

LIST OF ATTACHMENTS

ATTACHMENT A: Map illustrating existing BRS licensees subject to potential relocation

ATTACHMENT B: Map illustrating existing FS licensees subject to potential relocation

ATTACHMENT C: Affidavits from key M2Z personnel concerning qualifications

Attachment A



B

Attachment B

Google



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C

Attachment C

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

<i>In the Matter of</i>)	
)	
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
)	
)	

**AFFIDAVIT OF JEFFREY G. BURGAN
IN SUPPORT OF OPPOSITION OF M2Z NETWORKS, INC.
TO PETITIONS TO DENY**

I, Jeffrey G. Burgan, do hereby declare under penalty of perjury the following:

1. I am the Vice-President of Engineering of M2Z Networks, Inc. ("M2Z").
2. I am responsible for engineering and designing the overall architecture of M2Z's nationwide wireless broadband IP network. I am sufficiently qualified for such duties. I am a graduate of the University of Maryland, Baltimore County with a B.S. in Computer Science, and I have nearly twenty-five years of experience in designing, managing and implementing networks. This experience, which is detailed below, relates directly to my work with M2Z Networks.
3. Prior to joining M2Z, I served as a consultant for various companies in the networking and telecommunication field focusing on technology, product planning and strategies. In this capacity, I also worked with broadband Internet Service Providers ("ISPs"), assisting them with network architecture and interconnection strategies, as well as vendor and equipment selection.
4. Previously, I was Senior Director of Backbone Engineering at Excite@Home. There, I was responsible for the overall architecture and engineering for the company's nationwide IP backbone network. I established and led the team responsible for the architecture and implementation of the @Home nationwide IP

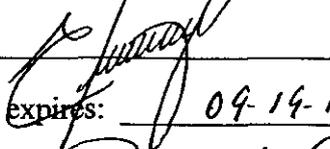
optical network, and I was responsible for the ongoing engineering and operational support of the network. I also led the team which orchestrated the transition from an ATM network to an OC-48 optical network. In addition, I was responsible for network scalability and backbone traffic planning and engineering, which included managing the relationships and engineering the "peering" connections with other ISPs.

5. I worked for Bay Networks for two years, where I managed the software engineering group responsible for the design and development of the router software, which was customized for ISPs. In addition, I participated in the definition and architecture of enhancements to the router software specifically for the ISP market.
6. I worked for Sterling Software for six years at the NASA Ames Research Center, where I was responsible for the architecture and engineering of the NASA Science Internet, an international multi-protocol network. I was responsible for defining the routing architecture and engineering the growth of the network which consisted of over 200 routers. Moreover, I participated on the Federal Engineering Planning Group which coordinated network planning and interconnection among the various US Federal agency backbone networks. During this time, I was an active member of the Internet Engineering Task Force (IETF), with an emphasis on routing protocols and operational issues concerning the Internet.
7. Aside from heading the network engineering efforts at M2Z, I have previously, and currently serve on the technical advisory boards of several start-up companies. In addition, I served for three years (April 1996 through March 1999) as a member of the IETF Internet Engineering Steering Group (IESG) as an Internet Area Director.

Signature: 
Jeffrey G. Burgan
Vice-President, Engineering
M2Z Networks, Inc.
2800 Sand Hill Road
Suite 150
Menlo Park, CA 94025

Date: 3/26/2007

Subscribed and sworn to before me this 26th day of March, 2007.

Notary Public: 

My Commission expires: 09-19-10

Residing at: Redwood City, CA



**Before the
Federal Communications Commission
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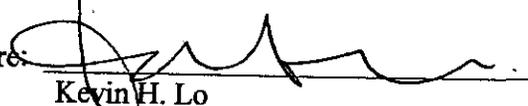
**AFFIDAVIT OF KEVIN H. LO
IN SUPPORT OF OPPOSITION OF M2Z NETWORKS, INC.
TO PETITIONS TO DENY**

I, Kevin H. Lo, do hereby declare under penalty of perjury the following:

