Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Creation of a Spectrum Sharing Innovation Test-Bed	)	ET Docket No. 06-89
	)	

REPLY COMMENTS OF THE WIRELESS COMMUNICATIONS ASSOCIATION INTERNATIONAL, INC.

The Wireless Communications Association International, Inc. ("WCA"), by its attorneys, hereby replies to the comments submitted by M2Z Networks, Inc. ("M2Z") in response to the Commission's *Public Notice* released on June 8, 2006 in the above-referenced matter.[1]

As the trade association of the wireless broadband industry, WCA has a direct and substantial interest in the issues raised for comment in the *Public Notice*.[2] Those issues include, *inter alia*, identification of the spectrum that will be designated for the proposed Spectrum Sharing Innovation Test-Bed ("Test-Bed"), the type and duration of testing that is to be done in the designated spectrum, and how the Commission proposes to ensure that others are fully protected from any interference created by the testing process. Whatever the practical limitations

[1] *See Federal Communications Commission Seeks Public Comment On Creation Of A Spectrum Sharing Innovation Test-Bed*, ET Docket No. 06-89, *Public Notice*, FCC 06-77 (rel. June 8, 2006) ["*Public Notice*"].

[2] WCA's membership includes a wide variety of wireless broadband system operators, equipment manufacturers and consultants interested in the deployment of wireless broadband service utilizing, *inter alia*, the 700 MHz, 900 MHz, 2.1 GHz, 2.3 GHz, 2.4 GHz, 2.5 GHz, 3.6 GHz, 5 GHz, 18 GHz, 24 GHz, 28 GHz, 31 GHz, 38 GHz and 70/80/90 GHz bands. The Commission has long recognized that wireless broadband service will play an essential role in the ongoing effort to extend broadband to all areas of the country, and that wireless broadband is already spurring innovation by providers of competing broadband platforms. *See, e.g.*, Federal Communications Commission, Report by the Wireless Broadband Access Task Force, *Connected & On the Go: Broadband Goes Wireless*, at 1-2 (February 2005) ["*Wireless Broadband Task Force Report*"] ("Wireless broadband constitutes a critical component of our nation's goal of ensuring that reliable and ubiquitous broadband becomes available for all Americans.").

of spectrum sharing may be,[3] it is imperative that the Commission's design and implementation of the Test-Bed protect the enormous investments wireless broadband operators and equipment vendors are making to deliver new service to the public. Likewise, the Test-Bed should not foreclose future opportunities to deliver wireless broadband service in spectrum the Commission has set aside for that purpose.

For these reasons, WCA must express its concerns regarding M2Z's late-filed comments in this proceeding, particularly M2Z's suggestion that the 3650-3700 MHz band is suitable candidate spectrum for the Test-Bed.[4] In support, M2Z asserts that the spectrum's "non-exclusive nationwide licensing" will "allow for rapid implementation and productive use of the spectrum test-bed for the purpose of exploring asymmetric sharing."[5] M2Z's argument should be rejected, as it misstates the current status of the 3650-3700 MHz allocation at the Commission and fails to account for the spectrum's widely recognized potential as a new vehicle for wireless broadband service.

First and foremost, M2Z overlooks the fact that the "non-exclusive" licensing regime on which it bases its argument has been the subject of substantial criticism from the wireless broadband industry and is under reconsideration by the Commission. Generally speaking, operators and equipment vendors are concerned that the current non-exclusive licensing scheme

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[3] *See, e.g., Facilitating Opportunities for Flexible, Efficient, and Reliable Spectrum Use Employing Cognitive Radio Technologies*, Report and Order, 20 FCC Rcd 5486, 5487 (2005) ("Some parties envision that the full development of cognitive radio capabilities will, or should, lead to a vastly different model for spectrum use. These 'futurists' see 'smart radios' operating on an opportunistic basis, finding idle spectrum, using it as they need, then vacating the band for others to use, all without human intervention. This model presumes no need for spectrum policy, allocation tables, or regulatory bodies to manage spectrum resources. While we recognize that this model exists, we also believe that many technical, cost, and business issues will need to be addressed in the marketplace before widespread deployment of such radios may take place.").

