

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
)
Amendment of the Commission’s Rules to Allow) RM-11755
for Specialized Mobile Radio Services Over 900 MHz)
Business/Industrial/Land Transportation Frequencies)

To: Chief, Wireless Telecommunications Bureau

**COMMENTS
OF THE
ENTERPRISE WIRELESS ALLIANCE**

The Enterprise Wireless Alliance (“EWA” or “Alliance”), in accordance with Section 1.405(a) of the Federal Communications Commission (“FCC” or “Commission”) rules and in response to the Public Notice issued by the Wireless Telecommunications Bureau,¹ respectfully submits its Comments regarding the June 26, 2015 Petition for Rulemaking (“Petition”)² filed by M2M Spectrum Networks, LLC (“M2M”). The Petition requests that the Commission amend FCC Rule Section 90.617(c) to permit the licensing of commercial Specialized Mobile Radio (“SMR”) systems on 900 MHz Business/Industrial/Land Transportation (“B/ILT”) frequencies, with the condition that all end users on such systems are themselves eligible B/ILT entities.

For reasons detailed by the FCC when it denied the Waiver Request filed by Spectrum Networks Group, LLC (“SNG”),³ M2M’s parent company, which sought waiver relief to deploy the same machine-to-machine (“m2m”) system described in this Petition, and as further

¹ Wireless Telecommunications Bureau Seeks Comment on M2M Spectrum Networks Petition for Rulemaking to Allow Specialized Mobile Radio Services Over 900 MHz Business/Industrial Land Transportation Frequencies, RM-11755, *Public Notice*, DA 15-944 (rel. Aug. 21, 2015) (“Public Notice”).

² Petition for Rulemaking of M2M Spectrum Networks, LLC, filed June 26, 2015.

³ In the Matter of Spectrum Networks Group, LLC, WT Docket No. 14-100, *Order*, 30 FCC Rcd 3509 (2015) (“SNG Waiver Denial”).

explained herein, EWA does not support the proposed rule amendment. If any rule changes are adopted in this band, those changes should permit the deployment of advanced technologies that promote greater spectrum efficiencies, for example the customer-driven broadband opportunities proposed by EWA and Pacific DataVision, Inc. (“PDV”),⁴ rather than proprietary narrowband technology⁵ that could be implemented successfully on spectrum allocated for such applications, including unlicensed spectrum that already is being used successfully to support m2m operations, such as those described in the Petition. Framing the Petition as an applicant eligibility matter does not alter the fact that permitting the type of data operations M2M proposes would be a colossal misuse of this critical band.

I INTRODUCTION

EWA represents a broad alliance of business enterprise users, commercial service providers, radio dealers and technology manufacturers. Its Board is elected by the Alliance’s members and is comprised of representatives from each of these segments of the Part 90 industry. The positions it supports reflect a balancing of their interrelated but not always fully congruous interests. Among the principles that guide the Board’s decision-making is a commitment by Directors to represent not only their individual business goals, but to endorse policies that will serve the broader interests of the industry both today and into the future. The Board also shares the Commission’s determination to promote the efficient use of spectrum, including the relatively limited amount of spectrum that has been and remains allocated for Part

⁴ See Wireless Telecommunications Bureau Seeks Comment on Enterprise Wireless Alliance and Pacific DataVision, Inc. Petition for Rulemaking Regarding Realignment of 900 MHz Spectrum, *Public Notice*, RM-11738, 29 FCC Rcd 14424 (WTB MD 2014); Wireless Telecommunications Bureau Seeks Comment on Supplement to Enterprise Wireless Alliance and Pacific DataVision, Inc. Petition for Rulemaking Regarding Realignment of 900 MHz Spectrum, *Public Notice*, RM-11738, 30 FCC Rcd 4763 (WTB MD 2015).

⁵ EWA assumes that the “innovative new wireless technology” SNG and M2M state will be used in this network would be proprietary technology. See, e.g., Comments of M2M and SNG, RM-11738 at 2 (filed Jan 12, 2015).

90 land mobile use.⁶ Those principals are reflected in EWA’s position on the Petition under consideration in this proceeding.

II COMMENTS

As described in the Petition and in the earlier waiver request filed by SNG, these affiliated entities, through M2M, propose to deploy a “nationwide, licensed, machine-to-machine network that could take advantage of narrowband channels such as those in the 900 MHz B/ILT band to provide services solely to business customers.”⁷ The proponents argue that it is both spectrally and economically inefficient to deploy this type of operation on broadband spectrum.⁸ Instead, they recommend retaining the 12.5 kHz band plan adopted almost 30 years ago and have committed to developing narrowband m2m equipment to fit that technology.⁹