1. I am the General Manager of M2Z Networks, Inc. ("M2Z").
2. I am responsible for implementing and operating M2Z's suite of nationwide wireless broadband IP services to consumers, either directly or through business partnerships I helped develop. I am sufficiently qualified for such duties. I have an AB from Harvard University and have 13 years of experience in operating technology businesses. This experience, which is detailed below, relates directly to my work with M2Z Networks.
3. Prior to joining M2Z, between 2004 and 2006, I was the managing partner of K5 Systems Inc. where I led a consortium of private equity investors and pension funds in evaluating and investing in On-Demand software companies who deliver their software as an integrated service, inclusive of the networks and management of these networks, to consumers.
4. Between 2000 and 2004, I was the CFO and COO of NaviSite (NASDAQ: NAVI) where I led the successful turnaround of the Internet and applications service provider and the stock price from a low of \$0.80 to \$8.00 at the end of my tenure. As CFO, I led a \$65M refinancing of the company, designed and implemented a

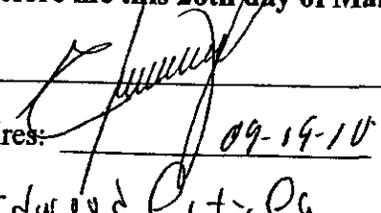
restructuring plan that took the company from losing \$200M/year to profitability, fixed the operational issues that significantly improved key performance and customer satisfaction metrics, and then guided the company through acquisitions and integrations of 5 market competitors. I managed all day-to-day operations of the company including service delivery and customer support, data center and network operations for a nationwide footprint, product management, sales, marketing and R&D functions. During my tenure as COO, I successfully led the 800+ person company through 4 major integration efforts in which the company more than tripled in size in revenues and number of customers.

5. From 1997 to 2000, I was the founder and CEO of X-Collaboration Software Corp (XCSC), an Application Service Provider that sold its award winning collaboration applications to Enterprise customers like Kodak, Pepsi, Fidelity and HP. As the CEO, I led the software design and development efforts, built and operated our IP network, and managed the delivery of service to our customer base. XCSC was acquired by Progress Software (NASDAQ: PRGS) in 2000.
6. Beginning in 1993 and through 1997, I was a strategy consultant at Bain & Company where I built an expertise in the software, telecommunications and public utility industries and worked on corporate strategy, operational improvement and turnaround situations for major clients.
7. Aside from being responsible for M2Z's overall product management and business development efforts at M2Z, I currently serve on the board of directors and board of advisors of several technology ventures, companies and non-profit organizations.

Signature: 
Kevin H. Lo
General Manager
M2Z Networks, Inc.
2800 Sand Hill Road
Suite 150
Menlo Park, CA 94025

Date: 3/26/07

Subscribed and sworn to before me this 26th day of March, 2007.

Notary Public: 
My Commission expires: 09-19-10
Residing at: Redwood City, Ca.



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Of the Commission's Rules and Other)	
Regulatory and Statutory Provisions)	
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**AFFIDAVIT OF DR. PAUL KOLODZY
IN SUPPORT OF OPPOSITION OF M2Z NETWORKS, INC.
TO PETITIONS TO DENY**

I, Dr. Paul Kolodzy, do hereby declare under penalty of perjury the following:

1. I am the Senior Technology Adviser for 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 20 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 Director of the Center for Wireless Network Security (WiNSeC) at Stevens Institute of Technology. I was also the Senior Spectrum Policy Advisor at the Federal Communications Commission (FCC) and Director of Spectrum Policy Task Force charged with developing the next generation spectrum policy.
4. Previously, I was Program Manager at the Defense Advanced Projects Agency (DARPA) in the Advanced Technology Office. There, I managed Research and

Development for communications programs developing generation-after-next capabilities.

5. Prior to DARPA, I was the Director of Signal Processing and Strategic Initiatives at Sanders (now BAE Systems), a premier electronic warfare company in the United States.
6. I began my career as the Group Leader and Staff Member at MIT Lincoln Laboratory, where I worked on Optical Systems for Laser Radars, Signal Processing, and Target Recognition for Acoustics, RF (SAR), and Optical signatures. I received a Ph.D. and M.S. in Chemical Engineering from Case Western Reserve University and a B.S. in Chemical Engineering from Purdue University

Signature: 
Dr. Paul Kolodzy
Senior Technology Advisor
M2Z Networks, Inc.
1200 North 14th Street
Suite 600
Arlington, VA 22201

Date: 26 MARCH 2007

Subscribed and sworn to before me this 26th day of March, 2007.

