August 31, 2007

Via Electronic Filing

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, SW, TW – A325
Washington, DC 20554

Re: Written Ex Parte Presentation in WT Docket No. 07-16 and WT Docket No. 07-30

Dear Ms. Dortch:

This submission is made to provide additional clarity on the applicability of Section 7 to M2Z's pending license application. Included herein is a signed declaration from Dr. Michael J. Marcus, former Associate Chief for Technology, Office of Engineering and technology, Federal Communications Commission (FCC), and a well-known expert in wireless technologies and past and current FCC policies for promulgating new wireless services and technologies. Dr. Marcus provides his expert assessment that NBRS and the underlying technologies qualify as "new service" and "new technologies." Dr. Marcus' qualifications are included in his declaration.

Pursuant to Section 1.1206(b) of the Commission rules, an electronic copy of this letter is being filed. Please let me know if you have any other questions regarding this submission.

Sincerely,

Uzoma C. Onyeije
Vice President Regulatory Affairs

2000 North 14th Street · Suite 600 · Arlington, VA 22201
OFFICE 703.894.9500 FAX 703.894.9501

cc: Erika Olsen
Bruce Gottlieb
Renee Crittendon
Wayne Leighton
Angela Giancarlo

Attachment
Declaration of Dr. Michael J. Marcus

Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
M2Z NETWORKS, INC.	)	
	)	
Application for License and Authority to Provide National Broadband Radio Service In the 2155-2175 MHz Band	)	WT Docket No. 07-16
	)	
Petition for Forbearance Under 47 U.S.C. § 160(c) Concerning Application of Sections 1.945(b) and (c) Of the Commission's Rules and Other Regulatory and Statutory Provisions	)	WT Docket No. 07-30

DECLARATION OF DR. MICHAEL J. MARCUS

I, Dr. Michael J. Marcus, do hereby declare under penalty of perjury the following:

1. I am a consultant to Kolodzy Consulting working on behalf of their client M2Z Networks, Inc. (M2Z")

2. I am responsible for advising M2Z with respect to various regulatory and spectrum management policy issues relevant to the engineering and design of M2Z's nationwide wireless broadband Internet protocol ("IP") network. I am sufficiently qualified for such duties. I have over 30 years of experience in technology development for advanced communications, networking, electronic warfare, and spectrum policy for government, private sector and academic groups. My experience in these fields is detailed below.

3. Most recently, I was the Associate Chief for Technology, Office of Engineering and technology, Federal Communications Commission (FCC). I also had several roles in the Spectrum Policy Task Force charged with developing the next generation spectrum policy including Senior Technical Advisor. I worked at various senior policy and enforcement positions at FCC from 1979-2004. During this period I proposed and managed FCC initiatives that lead to the unlicensed spread spectrum rules – used now for Wi-Fi, Bluetooth, and the majority of cordless phones used in the US – and the world's first general rules for frequencies above 60 GHz.

Most recently, I have worked in the FCC's spectrum management Japanese counterpart under the Mike Mansfield Fellowship exchange program and more recently have been Special Advisor to Mrs. Viviane Reding. European Commissioner for Information Society & Media – the FCC's counterpart at the European Commission.

4. I began my career as military project officer for the US Air Force working on underground nuclear test detection technology. My first position explicitly in the spectrum filed was in 1975 as a member of the technical staff at the Institute for Defense Analyses working on electronic warfare issues on behalf of the Secretary of Defense's office. I received an Sc. D.. and S.B. in Electrical Engineering from the Massachusetts Institute of Technology and have been recognized by the Institute of Electrical and Electronics Engineers (IEEE) as a Fellow "for leadership in the development of spectrum management policies".

5. The information provided herein is to the best of my current knowledge and based on my expertise in the field.

6. M2Z is proposing a new service called National Broadband Radio Service (NBRS) consisting of the following characteristics using spectrum found in 2155-2175 MHz:

   a. provision a free nationwide broadband wireless Internet access service at a speed of at least 384 kbps;
   b. provide a family-friendly service via network-level filtering of obscene and indecent content for the free service;
   c. permit public safety entities direct secondary access to a broadband platform over to which they may attach an unlimited number of devices at no charge;
   d. allow any CPE manufacturer that complies with published specifications to make and certify a device connecting to the network; comply with stringent construction benchmarks (33%/3 years; 66%/5 years; 95%/10 years); and
   e. use the series of technical and service rules enumerated in its license application necessary for interference mitigation and proper transmission of the specified wireless signals.

