

Indeed, Congress found the rapid deployment of new services and technologies to the public to be of such paramount importance, and the potential of competing providers to use regulatory maneuvers to delay the process so great, that it incorporated a burden-shifting mechanism into Section 7.⁴⁷ Thus, Section 7 provides that parties who oppose a new technology or service “have the burden to demonstrate that such proposal is inconsistent with the public interest.”⁴⁸ As Representative Dingell succinctly stated at the time: “If not blocked by the FCC, the forces of competition and technological growth would bring many new services to consumers.”⁴⁹ This burden-shifting procedure “is intended to shift the balance of the process in favor of new services” and “allow the FCC, on an expedited time frame, to review [an] application” proposing a new service or technology.⁵⁰

⁴⁷ See House Floor Debate on H.R. 2755, 129 Cong. Rec. 33347 (Nov. 17, 1983) (discussing backlog of applications).

⁴⁸ 47 U.S.C. § 157(a); see also *Petition for Reconsideration of Amendment of Parts 2 and 73 of the Commission's Rules Concerning Use of Subsidiary Communications Authorization*, 98 F.C.C.2d 792 (1984) ¶ 24 (Section 7 creates “a presumption that new services are in the public interest”).

⁴⁹ Extended Remarks of Hon. John R. Dingell on Amendments to H.R. 2755, 130 Cong. Rec. E74 (Jan. 24, 1984) (discussing multi-year delays in the introduction of cellular service and cable television service).

⁵⁰ *Id.* The Commission repeatedly has invoked Section 7 to promote “innovative polices and licensing models that seek to increase communications capacity and efficiency of spectrum use, and make spectrum available to new uses and users.” *Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets*, 18 FCC Rcd 20604 (2003); see also *1998 Biennial Regulatory Review—Testing New Technology*, Policy Statement, 14 FCC Rcd 6065 (1999); *Petition for Declaratory Ruling that pulver.com's Free World Dialup is Neither Telecommunications Nor a Telecommunications Service*, 19 FCC Rcd 3307, n.67 (2004); *Revision of Part 15 of the Commission's Rules Regarding Ultra-Wideband Transmission Systems*, 15 FCC Rcd 12086 (2000); *Amendment of Parts 2 and 15 of the Commission's Rules to Permit Use of Radio Frequencies Above 40 GHz for New Radio Applications*, 9 FCC Rcd 7078 (1995); *Amendment of Parts 1 and 21 of the Commission's Rules to Redesignate the 27.5 to 29.5 GHz Frequency Band and to Establish Rules and Policies for Local Multipoint Distribution Service*, 9 FCC Rcd 1394 (1994).

M2Z's Application is entitled to Section 7's presumption that a grant is in the public interest. As set forth in the Application, M2Z has proposed a new and innovative service, using new technologies, in 20 MHz of underutilized and unpaired spectrum. Although they have had months to prepare their applications, none of the Applicants has proposed a service that is more than a shadow of that proposed by M2Z.

II. THE ALTERNATIVE PROPOSALS HAVE FAILED TO MEET THEIR BURDEN OF PROOF UNDER SECTION 7 OF THE ACT.

The Alternative Proposals seek to oppose the M2Z Application because, at bottom, they all seek the approval of some other lesser service that is not NBRIS. Indeed, in their Alternative Proposals, almost all of the Applicants argue explicitly against the grant of the M2Z Application.⁵¹ Therefore, under Section 7, the Applicants have the burden to demonstrate that grant of the M2Z Application is inconsistent with the public interest. In this respect, the Applicants have failed to meet such burden or to reach the high public interest bar established by the M2Z Application.⁵² Unlike the Applicants, M2Z proposes specific and enforceable public interest obligations that will govern its conduct as conditions of the requested license. As

⁵¹ See NextWave Proposal at 7-8 (attacking M2Z's interpretation of the Commission's authority under Section 309(j)(6)(E) of the Act to grant spectrum licenses without conducting an auction); NetfreeUS Proposal at 4 (arguing that "[t]he question for the Commission . . . is not whether M2Z can fulfill its business plan, but whether other alternatives can better serve the public interest than the single-license, single-provider approach urged by M2Z"); Commnet Proposal at Exhibit 7, p. 1 (attacking the M2Z Application as "defective and not acceptable for filing"); McElroy Proposal at Exhibit 1, pp. 2-3 (arguing that the Commission has rejected M2Z's "extraordinary request that its application be both insulated from competing applications and treated as a non-auctionable license application"); TowerStream Proposal at Exhibit A, p. 8 (arguing that "[i]t would be manifestly inconsistent with the public interest for the Commission to grant M2Z's application").

⁵² See, e.g., Comments of the National Association of State Utility Consumer Advocates, WT Docket Nos. 07-16 & 07-30, at 10-12 (filed Mar. 19, 2007) (arguing that the Alternative Proposals do not make as strong a public interest showing as M2Z).

demonstrated below, the Alternative Proposals pale in comparison to the abundance of public interest benefits that would result from the grant of the M2Z Application.⁵³

A. The Alternative Proposals Will Not Provide Free Broadband Service to the Entire Nation.

M2Z proposes to offer *free* broadband Internet access to anyone who wants this service within its nationwide footprint. Thus, grant of the M2Z Application will guarantee that everyone in the country has access to broadband, regardless of income. With the exception of the McElroy Proposal, which, as discussed below, is merely a speculative and non-substantive “copy-cat” proposal attempting to duplicate most but not all of the M2Z Application, none of the Alternative Proposals will provide a free service:

- *Open Range.* Open Range proposes to charge subscribers \$34.95/month for broadband access, with additional recurring charges for the lease of consumer premises equipment (“CPE”).⁵⁴ Thus, the Open Range Proposal would, at best, result in a handful of people having an additional option for the purchase of broadband Internet access services. Although Open Range reports that it will offer free service to schools and certain health care providers, these entities already qualify for free services under USF programs,⁵⁵ so it is not clear that any new services will be offered to the public at no charge.
- *NextWave.* The NextWave Proposal does not specify how much NextWave will charge subscribers for its proposed service. Presumably, however, NextWave’s proposed service would not be provided free of charge; otherwise, NextWave would have stated as much in its proposal.
- *Commnet.* Commnet plans to charge subscribers \$11.95/month for a 384 kbps service, \$26.95/month for its 576 kbps service, and \$34.95/month for 1.158 Mbps service. It also will offer bulk rates to businesses and government

⁵³ See *supra* Section I. A chart comparing the M2Z Application with the Alternative Proposals is provided in Exhibit B hereto.

⁵⁴ Open Range Proposal at 8. Open Range’s VoIP service costs another \$24.99, with a required CPE lease that costs another \$2/month.

⁵⁵ See 47 U.S.C. § 254(h)(1)(A) (providing universal service support for service to rural health care providers); 47 U.S.C. § 254(h)(1)(B) (providing universal service support for service to educational providers and libraries).

subscribers with multiple units. Commnet plans to offer no free services.⁵⁶ Having failed to develop a business plan that will generate anything close to the public interest benefits of M2Z's proposal, Commnet makes the baseless contention that there is no way to do so.⁵⁷ The fact that Commnet was unable to develop such a plan to its own satisfaction has no bearing on the quality of M2Z's plan, which has managed to withstand the scrutiny of longtime experts in regulation, engineering, and investment in the telecommunications infrastructure and technology fields.⁵⁸ Commnet's unsupported suggestion that M2Z plans to engage in post-licensing re-negotiations with the Commission post-licensing should be ignored.⁵⁹ Commnet's baseless sniping serves only to demonstrate the feebleness of its proposal.

