all of the services designated for support by the Commission pursuant to Section 254(c) of the

Communications Act of 1934, as amended.[8] These services are composed of basic telecommunications services, such as interexchange and local voice grade access to the public switched network, and access to emergency services.[9] The Commission should consider whether ETC eligibility should be broadened to include providers of advanced spectrum-based services.[10]

IV. THE COMMISSION SHOULD AVOID MEASURES THAT DO NOT ADDRESS THE UNDERLYING PROBLEMS ASSOCIATED WITH SERVICE DEPLOYMENT IN RURAL AREAS

Regulatory approaches suggested in the *NOI* that mandate service to rural areas and do not address the underlying causes of unused rural spectrum should be avoided in favor of approaches that enable the operation of market forces and the efficient allocation of spectrum resources. For example, requiring licensees to partition and disaggregate unused spectrum from auctioned licenses would not only deprive the auction winners of a portion of the value of their licenses, but would have a chilling effect upon participation

---

[8] *See* FCC Public Notice, *Procedures for FCC Designation of Eligible Telecommunications Carriers Pursuant to Section 214(e)(6) of the Communications Act*, 12 FCC Rcd 22947 (1997).

[9] "The Commission has designated the following services for support: single-party service: voice grade access to the public switched network; Dual Tone Multifrequency […] signaling or its functional equivalent; access to emergency services including, in some circumstances, access to 911 and Enhanced 911 […]; access to operator services; access to interexchange service; access to directory assistance; and toll limitation services for qualifying low-income consumers." *See id.* at 22948 n.*5 (citing Federal-State Joint Board on Universal Service*, Report and Order, 12 FCC Rcd 8776, 8807, 8812-8814 (1997)).

[10] The Commission recently requested the Federal-State Joint Board on Universal Service to review certain of the Commission's rules relating to the high-cost universal service support mechanisms to ensure that the goals of preserving universal service and fostering competition are being fulfilled. *See Federal-State Joint Board on Universal Service*, Order, FCC 02-307 (Nov. 8, 2002).

in future auctions.[11] If licensees must deploy uneconomical service to avoid mandatory partitioning, they effectively would assume an economically irrational surcharge to the cost of the license, distorting the normal operation of the market. Similarly, adjusting the geographic area size of licenses would not address the underlying economics of deploying service. A nationwide license holder is no more likely to implement uneconomical service in its rural areas than the holder of a license covering a smaller geographic area. If anything, larger license areas may make it more likely that rural areas within the market are unserved because more dense population zones exist that allow the licensee to meet its minimum construction obligations without deploying its network in more rural areas.

CONCLUSION

The Commission should consider market-based spectrum management approaches, such as spectrum leasing, to facilitate the use and dissemination of unused spectrum in rural and underserved areas. Further, the Commission should consider economic incentives in the form of affirmative economic benefits, such a Rural Area Bidding Credit and expansion of ETC eligibility, to make deployment of service in rural areas more attractive. Finally, the Commission should avoid regulatory approaches, such as mandatory spectrum partitioning, that do not address the underlying economics of deploying service in rural areas.

[11] For licenses that were not acquired through the auction process, the Commission should adopt the Cellular Radiotelephone Service approach, under which, at the construction deadline, licensees get to serve the areas they have constructed and any non-constructed areas are made available for licensing to other parties on a first-come, first-served basis.

Respectfully submitted,

/s/ Cheryl A. Tritt

Cheryl A. Tritt
David Munson
MORRISON and FOERSTER LLP
2000 Pennsylvania Avenue, N.W.
Suite 5500
Washington, D. C. 20006
(202) 887-1500

February 3, 2003

Counsel for Monet Mobile Networks, Inc.