

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

In the Matter of )  
)  
Spectrum Networks Group, LLC ) WT Docket No. 14-100  
Waiver Request to Provide Commercial )  
Machine-to-Machine Service on 900 MHz )  
Business/Industrial/Land Transportation Channels )

To: Chief, Wireless Telecommunications Bureau

**COMMENTS  
OF THE  
ENTERPRISE WIRELESS ALLIANCE**

The Enterprise Wireless Alliance (“EWA” or “Alliance”), in accordance with Section 1.45 of the Federal Communications Commission (“FCC” or “Commission”) rules, respectfully submits its comments in response to the Public Notice seeking comment on the waiver request (“Waiver”) filed by Spectrum Networks Group, LLC (“SNG”).<sup>1</sup> The Waiver requests authority for SNG, through its subsidiary, M2M Spectrum Networks, LLC (“M2M”), to provide commercial, third-party service to meet the machine-to-machine (“m2m”) communications needs of entities eligible to use 900 MHz Business/Industrial/Land Transportation (“B/ILT”) channels.<sup>2</sup>

**I SNG’S WAIVER SHOWING HAS SERIOUS DEFICIENCIES**

EWA has long supported innovative proposals to make more efficient use of spectrum and those that demonstrate the ability to address needs of its members that otherwise are not being

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<sup>1</sup> Wireless Telecommunications Bureau Seeks Comment on Spectrum Networks Group, LLC Applications and Waiver Request to Allow it to Provide Private, Internal Machine-to-Machine Communications to Businesses on 900 MHz Business/Industrial/Land Transportation Channels, *Public Notice*, WT Docket No. 14-100, DA 14-980 (rel. July 9, 2014) (“Public Notice”).

<sup>2</sup> SNG asserts that it should not need a waiver since, by limiting its prospective customer base to B/ILT eligible entities and disavowing a right to serve individuals or Federal government users, it does not meet the definition of a Specialized Mobile Radio (“SMR”) operator. SNG fails to address FCC Rule Section 90.179(f), which limits operation on a for-profit private carrier basis above 800 MHz to SMR licensees.

satisfied, including waivers of the FCC rules when appropriate. It has no desire to see allocated spectrum lie fallow if there are genuine opportunities to put the spectrum to productive use. However, such proposals must be based on verifiable information that support a finding that waiver relief will serve the public interest and not be used as a vehicle for speculative entrepreneurship.

EWA's position on this Waiver is already on record with the FCC. The Alliance filed an Informal Opposition to the applications filed by SNG in 2013, as well as to similar applications prepared by SNG for other applicants.<sup>3</sup> It filed another Informal Opposition to the SNG applications and associated Waiver that was submitted in 2014.<sup>4</sup> Its position on the Waiver has not changed since those submissions. The Alliance believes that SNG has failed to provide information that would justify the relief it has requested. As EWA stated previously:

The Waiver Requests contain bald assertions by SNG about its plans for this spectrum, but are strikingly devoid of any product development details, information regarding FCC certification for this 900 MHz data product, business plans, funding status to support a 'nationwide network,' or other relevant documentation that might provide credence in support of waiver relief.<sup>5</sup>

Neither SNG's Reply to that filing,<sup>6</sup> nor its more recent supplemental filing<sup>7</sup> fill those critical gaps in its Waiver showing.

The Alliance has a heightened concern about the Waiver requested by SNG for several reasons. Barclay Knapp, described as M2M's CEO and co-founder, has a commendable history in wireless communications, but the organization with which he has aligned himself does not. The

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<sup>3</sup> See Letter from Mark E. Crosby, President/CEO, Enterprise Wireless Alliance to Marlene H. Dortch, Secretary, FCC (filed Jan. 6, 2014). If SNG has requested a waiver or paid the required waiver fee for the 2013 SNG applications identified in n. 1 on the Public Notice, that information does not appear in ULS. The same is true for the SNG-prepared applications listed in n. 8 on the Public Notice.

<sup>4</sup> See Letter from Mark E. Crosby, President/CEO, Enterprise Wireless Alliance to Marlene H. Dortch, Secretary, FCC (filed Apr. 8, 2014) ("Apr. 8 Opposition").

<sup>5</sup> Apr. 8 Opposition at 3.

<sup>6</sup> See SNG Reply to EWA's Opposition, FCC File No. 0006203140 *et al.* (filed Apr. 23, 2014) ("SNG Reply to Opposition").