- *NetfreeUS*. NetfreeUS would establish itself as a spectrum clearinghouse within the band.⁶⁰ As a result, all of its guarantees about what services will be available, when, and at what rates are dependent upon its identification and management of spectrum lessees. It states that it will offer a free service called Wireless Public Broadband ("WPB") at no monthly fee,⁶¹ but it only plans to retain control over 50 wireless access points ("WAPs").⁶² NetfreeUS estimates that one million WAPs will be needed to fully deploy the network.⁶³ With the network open to thousands of third parties who are yet to be identified, it is unclear how or when free WPB service will become widely available, which severely curtails the potential public interest impact of the NetfreeUS Proposal.
- *McElroy*. Although McElroy proposes to provide its service free of charge, it offers no specifics as to how or when such a service would be deployed to the

⁵⁶ See Commnet Proposal at Exhibit 2, pp. 1-2.

⁵⁷ See *id.* at Exhibit 2, n.2.

⁵⁸ See M2Z Application at 6-8 (discussing the qualifications, investment successes, and technical expertise of M2Z's principals and investors).

⁵⁹ See Commnet Proposal at Exhibit 2, n.2.

⁶⁰ NetfreeUS proposes a secondary market licensing system that would allow them to be a manager for new entrants on a "public commons" basis. NetfreeUS Proposal at 5-6 (citing 47 C.F.R. § 1.9080). Within 60 days of receiving authorization, NetfreeUS would begin offering spectrum to third-parties, who can hold no more than 50 wireless access points ("WAPs"). See *id.* at 5. NetfreeUS would be subject to the same limitation, except that any area not covered by a third-party could be administered by NetfreeUS in order to ensure compliance with milestone conditions of the license. See *id.*

⁶¹ See *id.* NetfreeUS proposes a minimum speed of 384 kbps downlink and 128 kbps uplink.

⁶² See *id.*

⁶³ See *id.* at 5, n.13.

entire nation or how McElroy will finance such a nationwide network.⁶⁴ As discussed below, because McElroy also has made no firm commitments to build out its network in any part of the country, let alone to all of the U.S., its pledge to provide free service rings hollow.

- *TowerStream*. On the one hand *TowerStream* requests an exclusive nationwide license in the 2155-2175 MHz, but in the same breath *TowerStream* proposes to serve only the country's top 200 Metropolitan Statistical Areas ("MSAs").⁶⁵ Wherever *TowerStream* actually intends to provide service, two things are clear: (1) it will not be truly nationwide service; and (2) it will not be free service as "*TowerStream* does not propose to offer 'free' service to the public."⁶⁶

B. The Alternative Proposals Do Not Commit to Providing Nationwide Service or to Adhere to Specific and Firm Buildout Obligations.

M2Z has committed to constructing its network and deploying service according to the following milestones: M2Z's network will be deployed to 33% of the U.S. population (*i.e.*, 100 million people) within three years of licensing and commencement of service, 66% of U.S. population (*i.e.*, 200 million people) within five years of licensing and commencement of service, and 95% of the U.S. population (*i.e.*, 285 million people) within ten years of licensing and commencement of service.⁶⁷ M2Z has even proposed these expedited construction milestones be included as conditions on its license, even though they far exceed the standard "substantial service" requirement that applies to the vast majority of wireless licenses.⁶⁸ The Alternative Proposals do not contain specific and comprehensive nationwide buildout commitments similar to those to which M2Z has committed itself:

⁶⁴ See McElroy Proposal at Exhibit 1, p.9.

⁶⁵ See *TowerStream* Proposal at Exhibit A, pp. 1-2.

⁶⁶ *TowerStream* Proposal at Exhibit A, p. 2.

⁶⁷ These numbers were derived by multiplying each percentage by 300 million, which approximates the current U.S. population. M2Z is committed to providing service to 33, 66, and 95 percent of whatever the total U.S. population actually is at the time of each construction milestone.

⁶⁸ See M2Z Application at 23 & n.60.

- *Open Range.* Open Range proposes to serve just 553 communities nationwide, and anticipates that it will reach a total population of 6.2 million people (approximately 3% of the U.S. population) during its fifth year of providing service.⁶⁹ The Open Range Proposal contains no specific commitments to offer service to anyone by a particular point in time.

Perhaps more disturbing than Open Range's lack of buildout requirements is the manner in which Open Range has "cherry-picked" the communities it plans to serve. A review of the communities Open Range proposes to serve, listed in Annex A of the Open Range Proposal, reveals that a majority of the areas that would be served are not actually "rural" as this term is defined by the Commission for purposes of the wireless services.⁷⁰ Indeed, many of the cities identified are small towns or suburbs that are very close to urban areas, ensuring that deployments to the smaller cities on the list also require deployment to an urban area in the immediate vicinity.⁷¹ Open Range's method of selecting its service areas calls into question the true impact of its proposal on rural communities. The Open Range Proposal will, at best, affect only 10% of rural Americans and is severely limited in its coverage of population and geography. This only underscores the need for the Commission to move forward on M2Z's NBRS proposal, which, by its very license conditions, would bring free broadband to hundreds of millions of Americans throughout the country within a specified timeframe.

- *NextWave.* NextWave does not specify any buildout requirements for its proposed system. Instead, NextWave makes a general commitment to adhere to the same terms, conditions, and technical requirements that the Commission adopted for operations in the 3.65 GHz band.⁷² Under those rules, however,

⁶⁹ See Open Range Proposal at 12. Although Open Range mentions 553 communities in the text of its proposal, Annex A of the proposal lists only 522 communities.

⁷⁰ The Commission defines "rural" areas as counties in which there is a population density of one hundred people or less per square mile. Under the Commission's standard, there are 60 million people in such counties. See *Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies To Provide Spectrum-Based Services*, 19 FCC Rcd. 19078 (2004) ("on a going-forward basis, and unless otherwise specified in the context of specific policies or regulations governing wireless communications services, counties with a population density of 100 persons per square mile or less constitute "rural areas" for purposes of our wireless spectrum policies"). M2Z has analyzed the communities that Open Range proposes to serve, and has found that only 42% of these communities are located in counties that meet the Commission's definition of "rural." See Exhibit C attached hereto (analysis of population density of cities in Open Range Annex A).

⁷¹ See Open Range Proposal at Annex A. A few of the cities that will be covered in the BTAs highlighted by Open Range include New York City, Chicago, Denver, and Cleveland.

⁷² See NextWave Proposal at 3-4; see also *Wireless Operations in the 3650-3700 MHz Band*, Report and Order and Memorandum Opinion and Order, 20 FCC Rcd 6502 (2005) ("3.65 GHz

NextWave would not be subject to *any* buildout or performance requirements whatsoever. When the Commission adopted service rules for the 3.65 GHz band, it determined that buildout in the band “will be driven by market demand” and therefore “there is no need to impose a performance or build-out requirement.”⁷³ Thus, NextWave would be under no obligation to provide service to any part of the country by a date certain.