7. M2Z is proposing to use 2155-2175 MHz spectrum band which has been reallocated by the FCC from its incumbent use to fixed and mobile advanced wireless services but for which the FCC has yet to implement specific service rules or specify a license assignment mechanism.

8. I have reviewed the M2Z service offering with respect to it being an offering that American consumers would perceive as a new service having a combination of technology, access, features, or functions that distinguishing it from existing services. The M2Z offering has features, functions, and technology that characterize it as a new service.

With reference to what constitutes a "new service", I believe that the Report and Order, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking in Docket 95-91, adopted March 3, 1997 "95-91 R&O" (http://www.fcc.gov/Bureaus/International/Orders/1997/fcc97070.txt) sets a good example of how FCC has dealt with such questions. Para. 7 of the 95-91 R&O crazies the question of benefits of new service:

> "These include introduction of a new radio service to the public, a national distribution of radio programming to all areas, including underserved and unserved areas and population groups, the creation of jobs and the promotion of technological development in the satellite and receiver industries, and the improvement of U.S. competitiveness in the international economy."

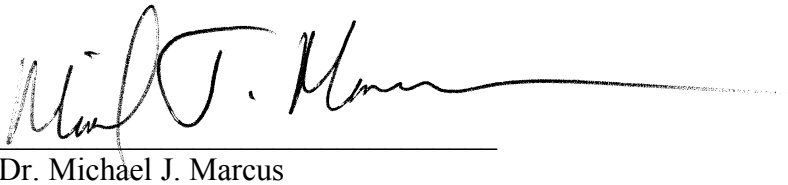
9. The M2Z service offering, as described in their application meets all the relevant parts of this definition. (Since M2Z's proposal is not a broadcasting service and not satellite-based, those points do not seem relevant here.) M2Z does propose the introduction of a new radio service to the public using spectrum that has been lying fallow for years. It proposes to provide this service to all areas, including unserved areas and population groups. It would lead to the creation of jobs and the promotion of technological development in the wireless industries and the improvement of US competitiveness in the international economy.

10. Some of M2Z's opponents, e.g. Commnet, NextWave,NetFreeUS, and OpenRange, claim that the problem of using the fallow 2155-2175 MHz band is simple and they can just use standard off-the-shelf WiMAX technology to do so. Other M2Z opponents, e.g. AT&T, reach the opposite conclusion and say that it is impossible to use this band without causing unacceptable harmful interference to the adjacent upper and lower AWS bands. Why this contradiction? It is simple: Standard WiMAX technology in not capable of providing an effective and efficient service in this band without interference.

11. In spectrum management, the most difficult interference problems or nightmares deal with adjacent band boundaries. In this category are the TV channel 69 problem of WVEU in Atlanta (about the channel 69

transmitter causing interference to land mobile receivers in the adjacent spectrum) in the early 1980's, the FAA EMI complaint (about upper FM band stations causing interference to the adjacent Instrument Landing System band) that crippled the expansion of FM broadcasting in the 1980's and the Nextel/public safety problem of the 1990's and early new millennium (about Nextel 800 MHz emissions causing interference to adjacent public safety systems.) Without a very careful system design using multiple advanced technologies, a system using 2155-2175 MHz would cause the precise interference that AT&T and others are so concerned about.

12. By using the synergistic effects of adaptive antennas and a novel application of cognitive radio technology, M2Z's design can use the present fallow band for valuable services to the public that are not presently available and under marketing terms, e.g. no charge for basic broadband service, that are not now offered or even proposed by others.

Signature: 

Dr. Michael J. Marcus
Technology Advisor
M2Z Networks, Inc.
1200 North 14th Street, Suite 600
Arlington, VA 22201

Date: August 31, 2007