<sup>7</sup> Letter from Pantelis Michalopoulos and Christopher Bjornson, Counsel to Spectrum Networks Group, LLC and M2M Spectrum Network, LLC to Marlene H. Dortch, Secretary, FCC (filed June 24, 2014) ("SNG Supplement").

inter-relationship of the principals of M2M, SNG, and both Smartcomm Management, LLC and Smartcomm Licensing Services, LLC (“Smartcomm”), does not inspire confidence. Smartcomm was founded by a convicted felon, Pendleton Waugh, and has marketed applications for FCC spectrum, including the 900 MHz Business/Industrial/Land Transportation (“B/ILT”) spectrum targeted in the Waiver, to the general investing public for years. The Smartcomm marketing materials that EWA has seen, at best, are seriously misleading about the potential uses for and likely secondary market purchasers of spectrum Smartcomm is promoting.

This troubling practice of selling FCC applications is consistent with the fact that the initial 900 MHz B/ILT applications<sup>8</sup> were prepared by SNG, but filed in the names of a number of different parties, none of which appear to have any prior wireless experience or the independent qualifications to construct and operate the systems for which they applied. It is not clear whether SNG intends to include those applicants in the waiver relief requested, or whether it has abandoned them in favor of pursuing only applications filed in its own name.

Indeed, SNG did not at the outset identify m2m communications as the justification for requesting 900 MHz B/ILT channels. The initial set of 900 MHz B/ILT applications filed by SNG itself, and those prepared by SNG for other parties, made no such reference. Indeed, SNG was a co-signatory to a detailed pleading from one of its customers, CCD 900 Communications, LLC (“CCD 900”), when it responded to a Petition for Reconsideration from EWA regarding CCD 900’s eligibility for 900 MHz B/ILT spectrum.<sup>9</sup> That Opposition was filed on February 10, 2014 and said nothing at all about m2m service, much less a nationwide m2m network. It was not until SNG included the Waiver with its 99 additional applications filed in March 2014 that it first

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<sup>8</sup> See Public Notice at n. 8.

<sup>9</sup> See CCD 900 Communications, LLC Opposition to EWA’s Petition for Reconsideration, Call Sign WQTE752 (filed Feb. 10, 2014).

asserted its plans for such a network.<sup>10</sup> This after-the-fact rationale for justifying already filed applications raises credibility issues that cannot be ignored.

Additionally, the Alliance, and it would expect the FCC, must question SNG's repeated claim that it is inefficient to provide m2m communications (or in SNG's preferred phraseology, the "Internet of Things") using "much wider spectrum bands than are necessary."<sup>11</sup> SNG does not identify what spectrum it believes is being used inefficiently for this purpose, but in today's environment, virtually all spectrum is either narrowband, like the B/ILT channels requested by SNG, or broadband. Since broadband permits the use of efficient air interfaces that allow the delivery of a wide variety of applications simultaneously at higher efficiency levels and with superior performance, a claim that it is an inefficient m2m delivery vehicle does not withstand scrutiny.<sup>12</sup>

What does require careful investigation by the FCC is SNG's various claims about the equipment it plans to use. Most recently, it identified a proprietary technology – Machine Data Network Architecture ("mDNA") – as the foundation of its network infrastructure.<sup>13</sup> Previously, it had referenced cognitive radios that would hop from channel-to-channel in what it called the "small and 'mosaic-like' available allocation of the 900 MHz I/B spectrum."<sup>14</sup> The Waiver stated

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<sup>10</sup> It remains unclear how SNG intends to deploy a "nationwide" m2m network on this spectrum when all available 900 MHz channels are already authorized in and around at least the top 20 markets in the country. A nationwide network that cannot provide service in New York, Los Angeles, Chicago, San Francisco, Balto-Washington, Houston, Dallas and other centers of business activity in this country is a doubtful proposition.

<sup>11</sup> See e.g., SNG Supplement at 4; see also Waiver at 4.

<sup>12</sup> SNG also has not addressed at all why it cannot use any number of other spectrum bands, licensed or unlicensed, that appear better suited for the described purpose, bands where data, including fixed data, is authorized on a primary basis.

<sup>13</sup> SNG Supplement at 2. It should be noted that a quick Google search of that term produces voluminous documentation from a variety of equipment vendors and other sources, information that does not appear to be proprietary and that focuses on broadband applications.