Moreover, if the 3.65 GHz band rules were applied in the 2155-2175 MHz band, as NextWave proposes, it is extremely unlikely that it would result in the provision of a nationwide service. The Commission’s licensing scheme for the 3.65 GHz band contemplates multiple licensees in a shared use band operating on the same frequencies in the same geographic areas without exclusive spectrum usage rights and interference protections.⁷⁴ However, because there are no buildout requirements under the 3.65 GHz band rules, the nominally “nationwide” licensees in reality are able to cherry-pick where they will construct facilities and which communities they will serve. Clearly, such a licensing scheme in the 2155-2175 MHz band would not engender the truly nationwide service M2Z proposes to provide.

- *Commnet.* Commnet proposes to construct sufficient cell sites to reach one third of the U.S. population within three years of licensing, two-thirds within seven years of licensing, and ninety percent within ten years of the issuance of a license.⁷⁵ Commnet would be required to meet the first two milestones as conditions of its license, while the third milestone is subject to a different standard. If Commnet doesn’t meet the third milestone, a *pro rata* portion of the licensed spectrum (presumably, that which covers the geographic area where there has been no construction) would be disaggregated and recaptured by the Commission.⁷⁶ This proposal clearly demonstrates that Commnet has no confidence in its ability to provide service to more than two-thirds of the nation. This set of license “conditions” would potentially allow Commnet to warehouse a nationwide license for ten years, during which time it has stated that it will, with few exceptions, “concentrate its initial efforts in the nation’s

Order”). Wireless broadband services in the 3.65 GHz band are governed by Subpart Z of Part 90 of the Commission’s rules. See 47 C.F.R. Part 90, Subpart Z.

⁷³ 3.65 GHz Order ¶ 40.

⁷⁴ See 3.65 GHz Order ¶ 35; see also 47 C.F.R. § 90.1307.

⁷⁵ Commnet Proposal at Exhibit 2, pp. 2-3. Commnet contends that its proposal is more realistic than M2Z’s plan and even suggests that M2Z does not intend to buildout its network as specified in the Application. See *id.* Commnet’s claims are baseless and should be disregarded as such. The fact that Commnet has not been able to identify a business model that can provide free nationwide broadband Internet access has no bearing on the viability of M2Z’s model.

⁷⁶ See *id.* at Exhibit 5, p. 1.

most densely populated areas.”⁷⁷ Once it has cherry-picked the areas that are most profitable to serve, Commnet would be able to simply hand the remaining spectrum back to the Commission, which would be left to identify a licensee or licensees who want to build a business plan around serving a variety of fragmented areas with no population density. Essentially, after Commnet reaches two-thirds of American households, all bets are off, with no penalties to Commnet. Commnet proffers a considerably slower, more limited, and less enforceable deployment plan than what M2Z’s NBRs would provide.

- *NetfreeUS*. NetfreeUS proposes to meet and enforce upon lessees the “substantial service” buildout standard as a condition of license.⁷⁸ NetfreeUS provides the following timeline for the provision of substantial service: coverage of 50% of the nation’s Cellular Market Areas (“CMAs”) within four years of license grant; coverage of 75% of the nation’s CMAs within six years of license grant; coverage of 95% of the nation’s CMAs within ten years of license grant.⁷⁹ Under Netfree’s safe harbors for meeting the substantial service requirement, “coverage” can be demonstrated in a variety of ways, including: reaching just 30% of the population of the CMA; providing service to 75% of 30% of the rural areas within the CMA; providing a “specialized or technologically sophisticated” service; or providing service to niche markets or to areas outside the areas covered by other licensees. These standards will provide for a significantly slower rollout of broadband services than would M2Z’s NBRs. Two years after commencement of operations, M2Z will reach 33% of the U.S. population. Under the NetfreeUS Proposal, there is no service guarantee by year two. At the five year mark, M2Z’s NBRs already would provide service to 66% of the public. Under the NetfreeUS standard, lessees would have just passed the four-year mark, and will have satisfied the applicable standard even if only 15% of the U.S. population is served. Indeed, a much smaller population could be served and still satisfy the vague, subjective safe harbor standards.⁸⁰

⁷⁷ *Id.* at Exhibit 2, p. 2. Commnet proposes a safeguard under which it will deploy service to any community with a population of 10,000 or less that has no other broadband access if it files a petition signed by two hundred households or businesses. *Id.* at Exhibit 2, pp. 2-3; Exhibit 5, p. 1. This safeguard is not proposed as a license condition, rather, it would be a rule that the Commission could enforce through its usual enforcement processes.

⁷⁸ Substantial service is defined as: “service which is sound, favorable, and substantially above a level of mediocre service which might minimally warrant renewal.” 47 C.F.R. §§ 27.14(a)-(b); 101.1011(a).

⁷⁹ See NetfreeUS Proposal at Exhibit 2, pp. 1-2.

⁸⁰ If the actions of Netfree’s affiliates provide any guidance regarding how NetfreeUS will interpret these safe harbors, the Commission should be very concerned about Netfree’s construction commitments. See SpeedUSNY.com, L.P., Local Multipoint Distribution Service, WLT379, Section 101.1011(a) Report and Demonstration of “Substantial Service,” FCC File No.

- *McElroy.* McElroy broadly commits to follow “a service deployment schedule with specific population coverage benchmarks” but does not specify what such schedule and benchmarks will be.⁸¹ McElroy also states that it will begin “offering service within 24 months of a grant” of its proposal, but fails to define the scope of such service.⁸² These noncommittal assertions from McElroy do not meet the high water mark M2Z has established for NBRs. There is no guarantee from McElroy that it will ever provide nationwide service, and even if McElroy commenced some sort of service within 24 months of grant, the extent to which such service would be available in the country is entirely uncertain and unclear.

- *TowerStream.* TowerStream proposes to provide coverage to at least 50% of the population in its licensed service area within 5 years, and 75% of that population within 10 years. In addition, TowerStream states that it will provide “substantial service” to 90% of Rural Service Areas (“RSAs”) within 10 years.⁸³ However, the TowerStream Proposal is internally inconsistent regarding the areas TowerStream seeks to serve. As discussed above, TowerStream requests a nationwide license, yet proposes to serve only the top 200 of the country’s 368 MSAs, leaving nearly half of the nation’s MSAs unserved. Notwithstanding this shortfall, TowerStream also proposes to serve 90% of RSAs. So exactly where TowerStream would provide its spotty service is entirely unclear. Indeed, apparently not even TowerStream knows.

0002939453 (filed Mar. 7, 2007). Speedus was granted a conditional renewal of its license for a ten-year term through February 1, 2016, provided that it could make a showing of substantial service by March 27, 2006. Speedus filed a substantial service showing on March 7, 2007. In its substantial service showing, Speedus identifies four primary service offerings that were provided during its license term: 1) a subscription television service, which was available to 52% of the market from 1996-1998; 2) transmission of Bloomberg Information Programming to financial institutions from 1996-2000; 3) a high-speed broadband Internet access trial from 1996-2003; 4) a testing program involving XO Communications, Inc., commencing in 2004. The report does not specify what services were offered using this spectrum from 2004 to the present. Speedus contends that it has met the substantial service safe harbor for service to niche markets and populations outside of areas served by other licensees, because no other LMDS licensee was offering any service in the same area during the license period. This substantial service showing remains pending.

⁸¹ McElroy Proposal at Exhibit 1, pp. 9-10.

⁸² See *id.* at Exhibit 1, p. 9.