Notary Public: 
My Commission expires 8/31/2008
Residing at: Arlington, VA

AFFIDAVIT OF MICHAEL J. MARCUS, SC.D., F-IEEE

The undersigned affiant, Michael J. Marcus, hereby declares:

1. I am over the age of eighteen, suffer no legal disabilities and have personal knowledge of the facts set forth below.
2. I am sufficiently qualified to render an opinion regarding radio frequency ("RF") interference. I hold S.B. and Sc.D. degrees in electrical engineering from the Massachusetts Institute of Technology. I was elected as a Fellow of the Institute of Electrical and Electronics Engineers "for leadership in the development of spectrum management policies." Since 1975, I have been primarily working on issues relating to spectrum management and radio interference. Specifically, I was employed by the Federal Communications Commission ("FCC") for more than 24 years with responsibility for reviewing interference concerns in the following bureaus/offices: the Field Operations Bureau (a predecessor to the Enforcement Bureau), the Office of Engineering and Technology ("OET") and OET's predecessor. Since retiring from the OET as Associate Chief for Technology in 2004, I have been working as an independent consultant in the area of wireless technology and spectrum policy.
3. I have reviewed the technical and factual statements made in the Application of M2Z Networks,¹ its Forbearance Petition² and its Opposition to the Petitions to Deny.³ The technical statements within these three documents are accurate and consistent with the interference analysis of packetized networks.⁴
4. I have also reviewed the interference-related assertions and analyses contained in the Comments, Petitions to Deny and Applications filed in the FCC's WT Docket 07-16.⁵ Based

¹ See 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, at 2-3 (filed May 5, 2006, and amended Sept. 1, 2006) ("Application").

² See Petition of M2Z Networks, Inc. for Forbearance Under 47 U.S.C. § 160(c) Concerning Application of Sections 1.945(a) and (c) of the Commission's Rules and Other Regulatory and Statutory Provisions, WT Docket No. 07-30, at 2 (filed Sept. 1, 2006) (the "Petition for Forbearance").

³ See M2Z Networks, Inc., Application for License and Authority to Provide National Broadband Radio Service in the 2155-2175 MHz Band, Opposition to Petitions to Deny of M2Z Networks, Inc., WT Docket No. 07-16, at 2-3 (filed Mar. 26, 2007) ("Opposition").

⁴ The terms "data network," "digital data network," and "packetized network" are used synonymously in this Affidavit.

⁵ See AT&T Inc., Petition to Deny, WT Docket No. 07-16 (submitted Mar. 2, 2007) ("AT&T Petition to Deny"); CTIA - The Wireless Association, Petition to Deny, WT Docket No. 07-16 (submitted Mar. 2, 2007); Petition to Deny of Motorola, Inc., WT Docket No. 07-16 (submitted Mar. 2, 2007); NextWave Broadband Inc., Petition to Deny, WT Docket No. 07-16 (submitted Mar. 2, 2007); Petition to Deny of T-Mobile USA, Inc., WT Docket No. 07-16 (submitted Mar. 2, 2007); Petition to Deny of Verizon Wireless, WT Docket No. 07-16 (submitted Mar. 2, 2007); Wireless Communications Association International, Inc., Petition to Deny, WT Docket No. 07-16 (submitted Mar. 2, 2007); Comments of the Consumer Electronics Association, WT Docket No. 07-16 (submitted Mar. 2, 2007); Comments of Leap Wireless International, Inc., WT Docket No. 07-16 (submitted Mar. 2, 2007); Opposition of EchoStar Satellite L.L.C., WT Docket No. 07-16, at 1-2 (submitted Mar. 2, 2007); Consolidated Petition to Deny and Comments of TowerStream Corporation, WT Docket No. 07-16 (submitted Mar. 15, 2007); Consolidated

on my review, I have concluded that these assertions incorrectly evaluate the interference potential (using an analog continuous mode interference analysis) from M2Z's proposed data network to the services in the neighboring bands. Data network interference analysis techniques use many more factors than the older analog methods referenced by the Petitioners.⁶ By using the incorrect analysis, the Petitioners overstate the interference potential of M2Z's network.