EWA agrees that it is appropriate to consider whether 900 MHz B/ILT spectrum is optimally configured to meet current and anticipated business enterprise, including critical infrastructure industry, requirements. It differs from M2M, as the Alliance believes that future must include, as an essential wireless solution option, access by enterprise users to broadband solutions and facilities in addition to those available on commercial networks and unlicensed spectrum. Realigning the 900 MHz band to consolidate previously auctioned, geographic authorizations into a contiguous block, supplemented by 40 channels of B/ILT spectrum that were previously assigned from B/ILT licensees to PDV in many of the major markets, in EWA’s

⁶ As directed by Congress, the FCC is required to repossess for auction all 470-512 MHz public safety spectrum, a directive that may prompt the FCC to include 470-512 MHz spectrum used by B/ILT eligibles as well. *See* Pub. L. No. 112-96, 126 Stat. 156 (2012). The loss of this band, without any Congressional suggestion as to where dispossessed licensees might relocate, will be a critical problem for the private land mobile user community in the very markets where spectrum is needed most urgently.

⁷ Petition at 4.

⁸ *Id.* at 6.

⁹ SNG and M2M advised the FCC in November 2014 that the 900 MHz radios that would be used on this system had nearly completed laboratory testing and would be submitted for FCC certification that same month with approval expected in December 2014. *See* Letter from Markham Erickson, Counsel to SNG and M2M, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 14-100 (Nov. 12, 2014). EWA has been unable to find any newly certified 900 MHz equipment that is consistent with the radios described by M2M/SNG.

opinion, is the only realistic, near-term opportunity to create tailored broadband solutions that accommodate private enterprise requirements.

Narrowband technology will continue to serve the mobile voice communications of many private users for the foreseeable future, including at 900 MHz. But it is irrefutable that the future of wireless communications, the focus of investment and innovation, lies with advanced multi-path digital and broadband technologies. The Alliance urges the Commission to take no action in response to the M2M Petition that would be inconsistent with the realignment proposed by EWA/PDV¹⁰ or with the continued availability of 900 channels for use in private systems where advanced digital systems are being deployed.¹¹

The Commission, in the SNG Waiver Denial Order, determined that SNG had not demonstrated that the use of 900 MHz B/ILT channels was essential to its purpose. It cited to parties, including EWA, who disagreed with SNG's position that it was inefficient to use broadband spectrum for this application and who stated that m2m operations on broadband spectrum "yield higher efficiency levels with superior performance."¹² It also noted that SNG indicated it intended to offer service using spectrum other than 900 MHz where there were not sufficient 900 MHz B/ILT channels available, a position that seemingly undercuts M2M's argument that this B/ILT spectrum is essential for its business purposes.¹³

¹⁰ In conjunction with its waiver request, SNG had committed that it would self-fund any frequency changes that might be required should the 900 MHz band be realigned other than coordination costs. *See* Letter from Pantelis Michalopoulos and Christopher Bjornson, Counsel to Spectrum Networks Group, LLC, and M2M Spectrum Networks, LLC, to Marlene Dortch, FCC, WT Docket No. 14-100, at 7 (June 24, 2014). That commitment is not mentioned in the M2M Petition and should be reaffirmed if the FCC takes any affirmative action in response to the Petition.

¹¹ The 900 MHz band currently is available only for B/ILT and SMR use. While public safety entities in the less populated areas where 900 MHz B/ILT spectrum still may be available, for the most part, have foregone their own 700 and 800 MHz channels in favor of VHF spectrum, the Commission may wish to consider allowing public safety access to 900 MHz spectrum if it otherwise would be unutilized.

¹² SNG Waiver Denial at 6.

¹³ *Id.*, citing SNG Reply Comments at 7.

EWA appreciates that M2M is requesting a rule change, while SNG sought a rule waiver, and that different standards apply to each. However, a rule change of this fundamental nature should be premised on a determination that the public interest would be served by facilitating delivery of the proposed service and that there is no spectrum reasonably available to accommodate it. It is the latter point on which the Alliance believes this Petition fails entirely. The potential uses described in the Petition, and in the earlier SNG waiver request, may be needed by B/ILT entities, but they are readily available. Applications of this type are being implemented today or proposed for deployment in various bands, including on unlicensed spectrum such as TV White Space, where the only cost to the user is the cost of equipment and installation.¹⁴ This presumably would be an even less expensive alternative than the approach proposed by M2M, since there would be no spectrum or service provider cost at all.

Moreover, M2M misapprehends broadband functionality if it believes that deploying the low-power, low-latency m2m devices it envisions would result in inefficient use. As explained by the Utilities Telecom Council in its Comments on the SNG Waiver Request, “To the extent that broadband spectrum is being used for M2M applications, the use of Internet Protocol (IP) over this broadband spectrum enables efficient use of the spectrum for multiple applications.”¹⁵

Finally, if the FCC elects to give this proposed rule change consideration, it should do so subsequent to or at least in conjunction with further action on the EWA/PDV Petition. While EWA does not support the M2M proposal, it also does not believe the two necessarily are incompatible, provided that the eligibility change were to apply only to channels below 937

¹⁴ See, e.g., Deere & Company Request for Limited Waiver of Part 15 Rules for Fixed Television Band Devices, ET Docket No. 15-184, *Public Notice*, DA 15-947 (rel. Aug. 21, 2015). Deere requires a waiver because it wishes to install approved devices on slow-moving agricultural equipment rather than at fixed locations.