⁸³ See TowerStream Proposal at Exhibit A, p. 4.

C. The Alternative Proposals Will Not Enhance Universal Service.

Universal service does not currently encompass broadband services. There is, however, a movement afoot in Congress to change that.⁸⁴ Nevertheless, M2Z has stated that it will not accept monies from the USF and also has agreed to contribute to USF, to the extent that such requirements apply to its services,⁸⁵ all of which will result in a net benefit to the USF program and, more importantly, to consumers.⁸⁶ The grant of the M2Z Application allows the realization of universal service goals for broadband without increasing universal service funding requirements. In contrast, the Alternative Proposals do not commit concurrently to contribute to USF and to not accept USF funding:

- *Open Range.* Open Range has not offered any commitment to pay into USF and has not declined to accept USF funds. Moreover, although Open Range suggests that its offering will “relieve pressure” on the USF, it does not explain how it will do so, nor does it attempt to quantify the benefits to the USF.
- *NextWave.* NextWave makes no commitments whatsoever concerning USF. Under its proposal to operate in the 2155-2175 MHz band with “the same

⁸⁴ See, e.g., Universal Service for the 21st Century Act, S.711, 110th Cong. 1st Sess. (2007); USA Act, S.101, 110th Cong. 1st Sess. (2007); Serving Everyone with Reliable, Vital Internet, Communications, and Education Act of 2007, H.R.42, 110th Cong. 1st Sess. (2007) (each proposing to expand the universal service program to encompass broadband).

⁸⁵ See Application at 32-33, n. 101 (“M2Z anticipates that its Premium Services (for which there will be a consumer charge) would be subject to universal service contributions to the extent specified by the Commission in appropriate rulemaking proceedings . . . M2Z will work with the Commission to ensure that its service meets the relevant requirements . . .”). In a recent declaratory ruling, the Commission determined that wireless broadband Internet access services are information services, and that such services are not CMRS as that term is defined in the Act and implemented in the Commission’s rules. See *Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks*, Declaratory Ruling, WT Docket No. 07-53, FCC No. 07-30 (rel. March 23, 2007) (“*Declaratory Ruling*”). Based on M2Z’s review of the item, it appears that NBRS would not be categorized as CMRS. M2Z remains committed to complying with USF obligations to the extent required by the Commission’s rules and regulations as presently formulated or adapted for various services it would provide under its NBRS license.

⁸⁶ See M2Z Application at 29-30.

terms, conditions and technical requirements that the Commission adopted for the 3.65 GHz band,”⁸⁷ however, NextWave would be able to choose to be regulated as a common carrier or non-common carrier depending on the type of service it opts to provide.⁸⁸ As a result, NextWave seeks to circumvent any and all USF obligations it might have by cherry-picking classifications of its services.⁸⁹ NextWave does not demonstrate that it can meet the changing regulatory landscape applicable to these services.

- *Commnet*. Commnet proposes to contribute to USF according to the heretofore unspecified requirements for BRS licensees. Commnet does not volunteer not to accept monies from the USF.
- *NetfreeUS*. Although NetfreeUS applauds the effects of M2Z’s proposal on the USF and suggests its proposal will have a similar impact, its plan does not specify how it will implement its goals given the subleasing arrangement it contemplates for buildout and operation of its service.⁹⁰
- *McElroy*. Although McElroy mentions in passing that it will not rely on “taxpayer dollars or disbursements from the Universal Service Fund” to construct its network,⁹¹ it does not elaborate and makes no concurrent commitment to contribute to USF to the extent required by the Act and the Commissions’ rules. Here again, McElroy has provided the most generic of assurances based on M2Z’s model, but without providing any substance.
- *TowerStream*. TowerStream has not declined to accept USF funds for the construction and operation of its network.

D. The Applicants Will Not Offer a Family-Friendly Service.

M2Z proposes to include a free filtering feature with its service that will protect minors from indecent, obscene, and pornographic content on the Internet, a private sector solution that is

⁸⁷ NextWave Proposal at 3-4.

⁸⁸ See 3.65 GHz Order ¶ 36 (“Licensees in the 3650 MHz band may provide services on a common carrier or non-common carrier basis and will have flexibility to designate their regulatory status based on any services they choose to provide.”)

⁸⁹ See *id.* ¶ 37 (“For instance, if a wireless licensee provides Commercial Mobile Radio Services (CMRS), which makes the licensee a common carrier, other obligations attach as a result of that decision under Title II of the Communications Act or the Commission’s rules (*e.g.*, universal service, CALEA).”).

⁹⁰ NetfreeUS Proposal at 4.

⁹¹ McElroy Proposal at Exhibit 1, p. 1.

sorely needed. This content filtering will be “always on” and tamper-resistant as an essential element of M2Z’s service.⁹² Filtering functions would apply enterprise class filtering to the free component of the NBRS to restrict unauthorized access to websites purveying pornographic, obscene, or indecent material.⁹³ Open Range, NextWave, NetfreeUS, and TowerStream offer no such filtering proposal.⁹⁴ Although Commnet and McElroy purport to employ some sort of filtering to protect minors, their nonspecific proposals are not comparable to the family-friendly service M2Z will offer:

- *Commnet.* Commnet merely states that it will comply with any “current or future federal requirements for the protection of minors.”⁹⁵ It is no surprise that Commnet does not intend to offer a family-friendly service, given that its affiliates have a history of profiting from the traffic and sale of indecent, pornographic content.⁹⁶ Commnet’s proffer of compliance with federal laws is,

⁹² See M2Z Application at 24 & Appendix 3.

⁹³ See *id.* Adults who wish to access otherwise lawful material that is restricted by NBRS may do so by enrolling in one of M2Z’s Premium Service offerings. See *id.*

⁹⁴ NetfreeUS explicitly states that it will not filter such content. See NetfreeUS Proposal at 6. TowerStream states that it “will comply with all requirements for the protection of minors from access to indecent and obscene materials, and will offer its users options for filtering and blocking pornographic sites.” TowerStream Proposal at Exhibit A, p. 3. Compliance with such federal laws is to be expected from a Commission licensee, however, and since pornography blocking software is already widely available, TowerStream brings nothing new to the table by offering such “options” to its users.

⁹⁵ Commnet Proposal at Exhibit 2, p. 3.

⁹⁶ See *Offshore Dial-a-Porn Coming Under Siege: Profits Transformed Guyana Phone System, But Regulators, Carriers Want to End High Fees*, CLEVELAND PLAIN DEALER (April 4, 1999) (describing how ATNI and GT&T financed a significant portion of upgrades to Guyana’s telecommunications infrastructure through revenues from phone services that feature adult entertainment, also known as “audiotexting”). Audiotexting generated significant revenues for GT&T because of call termination fees, which were once as high as 85 cents per minute. See *Guyana Telephone & Telegraph Co., Ltd. v. Melbourne Int’l Communications Ltd.*, 329 F.3d 1241 (2003). GT&T apparently only stopped routing the traffic when it ceased to be profitable. See Atlantic Tele-Network, Inc., Securities and Exchange Commission Form 10-K, Annual Report for the fiscal year ended December 31, 1998 at 2; Atlantic Tele-Network, Inc., Securities and Exchange Commission Form 10-K, Annual Report for the fiscal year ended December 31, 2001 at 2 (GT&T’s audiotext traffic steadily declined over a five year period from a high of 122,476 minutes in 1996 to just 3,689 minutes per year in 2001). The profitability of audiotexting was dealt a final blow in January 2002, when the FCC reduced the settlement rate to

presumably, not a benefit but the minimum one can expect from any Commission licensee.