5. Without regard to M2Z's Application, the 2155 – 2175 MHz band of spectrum will lie fallow, *unless* some form of interference coordination occurs. Any new entrant in this band will be required to coordinate with incumbent licensees to prevent harmful interference. The Petitioners' predictions of theoretical interference to Advanced Wireless Services ("AWS"), Broadband Radio Services ("BRS") and Fixed Microwave Services ("FS") fail to address the true issue in this proceeding: will aggressive application of contemporary technology and successful licensee coordination mitigate the potential for harmful interference in M2Z's proposal? M2Z's Application and related documents demonstrate that it will.
6. M2Z has requested treatment as an AWS licensee. As an AWS licensee, M2Z will abide by existing FCC regulations regarding BRS and FS incumbents.⁷ M2Z will avoid causing harmful interference to the incumbents under the FCC's rules and, where necessary, relocate BRS and FS licensees that would experience interference from M2Z's operations.
7. Interference to operations in the bands adjacent to 2155-2175 MHz is a more complicated issue. It involves Time Division Duplex ("TDD") systems operating in close proximity to Frequency Division Duplex ("FDD") systems. The FDD/TDD interference issue is fully explained below.

TDD / FDD NETWORK INTERFERENCE POTENTIAL EXPLAINED

8. FDD networks separate uplink (mobile-to-base) and downlink (base-to-mobile) communications into two paired bands. Spectral distance is maintained in FDD networks between up and downlink communications to minimize interference. The newer technology TDD permits uplink and downlink communications to be deployed in the same band using the time domain to separate the communications.
9. As indicated in Diagram 1 below, downlink communication in 2145 - 2155 and 2175 - 2180 MHz would be adjacent to M2Z uplink communications in 2155 - 2175 MHz. TDD mobile

Petition to Deny and Comments of the Rural Broadband Group, WT Docket No. 07-16 (submitted Mar. 16, 2007); Comments of the Information Technology Industry Council, WT Docket No. 07-16 (submitted Mar. 16, 2007).

⁶ Analog continuous mode interference analysis calculates only radiating power levels to determine if harmful interference is present. By contrast, packetized network interference analysis uses four variables to calculate the potential for interference, which are: frequency, power, space and time.

⁷ See Application, Appendix 2, at 3-4; in the Application and appendices thereto, M2Z stated plainly that it would relocate incumbent FS and BRS licensees pursuant to the FCC's relocation requirements developed in the AWS proceeding. See *id.* Moreover, M2Z's Application is conditioned on its compliance with the current standards for out-of-band emissions, $(43 + 10 \log(P))$ and $(67 + 10\log(P))$. See 47 C.F.R. § 27.53(1)(2) (note the first parenthetical contains a small case "L").

to FDD mobile interference could occur unless precautions are taken in design and operation of the proposed M2Z network.

Diagram 1

2145/55 AWS-1 Auctioned Downlink	2155/75 M2Z Proposed Uplink and Downlink	2175/80 AWS Proposed Downlink
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10. The potential mobile-to-mobile interference could occur when TDD mobiles operating near the band edge are transmitting near AWS mobile receive frequencies. When several conditions occur simultaneously (see paragraph 12), the TDD mobile send signal could overwhelm the FDD mobile receive signal because some receivers lack sufficient signal filtering capabilities.
11. Petitioners in this proceeding, on the other hand, have raised interference concerns which are not relevant to the M2Z proposal for operations at 2155 – 2175 MHz. For example, the AT&T Petition to Deny references the following statement from a study commissioned by the United Kingdom's Ofcom regulatory body:⁸

The worst-case interference mode is base station to base station, for which a separation distance of greater than 1 km was predicted to be required between base stations to avoid interference⁹

This statement, while relevant to the United Kingdom's band plan, simply does not apply to M2Z's proposal in this docket. Base station to base station interference will not occur between M2Z's service at 2155 – 2175 MHz and the neighboring AWS licensees. This is because the neighboring AWS licensees have their uplink frequencies at 1710 – 1755 MHz, a great spectral distance away from the 2155 – 2175 MHz band. A neighboring uplink frequency is a necessary ingredient for this form of interference. Thus, the "base station to base station" interference concern raised by AT&T, in the quote above, is unjustified.¹⁰