<sup>14</sup> SNG Reply to Opposition at 7. SNG's apparent lack of familiarity with the current status of 900 MHz B/ILT spectrum is highlighted in this filing. It describes as "incoherent" EWA's statement that 900 MHz B/ILT channels are not available in all parts of the country, making SNG's claim that it would deploy a nationwide network unachievable. SNG's response was that "while the same channel is not available throughout the country, some channels are available throughout most of the country." *Id.* EWA agrees that some channels are available in many

only that SNG would deploy an all-IP network.<sup>15</sup> While its technological claims are exceedingly fluid, in each filing, SNG has asserted that it is ready to begin network deployment and commercial operation in 2014, although it has not identified any specific equipment it intends to use or even any equipment vendor(s).<sup>16</sup> If it is ready to deploy, the Alliance would have expected to see an FCC equipment certification for cognitive subscriber radios in the 896-901 MHz band to be deployed on the network, but it has not located any such device on the OET Equipment Authorization website. It is possible that an application for such equipment is pending, but that would make their deployment claims wildly optimistic.

The Alliance does not doubt that there is significant activity in the m2m equipment development arena, albeit primarily, if not exclusively, focused on broadband applications. It is easy for any applicant to parrot jargon from that burgeoning field, but more is needed to justify waiver relief. The FCC must assess SNG's claims regarding the devices and infrastructure it says are ready to be deployed on its proposed narrowband network in evaluating the sufficiency of the Waiver showing.

## **II SNG'S PROPOSED CONDITIONS ON ITS WAIVER ARE NOT SUFFICIENT**

In its Supplemental filing, SNG proposed several conditions it would accept on the requested Waiver:

- 1) Use its channels only to serve Part 90 eligible entities;
- 2) Meet a multi-year loading requirement;

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parts of the country but, as explained in n.10 *supra*, **no** channels are available in any of the top urban markets, a fact easily verified in the FCC's ULS database.

<sup>15</sup> Waiver at 1.

<sup>16</sup> As recently as June 24, 2014, SNG stated that "M2M has identified several end-user customers ready to sign on to the M2M network, and several strategic vendors for its sites, network equipment, and deployment, **all expected to commence in July 2014.**" SNG Supplement at 3. The FCC should require SNG to provide it with detailed information about each of these areas.

- 3) Limit the number of channels in a market, irrespective of its loading; and
- 4) Fund its own relocation costs, except frequency coordination costs, should the 900 MHz band be reconfigured.<sup>17</sup>

For the reasons detailed above, EWA does not believe that a waiver is justified. If the FCC determines otherwise, then the conditions above are the minimum requirements needed to reduce, if not eliminate, the likelihood that whatever spectrum is included is placed into productive use or recovered by the FCC on a timely basis. The Alliance recommends that the following provisos also apply to any waiver relief:

- 1) The use must be limited to B/ILT eligible entities, not those eligible under Part 90, since that would include public safety/governmental entities. Those entities are not permitted to acquire licenses for this spectrum under the current rules and have been given ample spectrum by the FCC to meet their communications needs.
- 2) SNG should be subject to a more detailed construction showing to ensure that facilities are capable of providing meaningful coverage. They should provide copies of site leases and documentation of payment. “Site savers” or other equipment that, at most, facially meets current FCC construction requirements should be expressly prohibited.<sup>18</sup>
- 3) Loading should be verified by the FCC and not simply self-reported by SNG.
- 4) SNG should be subject to a cap of 20 channels per market, a number it previously reported to the FCC as sufficient to meet its anticipated needs.

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<sup>17</sup> SNG Supplement at 6-7.

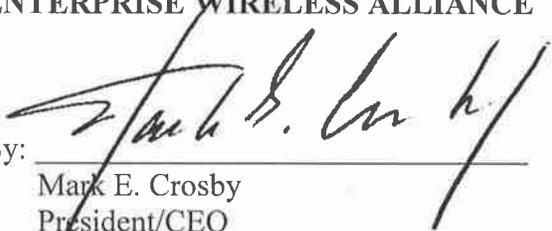
<sup>18</sup> Notice of Proposed Rulemaking and Order, WT Docket No. 10-112, 25 FCC Rcd 6996 at ¶ 59 (2010).

- 5) Whatever conditions are imposed on SNG licenses must also be imposed on the licenses of the “partners” with whom SNG says it intends to enter into de facto lease arrangements.<sup>19</sup> The conditions must be network-specific, not licensee-specific.

EWA submits that there are more than sufficient deficiencies in the Waiver and the supplemental filing to justify FCC denial of SNG’s request. At a minimum, the Commission should conduct its own investigation of the areas identified above before acting on the Waiver. Should the FCC conclude that waiver relief is appropriate, then it should condition its grant consistent with the recommendations herein.

**ENTERPRISE WIRELESS ALLIANCE**

By: \_\_\_\_\_

  
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July 28, 2014

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<sup>19</sup> SNG Supplement at 7.