- *McElroy.* McElroy commits “to outfit its system with advanced network filtering technology for purposes of blocking access to indecent or obscene material.”⁹⁷ Without further details from McElroy, however, it is impossible to determine whether such filtering will be comparable to M2Z’s family-friendly service. For instance, McElroy does not explain how it plans to accomplish filtering on its network, whether all users will be denied access to indecent and obscene material, and what measures it will take to prevent users from tampering with or hacking its filters.

E. The Alternative Proposals Do Not Make Comparable Commitments to Serving Public Safety Entities.

M2Z pledges to provide all public safety entities nationwide with access to its free interoperable network.⁹⁸ As part of this commitment, M2Z will serve any federal, state, or municipal public safety organization with the ability to connect an unlimited number of devices to its network. Once fully constructed, M2Z’s network will guarantee public safety entities a single interoperable data platform usable across the United States. The Alternative Proposals do not approach this level of commitment to the public safety entities:

- *Open Range.* Open Range offers a vague assurance that, in the event of an emergency, public safety communications will be “prioritized” on its system.⁹⁹ Open Range does not elaborate how such priority will be accomplished.
- *NextWave.* NextWave makes no commitment whatsoever to provide a free, nationwide, and interoperable network for the benefit of public safety entities. Indeed, given that NextWave’s proposal envisions a non-exclusive licensing regime using contention-based protocols in the 2155-2175 MHz band with no interference protections,¹⁰⁰ NextWave’s proposed service would be ill suited

just 23 cents per minute. Atlantic Tele-Network, Inc., Securities and Exchange Commission Form 10-K, Annual Report for the fiscal year ended December 31, 2001 at 2.

⁹⁷ McElroy Proposal at 10.

⁹⁸ See M2Z Application at 24-26.

⁹⁹ See Open Range Proposal at 5.

¹⁰⁰ See NextWave Proposal at 3-4; see also 3.65 GHz Order ¶ 35.

for public safety use. Because anyone could use such a network at any time, there would be no way to prioritize public safety access or to ensure the protection of priority communications from interference.

- *Commnet*. Commnet states that it will work with the public safety community to develop dual-mode voice and data handsets. When and if such CPE is developed, Comment would offer basic broadband to public safety at no charge. As compared to M2Z's offer to provide, as a condition of its license, free access for all public safety entities for an unlimited number of devices as soon as its network is deployed, Commnet's "commitment" rings hollow. The low level of commitment to public safety is no surprise given that Commnet has been less than aggressive in its efforts to comply with the Commission's E-911 mandates. Notably, Commnet twice has sought, and twice has been denied, waiver of the wireless E-911 requirements.¹⁰¹ There is nothing *per se* wrong with seeking waiver of a Commission rule or policy, but when the waiver concerns something as fundamental, and indeed as critical to national security, as wireless E-911, Commnet's level of commitment to providing services to first responders has to be open to question.

- *NetfreeUS*. Though NetfreeUS provides a long description of the communications problems faced by public safety entities, Netfree's proposed solution does little to solve them. NetfreeUS proposes to provide public safety officials with an override code that will enable them to clear traffic in emergencies.¹⁰² NetfreeUS analogizes its proposal to the Emergency Alert System and states that the override code would enable "public safety officials to communicate with the public and each other over the Internet before, during, and after natural disasters."¹⁰³ It also states that where it offers WPB service, it will make such service available to governmental or public safety entities.¹⁰⁴ As with the other commitments NetfreeUS makes, they are comparatively limited in scale and scope given the significantly slower rollout proposed by NetfreeUS and the fact that most of the network needs to be constructed and deployed by unidentified third parties. M2Z's proposal will offer public safety entities full-time free access to an interoperable network for an unlimited number of devices. With NetfreeUS establishing itself as little more than a spectrum referee, it simply cannot commit itself to the kind of public safety offering that M2Z would provide.

¹⁰¹ See *Revisions of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, 20 FCC Rcd 7709 (2005); *Revisions of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, 2007 WL 445335 (Feb. 9, 2007).

¹⁰² See NetfreeUS Proposal at 17-18.

¹⁰³ *Id.* at 6.

¹⁰⁴ See *id.* at 6 and Exhibit 2, p. 4.

- *McElroy*. Although McElroy “commits to serve any federal, state, county, or municipal safety organization wishing to use its service, without regard to the number of devices utilizing the network,”¹⁰⁵ this commitment from McElroy does not withstand scrutiny. As discussed above, McElroy makes no commitment to ever construct a nationwide network, and the extent to which *its network will ever be built out is entirely unclear and uncertain*. As compared to M2Z’s firm commitment to build an interoperable public safety network across the country within ten years of license grant, McElroy’s attempt at mimicry falls well short of that pledge.
- *TowerStream*. TowerStream states without elaboration that it will provide “priority access” to public safety entities “operating with open standard equipment” during emergencies at no charge.¹⁰⁶ However, given that TowerStream does not commit to building a nationwide network, such “priority access” is meaningless.

F. The Alternative Proposals Do Not Offer Comparable Spectrum Usage Fees.

As explained in the M2Z Application, in addition to providing broadband free of recurring charges, M2Z also will offer a subscription-based service with such premium features as faster data rates and access to additional content and/or applications (the “Premium Service”).¹⁰⁷ M2Z has voluntarily committed to pay an annual spectrum usage fee to the U.S. Treasury in the amount of five percent of the gross revenues derived from the Premium Service, and has proposed that this commitment be included among the terms and conditions of its license.¹⁰⁸ The Alternative Proposals make no such commitment:¹⁰⁹

¹⁰⁵ See McElroy Proposal at Exhibit 1, p. 10.

¹⁰⁶ TowerStream Proposal at Exhibit A, p. 3.

¹⁰⁷ M2Z Application at 26.

¹⁰⁸ *Id.*

¹⁰⁹ Several of the Applicants instead urge the Commission to award the license at auction. See McElroy Proposal at Exhibit 1, p. 3; TowerStream Proposal at Exhibit A, p. 2; Commnet Proposal at Exhibit 7. However, as discussed below, the public interest is not best served by award of a NBRIS license at auction. See *infra* Section IV. See also, Simon Wilkie, PhD., “Auctions Are Not a Panacea: Theory And Evidence Of Anti-Competitive and Rentseeking Behavior in FCC Rulemakings and Auction Designs,” WT Docket Nos. 07-16 & 07-30 (filed Mar. 26, 2007). Moreover, any commitment from the Applicants to pay for the value of the spectrum at auction is meaningless unless the Applicants participate in and win such an auction.

