

**BEFORE THE  
FEDERAL COMMUNICATIONS Commission  
WASHINGTON, D.C. 20554**

In the Matter of )  
 )  
Amendment of Part 2 of the Commission’s Rules ) ET Docket No. 00-258  
To Allocate Spectrum Below 3 GHz for Mobile )  
And Fixed Services to Support the Introduction of )  
New Advanced Wireless Services, including Third )  
Generation Wireless Systems )  
 )

**COMMENTS OF SPEEDNET, L.L.C.**

SpeedNet, L.L.C. (“SpeedNet”), hereby submits its comments to the *Eighth Report and Order and Fifth Notice of Proposed Rulemaking and Order* (“Order”) in the above-referenced proceeding. Petitioner is a licensee of Broadband Radio Service (“BRS”) spectrum; lessee of various BRS and Educational Broadband Service (“EBS”) licenses; and is currently an Internet Service Provider (“ISP”) in the Saginaw, Alpena, Bad Axe and Mt. Pleasant, Michigan markets. To provide such ISP broadband services, SpeedNet uses the BRS-1 and 2 (2.1 GHz spectrum) channels to provide the return channel signaling or upstream transmissions and uses EBS and BRS channels in the 2.5 GHz band for downstream transmissions to serve approximately 4,000 residential and commercial customers. Many of these customers are in rural parts of northern Michigan where SpeedNet is the only broadband solution, providing competition to incumbent wire-line providers while keeping overall broadband costs down. Accordingly, the Commission’s decision in this rulemaking is crucial to the operation of SpeedNet’s business and to the

continued provision of such services to underserved areas in the greater state of Michigan.

**I. Any New or Expanded Operations on any BRS 1 and 2 Channel Should be Deemed Primary Operations Until Ninety Days After Written Notice that Negotiations with the AWS Entrant are to Commence**

The Commission should not mandate a cut-off date of November 25, 2005, after which all expanded or newly initiated operations on the BRS-1 Channel will be treated as secondary. BRS 1 and 2 licensees should not be penalized and required to allow their spectrum to lay fallow or underutilized because the Commission has deemed that they must migrate their services to another band to allow for new AWS entrants to occupy their current spectrum. It could be years before an AWS entrant deploys service on such spectrum and the BRS licensee should not be held captive in implementing its own deployment of services because of the transition that is expected to occur sometime in the future.

Any expansion or commencement of services should continue to be regarded as primary operations subject to reimbursement by the AWS entrant until ninety (90) days from the date that the AWS entrant provides written notice that it desires to commence transition negotiations with the BRS licensee. In fact, to allow such operations to remain primary until this juncture would encourage the AWS entrant to commence this process at a far earlier date, expediting such a transition and meanwhile allowing services that have already been deployed or are expected to be deployed on the BRS 1 and 2 Channels to continue to develop and be implemented. By discouraging such deployments, it is the general public that stands to lose the most in this process, as there are many areas in which a broadband service is the only

alternative, and in some cases the only solution, in serving less populated and harder to reach destinations.

## II. Transition Schedule for BRS Licenses

The Commission should require that AWS licensees relocate any and all existing BRS operations throughout a BRS station's geographic service area ("GSA") regardless as to whether the AWS licensee will serve such areas, just as the Commission has mandated in other services.<sup>1</sup> The AWS entrant should at a minimum be required to transition all BRS-1 services throughout the BRS licensee's GSA to the 2.5 GHz band prior to implementing any of its own services to such area, as the possibility for interference between the two operations is highly anticipated. Furthermore, the BRS-2 channel should be moved simultaneously or shortly after transition of the BRS-1 channel, as both channels were generally used in coordination with each other in the 2.1 GHz band and by moving one, the other is rendered useless until it is transitioned to the 2.5 GHz band as well.

There need not be a deadline by which all such channels must be transitioned if the Commission agrees to forego its earlier decision to implement a November 25, 2005, cut-off date (which would inhibit development on the BRS 1 and 2 channels). The transition of the channels should occur in accordance with what is best to maintain incumbent BRS operations, not what is necessary to the deployment of AWS services or its build-out requirements. Each market can be transitioned within its own timeframe so long as the BRS licensee will be properly reimbursed for its

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<sup>1</sup> See AWS Sixth R&O, 19 FCC Rcd at 20753, ¶ 71 (requiring AWS licensees in the 1995-2000 MHz and 2020-2025 MHz bands to relocate incumbent BAS operations in all affected BAS markets, including those markets where the AWS licensee provides partial, minimal, or no service).

operations *at the time of transition* and not pursuant to an arbitrary deadline that is well suited to the AWS entrant but not the incumbent user of spectrum. This is a more acceptable form of succumbing to market forces to encourage the transition rather than allowing an AWS entrant's decision to deploy service trigger the steps necessary to relocate the BRS 1 and 2 channels.

### **III. AWS Entrants Must Provide Comparable Facilities to Existing Operations**

As a matter of right, the Commission must require that AWS entrants provide comparable facilities when relocating BRS facilities that have deployed service. Such comparable facilities must consist of the same throughput and reliability as provided by the system currently in operation on the BRS 1 and 2 licenses, as well as include the equipment and labor costs, as well as any other administrative costs, that are necessary to complete the transition as smoothly as possible without losing the incumbent's customers in the process.