EVEN WITHOUT INTERFERENCE MITIGATION, THE CHANCES OF TDD/FDD INTERFERENCE ARE EXTREMELY REMOTE

12. Although much concern has been raised in the proceeding record regarding potential *TDD mobile to FDD mobile* interference, it will be a rare occurrence in practice. Potential interference will only cause harmful interference if *all six* of the following circumstances happen simultaneously:
 - The FDD and TDD mobiles are physically close, *and*
 - The FDD subscriber is receiving at the same time that the TDD mobile is transmitting, *and*

⁸ *AT&T Petition to Deny*, 34 (citing Mason Communications Ltd, "2500-2690MHz, 2010-2025MHz and 2290-2302MHz Spectrum Awards – Engineering Study (Phase 2)" (November 2006) at Appendix A, p. 15-16 <http://www.ofcom.org.uk/consult/condocs/2ghzawards/masonresearch.pdf>) ("Ofcom Report").

⁹ *Id.*

¹⁰ *See supra*, note 8.

- The FDD subscriber is receiving a weak signal from his base station, *and*
- The TDD subscriber is transmitting a strong signal to his base station since he is very far away, *and*
- The FDD and TDD subscribers are assigned channels within their block that are close to the FDD/TDD block boundary, *and*
- The interference is greater than the FDD network's packet error rate.

13. Because the simultaneous occurrence of six independent variables is required, it is expected that M2Z's block error rate in adjacent band mobile units will be less than one percent—without any mitigation techniques employed. Once mitigation techniques are employed, the block error rate to mobile units in adjacent bands will be significantly less than one percent. A precise quantification of this rate requires modeling of the specific systems that the adjacent block licensees intend to use.

14. The potential interference at issue is dwarfed even further once packet error rates are taken into account. Modern networks contain a measure of built-in interference tolerance. AWS networks will be engineered typically for a certain rate of lost packets due to propagation issues and interference, called a packet error rate. AWS planners anticipate packet error rates in the order of a few percent and AWS-designed networks will include error correction and retransmission techniques to cope with the problem of lost data packets. Normally, matters such as this would be resolved by direct coordination between the neighboring licensees.

15. As a result, the theoretical interference predicted by the Petitioners results in little more than an inconvenience to be managed in practice by the TDD operator with proper coordination and aggressive use of interference control technology. M2Z has every incentive to coordinate and be a good spectral neighbor. If it does not, similar interference could occur to the M2Z network. Thus, M2Z and the neighboring AWS systems must cooperate for mutual benefit.

THE M2Z INTERFERENCE MITIGATION PLAN

16. Many of the techniques that M2Z proposes to use in mitigating interference stem from the modern efficiencies of data networks. Both M2Z and the neighboring AWS systems are data or packetized voice systems that do not operate continuously. Unlike the older 800 MHz cellular systems which required constant communication, data networks may utilize communication time cycles for efficiency. These time cycles may be managed to mitigate interference.

17. Despite the Petitioners' objections to the use of packetized interference mitigation analysis, this analysis is generally accepted in the scientific community. It is even referenced in one of the publications cited by the Petitioners.¹¹ The AT&T-referenced Ofcom Report uses the packetized approach to analyze TDD mobile to FDD mobile interference. Regrettably, these sections of the Report were not cited by AT&T or its retained engineering expert.¹²

¹¹ *Id.*

¹² See e.g. *Ofcom Report*, 38 (the digital analysis on this page is indicated by the discussion of probabilistic interference assessments.).