- *Open Range.* Open Range, by contrast, has identified no spectrum usage fees or other means by which the Commission can meet its statutory obligation to recover a portion of the value of this spectrum for the public.¹¹⁰
- *NextWave.* NextWave also does not offer to pay spectrum usage fees. Moreover, under NextWave's non-exclusive licensing scheme for the 2155-2175 MHz band, the Commission would not be able to satisfy its statutory obligation to recover a portion of the value of the spectrum for the public because there would never be any need to conduct an auction.¹¹¹
- *Commnet.* Commnet proposes to pay a regulatory fee of \$50 million when the grant of its license *renewal* becomes an unreviewable final order.¹¹² All of Commnet's services are feeable and would, presumably, generate revenue for Commnet within a few years after a license issues (assuming that Commnet constructs under the schedule in its Proposal). The U.S. Treasury, on the other hand, would not see any of these proceeds for at least ten years, and that is assuming that Commnet is still operating and then only if Commnet's license is renewed. Commnet's regulatory fee proposal does not constitute an adequate means by which the Commission can recover a portion of the value of this spectrum for the public, making its proposal inconsistent with statutory requirements.
- *NetfreeUS.* NetfreeUS has stated that it will pay the U.S. Treasury a fee of 5% of the gross revenues that it receives from its WPB service.¹¹³ As with so many other aspects of its proposal, the impact of this proposed usage fee is substantially reduced by the fact that NetfreeUS is presently only committing itself to these payments, not the thousands of as-yet-unidentified parties that would be providing services under the proposed spectrum leasing model. Moreover, according to the NetfreeUS business plan, WPB revenues will be

¹¹⁰ Open Range apparently is willing to pay "the regulatory fee established by the FCC" for its service offering. Regulatory fees are mandatory, not voluntary, so it is unclear why Open Range mentions this payment. In any event, the payments are de minimis. For example, the current annual regulatory fee for CMRS providers is \$0.20 per subscriber per year. *Assessment and Collection of Regulatory Fees for Fiscal Year 2006*, 21 FCC Rcd 8092 (2006).

¹¹¹ See NextWave Proposal at 7 ("the basic construct of NextWave's application would avoid mutual exclusivity with all other applicants seeking authority to operate under the same terms and conditions set forth in the NextWave application"). Thus, the Commission would have no need to conduct competitive bidding for the spectrum if the NextWave Proposal were implemented because there would be no mutual exclusivity among applicants. See 47 U.S.C. 309(j)(i) (acceptance of mutually exclusive applications is a condition precedent to competitive bidding).

¹¹² Commnet Proposal at Exhibit 5, p. 2.

¹¹³ NetfreeUS Proposal at 6 & 23.

generated only through advertising.¹¹⁴ M2Z's spectrum usage payments are connected not to the advertising that will support its free service, but to the revenue that will be generated by its premium offerings. Because it relies solely on possible advertising revenues, the NetfreeUS proposal does not include a comparable spectrum usage commitment.

- *McElroy*. McElroy flatly states that, unlike M2Z, it will not pay a spectrum usage fee of five percent of the gross revenues generated by the provision of its premium service.¹¹⁵ While, as explained below, McElroy attempts feebly to mimic M2Z's proposal, it departs company with M2Z where it really counts—providing ongoing payments for use of the spectrum it seeks.
- *TowerStream*. The TowerStream Proposal confirms that TowerStream will not pay either a licensing fee or a renewal fee.¹¹⁶

G. The Alternative Proposals Will Not Promote New Entry.

M2Z will be a new entrant in the broadband market, not an incumbent provider of wireline or wireless broadband services. With the exception of Open Range, all of the Applicants hold wireless licenses. As M2Z has observed, such incumbents have no incentive to compete with their existing broadband offerings.¹¹⁷ Accordingly, any Alternative Proposals that do not promote entry by a new provider of wireless broadband service should be rejected:

- *NextWave*. As NextWave readily acknowledges, its spectrum portfolio includes: (1) 20 MHz or more of spectrum covering 136.4 million persons; (2) 10 MHz of spectrum covering an additional 96 million persons; and (3) 30 MHz or more of spectrum covering a number of markets, including licenses covering 11.9 million persons in New York.¹¹⁸
- *Commnet*. Commnet's Proposal fails to satisfy the threshold obligation of an NBRS applicant to promote new entry into the wireless or broadband markets. Commnet is an entrenched incumbent which controls numerous FCC licenses

¹¹⁴ NetfreeUS also will charge its lessees certain "nominal" fees for transaction costs. *Id.* proposal at 23. It is unclear whether these fees would be counted among total revenues for purposes of calculating spectrum usage payments.

¹¹⁵ See McElroy Proposal at Exhibit 1, p. 3.

¹¹⁶ See TowerStream Proposal at Exhibit A, p. 2.

¹¹⁷ See Forbearance Petition at 25-30.

¹¹⁸ See NextWave Proposal at n.5.

and is affiliated with other FCC-licensed entities. Commnet controls nine other wireless companies which, together, provide service in 12 different states.¹¹⁹ Commnet's parent company, Atlantic Tele-Network, Inc. ("ATNI"), owns other communications businesses, including Choice Communications, LLC, a provider of subscription television and telecommunications services in the U.S.,¹²⁰ Sovernet, a provider of wireline services in Vermont,¹²¹ and Guyana Telephone and Telegraph abroad.¹²² Moreover, by its very nature, Commnet's business is dependent upon its relationships with the nation's wireless incumbent carriers. Commnet's entire business revolves around its roaming agreements with these carriers.¹²³

- *NetfreeUS*. Although NetfreeUS itself has no licenses, its parent company, one of its principals, and an investor all have ownership interests in entities that hold FCC licenses. Accordingly, NetfreeUS does not promote new entry into the wireless and broadband markets as would M2Z. NetfreeUS is a wholly-owned subsidiary of Speedus Corp.,¹²⁴ which, through its wholly-owned subsidiary SpeedUSNY.com, L.P., holds a Local Multipoint Distribution Service ("LMDS") license.¹²⁵ NetfreeUS's Chairman and CEO

¹¹⁹ See FCC Form 602 of Commnet Wireless, LLC (filed Feb. 27, 2007). These include Commnet Four Corners, LLC, Commnet Illinois, LLC, Commnet of Arizona, LLC, Commnet of Delaware, LLC, Commnet of Florida, LLC, Elbert County Wireless, LLC, Excomm, LLC, Gila County Wireless, LLC, and Mocelco, LLC. Commnet serves markets in Arizona, Colorado, Illinois, Missouri, New Mexico, and seven other states. See ATNI 2006 Annual Report at 3.

¹²⁰ See Atlantic Tele-Network, Inc., Securities and Exchange Commission Form 10-K, Annual Report for the fiscal year ended December 31, 2006 at 2 ("ATNI 2006 Annual Report").

¹²¹ See *id.*

¹²² See *id.*

¹²³ According past statements of its parent company, Commnet operates in "a very unusual niche market: a rural wireless network focused solely on providing service to other carriers." ATNI 2005 Annual Report, Letter to Shareholders at 4, available at: http://www.atni.com/2005_report.html. Such carriers have demonstrated an increasing willingness to make longer term commitments, and Commnet has "taken advantage of this environment by entering into long-term, preferred roaming agreements with several major wireless carriers, including Cingular, Verizon and T-Mobile." *Id.* at 3.

¹²⁴ See NetfreeUS Proposal at Exhibit 1, FCC Form 602 of NetfreeUS, LLC.