For instance, SpeedNet is currently using frequency division duplexing ("FDD") technology. Basically, at each FDD customer site, SpeedNet installs a transceiver device in concert with a high frequency antenna installed outside and often attached to the customer's building or home. These transceivers receive incoming microwave radio transmissions at the 2.5 to 2.7 GHz bands and down-convert them to frequencies visible to a standard Data over Cable Service Interface Specification (DOCSIS) customer based broadband modem. The DOCSIS modem then transmits its return signaling data to the transceiver where it is up-converted to microwave frequencies in the 2.1 GHz band and then transmitted back. This device is known as an

out-of-band or dual band transceiver because it uses one frequency band for downstream and another for upstream.

Such FDD equipment is built around a hard wired transceiver where the only way to change the frequencies used is to physically change the equipment at each and every customer site. The time and costs associated with such a transition involves at a bare minimum informing the customer that a change is required, having the customer contact SpeedNet to schedule an appointment, the inconvenience to the customer at having to be home for the appointment, transportation and labor costs in sending a technician to change the equipment and the cost of the equipment itself. In-band or single band transceivers are available, yet often exceed \$400 each for just the equipment. In addition, SpeedNet must arrange for personnel to arrange such appointments and must take up hundreds of hours of employee hours arranging, coordinating and executing such changes, all time taken away from marketing and expanding its services to future customers.

Furthermore, operation in the 2.5 GHz band may require the addition of more transmitters to maintain current operations, meaning SpeedNet would be required to locate and lease tower sites in which to construct its transmitters as well as provide for all the expenses incurred in installing and maintaining operations at such sites at a cost of \$100,000 per site.

As SpeedNet expands its operations, it is now building and installing time division duplexing (“TDD”) technology, as changes to this newer

technology can be made remotely without necessitating a customer visit, among other improvements. SpeedNet currently has no reason to replace the FDD equipment used in many of its rural areas, as installation of a TDD network is cost prohibitive and the FDD system currently in place is sufficient to provide its services. However, if forced to migrate to the 2.5 GHz band, the AWS entrant should reimburse SpeedNet all of these costs in transitioning the current BRS 1 and 2 services to TDD technology, as such a move would provide SpeedNet with a comparable facility at a similar cost and benefits as that derived from FDD technology.

Without sufficient economic relief, SpeedNet will not be able to afford to transition its FDD customers at its current subscription pricing levels of \$32 and \$40 a month. Furthermore, the Commission's failure to provide for this relief in full would cause companies like SpeedNet irrecoverable harm and force it to abandon many of its rural and underserved customers in each of its markets due to such costs. Accordingly, SpeedNet petitions the Commission to order that these reasonable and out-of-pocket costs be reimbursed by the 2.1 GHz spectrum recipients.

#### **IV. The Commission Should Set a 10 Year Sunset Rule**

The Commission should not impose a sunset rule that would alleviate AWS entrants from such reimbursement expenses after a certain deadline. If the AWS entrant is forcing the BRS licensee to relocate to new spectrum to allow for its own operations, then it should be obligated to pay for such a

transition regardless of when the transition occurs. Incorporating such a requirement only benefits the AWS entrant, whose bargaining power increases while the value of the BRS 1 and 2 licenses decline as such a deadline approaches. Under the Commission's current suggestion of not requiring an AWS entrant to relocate incumbent BRS users until it needs the spectrum would allow such entrants to deny their responsibilities and if possible, merely wait out the ten year terms in order to avoid having to pay such reimbursement costs.

This is unacceptable as it is the Commission that is forcing this transition and it should require compensation to be paid to the incumbent regardless of when the transition occurs. Only the AWS entrant who slowly deploys services could possibly benefit from such a sunset rule, undermining the Commission's greater goal of providing competitive services to the general public. The incumbent BRS 1 and 2 licensees are already at a disadvantage by having to relocate their systems. They shouldn't have to find a way to encourage the AWS entrant to assist them in transitioning within a ten year time period to ensure adequate reimbursement for such a move as well.

## **CONCLUSION**

The concept of comparable facilities and what costs should be reimbursed is crucial to the existence of businesses like SpeedNet, as providing too little ensures that such businesses will either cease operating or suffer great losses for having provided service prior to these reallocation proceedings. There will be many costs that will never be reimbursed, yet

operators such as SpeedNet will have to bear the cost of, such as revenue lost due to customers who do not desire to go through the transition process and cancel services or those who disagree with the rate hikes necessitated by this transition and also find another service provider. How does one measure the time spent completing this transition that could have been put into expanding the business and attracting new customers? This is why it is so important that the Commission support reimbursement of all equipment and labor necessary to effectuate such a transition, since even if all of these factors are addressed and reimbursed, the BRS 1 and 2 licensees, as well as the businesses that depend on this spectrum to operate, can never be made completely whole. Accordingly, SpeedNet requests that the Commission consider its comments when deciding what type of reimbursement to should be applied and thanks it for its consideration in this crucial matter.

**SPEEDNET, L.L.C..**

By /s/ John Ogren  
John Ogren  
President

November 22, 2005