18. Petitioners fail to consider that some data network interference control techniques were used previously in operational CMRS systems. For example, in second generation GSM systems “cochannel interference is typically minimized by means of power control, discontinuous transmission (DTX) and frequency hopping.”¹³ Thus, many wireless providers that have already deployed advanced wireless technologies presently use or have used these mitigation techniques. The CMRS interference avoidance methods are similar to the present FDD/TDD interference mitigation techniques.
19. The basic interference mitigation technologies to be employed in M2Z’s proposed network are: (1) automatic transmitter power control, (2) smart antennas, and (3) careful base station selection of channels and time slots for subscriber units. Each of these technologies are referenced in a recent ITU-R paper as effective means for reducing interference.¹⁴ M2Z’s Application recognizes that these tools must be used in combination, and has committed to such detailed interference planning.
20. The references quoted by the Petitioners do not consider smart antennas as a TDD/FDD interference mitigation tool. However, for this one tool alone, there is a growing body of technical literature on the topic resulting from the decisions by China to use a TDD-based system as the core of its 3G implementation.¹⁵ The existing technical documentation and practical implementation examples increase exponentially once all mitigation factors in the interference tool kit are considered. In short, data interference mitigation techniques are heavily documented in theory and tested in practice.
21. As the discussion above makes clear, M2Z’s proposed service will not cause harmful interference to either BRS, FS or other AWS licensees. To avoid interference to BRS and FS licensees, M2Z has proposed that the FCC condition its license upon the applicable interference and relocation rules for AWS licensees. Moreover, its proposed aggressive use of interference mitigation techniques for data networks will enable other AWS licensees to safely operate along side M2Z’s network. As a result, in my opinion, M2Z has fully responded to the claims of the Petitioners and affirmatively proven that it has the technical qualifications to operate at 2155 – 2175 MHz without causing harmful interference to co-channel and adjacent band licenses.

¹³ Juha Korhonen, Introduction to 3G Mobile Communications, Second Edition, Artech House, 2003 at p. 254.

¹⁴ *Mitigating Techniques to Address Coexistence Between IMT-2000 Time Division Duplex and Frequency Division Duplex Radio Interface Technologies Within the Frequency Range 2 500-2690 MHz Operating in Adjacent Bands and in the Same Geographical Area*, ITU-R M.2045 (2004) (“ITU-R Study”).

¹⁵ See Mugen Peng, Biao Huang, and Wenbo Wang, “Investigation of TDD and FDD CDMA Coexistence in the Macro Environment Employing Smart Antenna Techniques,” 2004 and the 5th International Symposium on Multi-Dimensional Mobile Communications Proceedings, Vol. 1 (Aug.-Sept. 2004) 43- 47. See also Mugen Peng & Wenbo Wang, “A Framework for Investigating Radio Resource Management Algorithms in TD-SCDMA Systems,” IEEE Radio Comm’s (June 2005), S12-S18. However, the Chinese band plan has the TDD system adjacent to an FDD uplink block, so all conclusions for the Chinese system are not directly relevant to the M2Z proposal at 2155-2175 MHz in the United States.

I declare under the penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

This the 23 day of March, 2007.



REPUBLIC OF FRANCE CITY OF PARIS
EMBASSY OF THE UNITED STATES OF AMERICA } SS

Michael J. Marcus, Sc.D., F-IEEE

Sworn and subscribed before me this

the 23 day of March 2007,
Lillian C. Wahl-Tuco

Notary Public

My Commission expires: INDEFINITE

Lillian C. Wahl-Tuco
Vice Consul
U.S. Embassy, Paris

**Before the
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WT Docket No. 07-30

**AFFIDAVIT OF MILO S. MEDIN
IN SUPPORT OF OPPOSITION OF M2Z NETWORKS, INC.
TO PETITIONS TO DENY**

I, Milo S. Medin, do hereby declare under penalty of perjury the following:

1. I am the co-founder, Chairman, and Chief Technology Officer of M2Z Networks, Inc. ("M2Z"). I am also a member of the State of California's Broadband Taskforce to which I was appointed by the California Governor in December 2006.
2. I am responsible for the overall design, implementation and deployment of the advanced wireless technology upon which M2Z Networks' nationwide wireless broadband service is based. I am sufficiently qualified to implement such a system. I studied Computer Science at the University of California at Berkeley. Furthermore, I have 20 years of experience in designing, developing and implementing high-speed data networks. This experience, which is directly relevant to my current endeavors with M2Z, is detailed below.