¹²⁵ Speedus secured this license in 1991 and it was renewed in 1996 for a new ten year term that expired on February 1, 2006. A conditional renewal was granted for a ten-year term through February 1, 2016, provided that it could make a showing of substantial service by March 27, 2007. The substantial service notification was filed recently and remains pending. See SpeedUSNY.com, L.P., Local Multipoint Distribution Service, WLT379, Section 101.1011(a) Report and Demonstration of "Substantial Service," FCC File No. 0002939453 (filed Mar. 7, 2007).

holds an attributable interest in VisionStar, Incorporated, a satellite communications company.¹²⁶ XO Communications, Inc., which has a indirect interest in NetfreeUS, and also wholly owns Nextlink Wireless, Inc., a wireless services provider,¹²⁷ Telecommunications of Nevada, LLC, a wireline service provider,¹²⁸ and XO Communications Services, another wireline service provider.¹²⁹

- *McElroy*. During McElroy's 80-year history in wireless communications, it has built and operated cellular telephone systems. Currently, McElroy holds 700 MHz licenses in various markets and was the first applicant in the country to file for cellular unserved areas in the Los Angeles, Phoenix, Boston, Minneapolis, and Las Cruces markets.¹³⁰
- *TowerStream*. According to the TowerStream Proposals, TowerStream is a leading fixed wireless service provider that delivers high-speed Internet access to businesses in markets such as New York City, Los Angeles, Chicago, San Francisco, Seattle, and Boston.¹³¹

H. The Alternative Proposals Will Not Stimulate the Economy or Result in Comparable Consumer Welfare Benefits.

In contrast to the Alternative Proposals, four of which, amazingly, devote no attention to the purported economic benefits of their proposals, the record contains substantial evidence of the economic benefits of M2Z's proposal.¹³² For example, using a "very conservative framework," the Wilkie Consumer Welfare Study estimates "the net present value of consumer

¹²⁶ See NetfreeUS Proposal at Exhibit 1, FCC Form 602 of NetfreeUS, LLC. Shant Hovanian, NetfreeUS's Chairman and CEO, has a 10% interest in VisionStar, Incorporated.

¹²⁷ See *id.*

¹²⁸ See *id.*

¹²⁹ See *id.*

¹³⁰ See McElroy Proposal at Exhibit 1, pp. 4-5. McElroy states that it will participate in an auction of the spectrum. However, as discussed below, the public interest is not best served by award of a NBRIS license at auction. See *infra* Section IV.

¹³¹ TowerStream Proposal at Exhibit A, p. 4.

¹³² The economic benefits of M2Z's proposal also are discussed in the Application. See M2Z Application at Appendix 5.

benefits that will likely result from the first-order effects of M2Z's entry" into the market for broadband access services.¹³³ The report focuses on:

[T]hree important first-order effects of M2Z's entry on consumers: (1) benefits to consumers of broadband services due to lower prices; (2) benefits from increased broadband access via either (a) the provision of broadband access to consumers without prior access to broadband or (b) an avoided new broadband universal service fund tax; and (3) royalty payments for the spectrum to be leased by M2Z.¹³⁴

Using these very conservative assumptions, the Wilkie Consumer Welfare Report estimates that M2Z's entry into the market for broadband access services "will likely result in a net present value ('NPV') as of 2007 of benefits to U.S. consumers of broadband and telecommunications services ranging from more than \$18 billion to more than \$25 billion," taking into account the reduction in broadband access prices from 2008 onwards and benefits resulting from increased broadband access made possible by M2Z's free service from 2008 to 2022.¹³⁵

According to the Wilkie Consumer Welfare Report, the most significant effect of M2Z's entry in the market for broadband services will be its impact upon the competitive dynamics of the market: "M2Z's Proposal has the potential to dramatically alter the pattern of competition in the market for broadband access."¹³⁶ Furthermore, consumers will benefit from the competitive impact of M2Z's entry by "more than \$13 billion from 2008 onwards."¹³⁷

¹³³ Wilkie Consumer Welfare Study at 2.

¹³⁴ *Id.*

¹³⁵ *Id.* at 3.

¹³⁶ *Id.* at 9.

¹³⁷ *Id.* at 12. These estimates expressly exclude the second order effects which also are likely to stem from M2Z's entry into the national broadband access market. These include "the effects of M2Z's entry on the incentives of existing broadband providers to innovate and invest in their networks" and "the significant but less tangible consumer benefits from increased innovation and

The second effect of M2Z's entry analyzed in the Wilkie Consumer Welfare Report are the benefits to consumers from expanded broadband access: "The NPV of benefits to consumers of broadband and telecommunications services from increased broadband access made possible by M2Z's free service range from more than \$5 billion to more than \$12 billion over the period 2008 to 2022."¹³⁸

Finally, the Wilkie Consumer Welfare Report conservatively estimates that "the NPV of benefits from royalty payments for the spectrum to be leased by M2Z" will range "from more than \$35 million to more than \$536 million from 2008 onwards."¹³⁹ Using less conservative but still realistic assumptions of M2Z's market penetration, the report estimates that "M2Z will make royalty payments ranging in net present value from more than \$71 million to more than \$1 billion from 2008 onwards" depending on whether it acquires one million to fifteen million customers.¹⁴⁰

A second report entitled "M2Z Networks, Inc. The Value of Public Interest Commitments and the Cost of Delay to American Consumers", offers a different perspective of the effects of M2Z's entry into the market.¹⁴¹ Using more optimistic assumptions of the overall growth of

investment in other industries as a result of increased and cheaper broadband access for U.S. consumers due to M2Z's service." *Id.* at 2.

¹³⁸ *Id.* at 9.

¹³⁹ *Id.* In addition, other filings that have been made in support of M2Z's Application contain citations to economic data. *See, e.g.*, Comments of California Association for Local Economic Development, WT Docket No. 07-16 (filed Feb. 20, 2007) (referencing a February 2006 report by the U.S. Dept. of Commerce Economic Development Administration); Comments of the Electronic Retailing Association, WT Docket No. 07-16, (filed Feb. 6, 2007) (citing online sales figures).

¹⁴⁰ Wilkie Consumer Welfare Study at 20.

¹⁴¹ Kostas Liopiros, PhD., "M2Z Networks, Inc.—The Value of Public Interest Commitments and the Cost of Delay to American Consumers" WT Docket Nos. 07-16 & 07-30 (filed March 19, 2007) at 31.

broadband penetration, as well as the effects upon competitive prices due to M2Z's entry, the report finds that, in the aggregate, the following benefits will result over the course of the initial 15-year license period:

- M2Z's entry would have positive competitive effects because it will alter the duopoly structure of the market for residential broadband access, resulting in benefits to consumers from increased competition of \$25 billion.¹⁴²
- Increased broadband access made possible by M2Z's free service would result in benefits to broadband consumers of more than \$5 billion.¹⁴³
- M2Z's commitment to offer its free interoperable network to public safety officials with priority access during emergencies would result in benefits to the public of approximately \$3.5 billion.¹⁴⁴
- M2Z's contribution to the U.S. Treasury of 5% of the revenues from its enhanced subscription service would result in direct financial benefits of about \$275 million.¹⁴⁵

Summing all these effects, consumers and the general public would gain a net value of \$34.2 billion dollars from M2Z's entry into the market. The second report also calculates the cost to society of a delay in the market entry of M2Z: a one year delay in M2Z's entry could cost American consumers \$4.7 billion in lost benefits.¹⁴⁶

In contrast, the Alternative Proposals lack a meaningful discussion of their purported economic benefits. Indeed, with the exception of Open Range and NetFreeUS, none of the Alternative Proposals even bother to address this important issue:

- *Open Range.* Open Range asserts that it "has developed a realistic, achievable plan which will provide significant economic benefit to rural Americans," but

¹⁴² *Id.* at ii, 11-13.