[4] *See* Comments of M2Z Networks, Inc., ET Docket No. 06-89, at 11 (filed July 11, 2006) ["M2Z Comments"].

[5] *Id.* (footnotes omitted).

(and the associated frequency congestion (particularly in urban areas) and general lack of sufficient interference protection) will deter investment in the 3650-3700 MHz band, since it does not assure that operators will be able to provide consumers with the quality of service ("QoS") necessary to sustain competitive wireless broadband service and emerging applications such as VoIP.[6] The industry thus has urged the Commission to set aside at least some of the 3650-3700 MHz band for exclusive licensing, so that operators will have a better opportunity to deliver the QoS necessary to attract significant investment in the spectrum.[7] Hence, contrary to what M2Z appears to suggest in its filing, the absence of broadband deployment at 3650-3700 MHz is attributable not to lack of interest but to flaws in the existing licensing system that effectively preclude the investment necessary to sustain broadband operations in the band. Furthermore, no such deployment has been possible in any case, since the Commission has yet to release a Public Notice establishing a filing date for license applications under the current rules for the 3650-3700 MHz band.[8]

Once the flaws in the licensing scheme are eliminated, it is expected that the 3650-3700 MHz band will become occupied relatively quickly by new wireless broadband services for consumers and by the backhaul links required to support those services. That is a critical consideration, as the Commission itself has recognized that there is "a clear need for additional

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[6] *See, e.g.*, Petition of Wireless Communications Ass'n Int'l, Inc. for Reconsideration, ET Docket No. 04-151 *et al.*, at 2 (filed June 10, 2005) ["WCA Petition"]; Petition of WiMAX Forum for Reconsideration, ET Docket No. 04-151 *et al.*, at 9 (filed June 10, 2005) ["WiMAX Forum Petition"]; Petition of Intel Corp., Redline Communications Inc., and Alvarion, Inc. for Reconsideration, ET Docket No. 04-151 *et al.*, at 10, 21 (filed June 10, 2005) ["Vendors Petition"].

[7] *See, e.g.*, WCA Petition at 12,; Vendors Petition at 19-24; Petition of Motorola, Inc. for Reconsideration, ET Docket No. 04-151 *et al.*, at 6 (filed June 10, 2005).

[8] Also, the Commission's Office of Engineering and Technology has announced that processing of applications for equipment authorizations in the 3650-3700 MHz band will be delayed pending resolution of the technical issues raised in the petitions for reconsideration discussed above. *See* OET Knowledge Database, Publication No. 476264 (Feb. 14, 2006).

spectrum for broadband use – including backhaul and subscriber connectivity," and that the 3650-3700 MHz band "appears to provide a unique opportunity to satisfy this demand."[9] Indeed, given that most of the world makes spectrum in the range of 3300-3700 MHz available for wireless broadband applications, the 3650-3700 MHz band represents a particularly important opportunity for the United States to harmonize its spectrum usage with global allocations and provide consumers with the cost savings created by economies of scale in a global market.[10] Not coincidentally, the Commission has identified the 3650-3700 MHz band as a potential home for WiMAX-based technologies, and global proponents of WiMAX have expressed a concomitant interest in the spectrum.[11] Given this backdrop, now is not the time to throw the 3650-3700 MHz band back into further uncertainty by suggesting that the spectrum might be used for the Test-Bed before operators have been afforded a chance to deploy services there. The Commission thus can and should pursue other options for the Test-Bed, so that the 3650-3700 MHz band can be utilized for its intended purpose once the Commission adopts a workable licensing regime for the spectrum.

[9] *Wireless Operations in the 3650-3700 MHz Band*, Report and Order and Memorandum Opinion and Order, 20 FCC Rcd 6502 (2005) ["*Report and Order*"].

[10] *See* WCA Petition at 1-2.

[11] *See, e.g., Report and Order*, 20 FCC Rcd at 6503; WiMAX Forum Petition at 3-5.

WHEREFORE, for the reasons set forth above, WCA requests that any further Commission action in this matter be taken in accordance with these reply comments.

Respectfully submitted,

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