¹⁵ Comments of the Utilities Telecom Council, WT Docket No. 14-100, filed July 30, 2014 at 4.

MHz. However, the critical first question is whether the public interest would be served by this change in eligibility at all.

The FCC also must consider whether the change proposed would trigger an influx of applications by entities who believe, or unfortunately have been advised, that SMR licenses represent lucrative investments, because the spectrum acquired will be attractive to purchasers, notably the national cellular carriers. The number of SMR applications filed for 800 MHz Expansion Band and Guard Band channels in markets where there are few, if any, active SMR systems operated by those with an actual knowledge of two-way radio communications and user demand should give the Commission pause. It simply cannot be that all, perhaps any, of these applicants actually intend to install and operate SMR systems. Rather, there is every reason to believe that they have been advised that their licenses will be resold to commercial entities, perhaps even to M2M itself, at a handsome profit. EWA has expressed its serious concerns about this recent upsurge in the marketing and sale of FCC applications and urges the FCC to consider this issue in its deliberations on this Petition.

Should the FCC determine that the change proposed by M2M is in the public interest, the draft rule in the Petition would require modification in any event. M2M, as well as SNG and Smartcomm, LLC, another affiliated entity, have made much of what they consider egregious and voluminous violations of the current eligibility requirements for B/ILT channels.¹⁶ EWA has explained in multiple filings that if such violations have occurred, it is the FCC that must address them, as the FCC has retained exclusive authority to rule on applicant eligibility, in particular the eligibility of facially compliant applicants.¹⁷ If the 900 MHz B/ILT eligibility rule

¹⁶ See, e.g., Spectrum Networks Group, LLC Application for Review, WT Docket No. 14-100 (filed May 13, 2015).

¹⁷ See, e.g., EWA Partial Opposition to SNG Petition for Orders to Show Cause, Call Signs WQUI888 *et seq.* at 2 (July 9, 2015) *citing* Private Land Mobile Radio Services (Frequency Coordination), *Report and Order*, PR Docket No. 83-737, 103 FCC2d 1093 (1986).

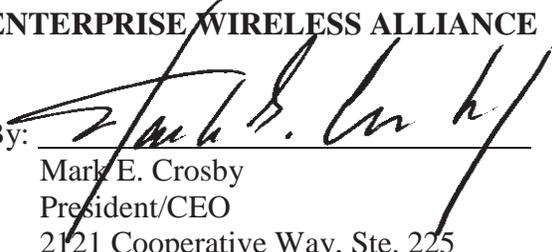
has been abused, the FCC should take appropriate action to rectify any such instances. However, there also are numerous situations where commercial entities acquired authorization for B/ILT channels from eligible licensees and subsequently converted them to SMR use, a process clearly authorized under today's rules. As written, the proposed rule would limit the customers of those systems, as well as those of SMR licensees who secure B/ILT channels directly from the FCC, to B/ILT eligible entities. EWA assumes that was not the intent. While most users on SMR systems qualify as B/ILT, the current rules permit converted spectrum to serve the needs of public safety and even Federal government entities, uses that would be prohibited by adoption of the rule drafted by M2M. Additionally, the proposed modification of FCC Rule Section 90.617 addresses only B/ILT frequencies in non-border areas. FCC Rule Section 90.619 would need to be amended as well to cover frequencies in border areas.

III CONCLUSION

As wireless demand explodes and the spectrum to address it becomes increasingly scarce, it is imperative that proposed uses and the spectrum to meet them be matched carefully. The 900 MHz B/ILT spectrum at issue herein was allocated to and is capable of meeting the mobile, voice requirements of private enterprise users with a need for channel exclusivity. It is among the very last exclusive use spectrum suitable for that purpose. By contrast, the narrowband, low-latency network proposed by M2M can be deployed on the many bands of unlicensed spectrum the FCC has made available, as evidenced by the proliferation of fixed, data operations on that spectrum. Given what M2M/SNG have described as the agile, frequency-hopping capability of their technology, it would seem ideally suited for unlicensed bands. Indeed, had M2M/SNG pursued that approach, the network they envision might be operational today. The Alliance encourages them to revisit their spectrum needs and identify alternative bands that can

accommodate the m2m operations they plan to address. A rule change to allow the conversion of spectrum allocated for primary B/ILT mobile, voice operations to commercial use as the means to deploy an m2m data network would be a step backward for the 900 MHz band. A step forward would be a rulemaking proceeding that would engender the deployment of advanced digital and broadband technologies for the benefit of B/ILT entities.

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