¹⁴³ *Id.* at iii, 14-20.

¹⁴⁴ *Id.* at iii, 20-25.

¹⁴⁵ *Id.* at iii, 25-29.

¹⁴⁶ *Id.* at ii, 29-31.

cites no figures to support that assertion.¹⁴⁷ Open Range further asserts that the availability of its services “will stimulate economic growth in rural areas and bring those areas within the modern information economy,” and that the hiring and training of the “personnel providing the construction, operating, sales, marketing and customer care functions required to operate and manage” Open Range’s network in the rural communities that it serves “will have a substantial direct and indirect economic impact on these rural communities.”¹⁴⁸ Again, Open Range provides no data or analysis to support this assertion.

- *NetfreeUS*. In its application, NetfreeUS essentially agrees with M2Z’s economic analysis, but offers little in the way of unique data to support its own proposal. NetfreeUS states that “[b]roadband access has been found to be an engine for economic growth” and cites statistics concerning wage increases from a report that appears to be based on evidence from one region of the country.¹⁴⁹ Accepting those figures at face value, they suggest that NetfreeUS US has conducted only a very limited economic analysis with regard to its own proposal and, in any event, do not provide sufficient evidence of economic benefits to justify acceptance of the NetfreeUS proposal for filing.

In sum, M2Z has supported its application with substantial evidence of the benefits to the economy and to consumer welfare that its proposal will likely bring about. The Alternative Proposals are sorely lacking in that regard. Four of the Applicants devote *no* attention to the issue, and the other two Applicants present either a conclusory, or very limited, analysis. Slowing down the review of M2Z’s Application to examine these flimsy proposals presents significant negative consequences for all Americans and thus would disserve the public interest.

I. The Alternative Proposals Have Not Proposed to Meet Interference Protection and Other Standards Under Part 27 of the Commission’s Rules.

M2Z proposes to protect incumbent co-channel and adjacent channel users on the 2155-2175 MHz band using the same standards set forth at Part 27 of the Commission’s rules.¹⁵⁰ M2Z

¹⁴⁷ Open Range Proposal at 4.

¹⁴⁸ *Id.* at 13.

¹⁴⁹ NetfreeUS Proposal at 20.

¹⁵⁰ See M2Z Application at Appendix 2.

has further committed to assisting incumbent users in relocating out of the band.¹⁵¹ With the exception of NetfreeUS,¹⁵² the Alternative Proposals do not propose interference protection standards. Several Alternative Proposals also fail to commit to relocating incumbent licensees in the 2155-2175 MHz band. To the extent that they fail to propose compliance with any technical requirements or interference standards, the Alternative Proposals are not only deficient as compared to M2Z's NBRS, they are also defective and subject to dismissal as incomplete:¹⁵³

- *Open Range.* As the Open Range Proposal stands, it is impossible for the Commission to address such threshold matters as how or whether Open Range will avoid interference to incumbent or adjacent licensees. Open Range itself has observed, "WiMAX propagation characteristics depend upon a number of technical and geographic characteristics," including, but not limited to, "allowable power output in the frequency band, transmission frequency, out of band emissions limits, terrain, vegetation, building density, base station power and antenna gain, CPE power and antenna gain, height of base station and CPE antennas and other factors."¹⁵⁴ Yet Open Range provides the Commission with no technical specifications that would give the Commission comfort concerning the RF environment (including emissions limits, base

¹⁵¹ See *id.* at 13 & 19 (citing *Amendment of Part 2 of the Commission's Rules 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, Service Rules for the Advanced Wireless Services In the 1.7 and 2.1 GHz Bands*, Ninth Report and Order, 21 FCC Rcd 4473 (2006)).

¹⁵² See NetfreeUS Proposal at 16 (proposing to comply with Parts 22, 27, and 101 of the Commission's rules); see also *id.* at Exhibit 2, p. 3 (proposing to relocate incumbents).

¹⁵³ The Commission may dismiss as defective any application that "is incomplete with respect to required answers to questions, informational showings, or other matters of a formal character." 47 C.F.R. § 1.934(d)(1). See also 47 U.S.C. § 308(b) ("[a]ll applications for station licenses, or modifications or renewals thereof, shall set forth such facts as the Commission by regulation may prescribe as to the citizenship, character, and financial, technical, and other qualifications of the applicant to operate the station; the ownership and location of the proposed station and of the stations, if any, with which it is proposed to communicate; the frequencies and the power desired to be used . . . and such other information as it may require."). Applications that do not meet the standard are subject to dismissal. See, e.g., *Applications of San Diego Gas and Electric Company for Authority to Operate Multiple Address Systems Stations at Carlsbad and San Marcos, California*, Order on Reconsideration, 16 FCC Rcd 13089 (2001) (upholding dismissal of application as defective where applicant failed to include required frequency coordination showing).

¹⁵⁴ See Open Range Proposal at Annex D, p. 33.

station power levels, or CPE power levels) that will be established by Open Range's proposed deployment. The only standard with which Open Range proposes to comply, with any specificity, is the obligation to relocate incumbent licensees.¹⁵⁵ Had Open Range asserted that it would comply with a set of power limits within the FCC's rules or at least set forth some parameters with which it planned to comply, the Commission would be better able to evaluate Open Range's assertion that it will cause "no harmful interference to licensees."¹⁵⁶ Without this information, the Commission cannot make an informed analysis of whether Open Range's proposal is technically viable, nor can it be assured that incumbent and adjacent licensees will be protected from interference.

- *NextWave*. By definition, the NextWave Proposal will offer no interference protection to licensees in the 2155-2175 MHz band, let alone adhere to Part 27 interference standards. Because NextWave proposes to use the service rules the Commission adopted for the 3.65 GHz band, any licensee would have access to the 2155-2175 MHz band through a non-exclusive, nationwide licensing scheme.¹⁵⁷ Under this approach advocated by NextWave, multiple licensees would operate on the same frequencies in the same geographic areas without having exclusive spectrum usage rights and interference protections.¹⁵⁸

Moreover, although NextWave asserts that it will protect incumbent co-channel users, the contention-based technology it proposes to use has yet to be fully developed and the current level of contention-based methods are highly spectrally inefficient.¹⁵⁹ NextWave also offers no specifics as to how adjacent channel licensees will be protected from interference.¹⁶⁰

¹⁵⁵ Open Range states that it will comply with the relocation requirements adopted by the Commission. *See id.* at 4& 10.

¹⁵⁶ *See id.*

¹⁵⁷ *See 3.65 GHz Order* ¶ 25.

¹⁵⁸ *See id.* ¶ 26.

¹⁵⁹ Under NextWave's proposal, contention-based technology would be required for all users of the contention-based using omnidirectional antennas so their transmissions can be detected anywhere that a potential transmitter might cause interference to a transmitter-receiver pair in use. However, incumbent BRS and FS licensees are not omnidirectional but use high gain direction antenna systems and thus are subject to the "hidden node problem." The hidden node problem refers to a situation where an active receiver using a high gain/directional antenna to receive a signal from a transmitter with a high gain/directional antenna cannot be detected by a nearby contention-based system searching for idle spectrum. The situation is complicated by the lack of specific FCC modulation standards for BRS and FS systems thus precluding the use of extremely sensitive detectors using processing gain.

¹⁶⁰ *See NextWave Proposal* at 4.