3. For a few years prior to founding M2Z Networks in 2005, I operated a consulting practice, Medin Consulting. My consulting efforts included advising a large enterprise client on strategic network and security architecture and design. In addition, I was and still am a member of Technet's Broadband Task Force, and I participated in public policy and industry initiatives to increase the availability and speed of broadband services. In 2005, I was awarded Pulver Media's first Peripheral Visionary Award for my pioneering work in the development of the Internet and Broadband.
4. In 1995, I co-founded @Home Network, a company that pioneered the deployment of a nationwide cable modem service. In my capacity as Chief Technology Officer, I designed @Home's broadband service architecture and overall product specifications, and worked with cable carriers and equipment manufacturers to establish the technology standards for the cable broadband industry. I led @Home Network's engineering team, which grew the network from inception to almost four million operational subscribers, 800 POPs, 26 datacenters, and two NOCs across North America, Japan, and Europe, and through multiple product rollouts and revisions. In addition, I led the implementation of a comprehensive security architecture over the entire network infrastructure. During my tenure with @Home Network, I also led public policy initiatives on open access and testified before several Congressional committees and before the Federal Communications Commission. Moreover, I participated on two National Academy of Sciences panels, "Committee to Study Tools and Strategies for Protecting Kids from Pornography and Their Applicability to Other Inappropriate Internet Content" and "Committee on the Internet in Evolving Information Infrastructure".
5. Before founding @Home, I served as a Project Manager at the NASA Ames Research Center. There, I managed the NASA Science Internet Project Office, which deployed a core Federal network that connected 200 sites in 16 countries and six continents, including Antarctica. Additionally, I led the design and implementation of MAE-West, the primary west coast Internet interconnect, and participated on a federal panel on network protocol standards and protocols that designated TCP/IP a co-standard with ISO protocols. I also participated in the development of many Internet Protocol standards, such as OSPF and BGP.
6. From 1987 to 1991, I was a System Analyst with Sterling Software, where I supported networking programs at NASA's Ames Research Center, and led the design and implementation of FIX-West, the primary west coast Federal Internet interconnect. I also provided architectural design and implementation support for the Pilot Land Data System network, and helped develop an Internet protocol-based center-wide Email system.

Signature: Milo S. Medin
Milo S. Medin
Chairman and Chief Technology Officer
M2Z Networks, Inc.
2800 Sand Hill Road
Suite 150
Menlo Park, CA 94025

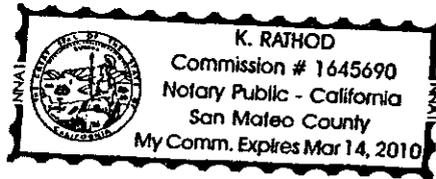
Date: 3/26/2007

Subscribed and sworn to before me this 26th day of March, 2007.

Notary Public: K. Rathod

My Commission expires: 03/14/2010

Residing at: 570 El Camino Real #150
RMC, CA - 94065



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**AFFIDAVIT OF UZOMA C. ONYEIJE
IN SUPPORT OF OPPOSITION OF M2Z NETWORKS, INC.
TO PETITIONS TO DENY**

I, Uzoma C. Onyeije, do hereby declare under penalty of perjury the following:

1. I am Vice President for Regulatory Affairs of M2Z Networks, Inc. ("M2Z").
2. I have read the foregoing Opposition of M2Z Networks, Inc. to Petitions to Deny, and any facts stated therein, of which the Federal Communications Commission may not take official notice, are true and correct to the best of my knowledge, information, and belief.

Signature: U. C. Onyeije
Uzoma C. Onyeije
Vice President, Regulatory Affairs
M2Z Networks, Inc.
12000 North 14th Street
Suite 600
Arlington, VA 22201

Date: 03/26/07

Subscribed and sworn to before me this 26th day of March, 2007.

Notary Public L. T. Mc. Buggott

My Commission expires April 14, 2008

Residing at: District of Columbia

CERTIFICATE OF SERVICE

I, Erin L. Dozier, an attorney in the law office of Sheppard Mullin Richter & Hampton, LLP, hereby certify that I have on this 26th day of March 2007 caused a copy of the foregoing Consolidated Opposition of M2Z Networks, Inc. to Petitions to Deny to be delivered by first-class mail to the following:

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In addition, courtesy copies of the foregoing Consolidated Opposition of M2Z Networks, Inc. to Petitions to Deny were delivered by hand upon the following:

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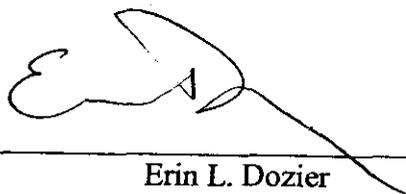
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