

Before the  
**Federal Communications Commission**  
Washington, DC 20554

In the Matter of the Petition of )  
 )  
The State of Maryland )  
 )  
Request for Waiver to permit operation of Air- ) RM-11433  
to-Ground radio equipment on 700 MHz )  
Secondary Trunking Channels )  
 )

To: The Public Safety and Homeland Security Bureau

**REPLY COMMENTS OF THE TELECOMMUNICATIONS INDUSTRY**  
**ASSOCIATION**

**I. INTRODUCTION & SUMMARY**

The Telecommunications Industry Association (“TIA”) files these reply comments in response to the Public Notice issued by the Federal Communications Commission’s (“Commission”) Public Safety and Homeland Security Bureau (“PSHSB”) on April 17, 2012 in the above-captioned proceeding.<sup>1</sup> The Petition, submitted by the State of Maryland (“Maryland”),<sup>2</sup> asks the FCC to authorize use of 700 MHz band secondary trunking channels for air-to-ground interoperable radio communications. TIA submits its support of the petition,

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<sup>1</sup> Public Notice, *Public Safety and Homeland Security Bureau Seeks Comment on Petition for Waiver of Rules Filed by the State of Maryland Requesting Permission to Operate Air-to-Ground Radio Equipment on 700 MHz Secondary Trunking Channels*, RM-11433, DA 12-602 (Apr. 17, 2012) (“Public Notice”).

<sup>2</sup> Petition for Waiver of Rules, State of Maryland, RM-11433 (filed Feb. 24, 2012) (“Petition”).

contingent on that, if the Commission acts on the Petition, (i) the granting of the Petition include a condition that Maryland make all reasonable efforts to ensure that harmful interference of other 700 MHz narrowband operations as well as on broadband operations in adjacent blocks in the band does not occur; and (ii) the Commission impose on Maryland appropriate safeguards under the Petition to protect those operations from harmful interference moving forward. We note that, in response to the associated Petition for Rulemaking submitted by the National Public Safety Telecommunications Council (NPSTC),<sup>3</sup> TIA has previously submitted similar concerns to the Commission.<sup>4</sup>

TIA represents the global information and communications technology (ICT) industry through standards development, advocacy, tradeshow, business opportunities, market intelligence and world-wide environmental regulatory analysis. Its hundreds of member companies manufacture or supply the products and services used in the provision of broadband and broadband-enabled applications. For over eighty years, TIA has enhanced the business environment for broadband, mobile wireless, information technology, networks, cable, satellite, and unified communications. Members' products and services compete to empower communications in every industry and market, including healthcare, education, security, public safety, transportation, government, the military, the environment and entertainment. TIA is accredited by the American National Standards Institute (ANSI). TIA members are also involved

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<sup>3</sup> See Public Safety and Homeland Security Bureau Seeks Comment on NPSTC's Petition for Rulemaking to Allow Aircraft Voice Operations on Secondary Trunking Channels in the 700 MHz Band, *Public Notice*, DA-11-1146 (Jun. 30, 2011).

<sup>4</sup> See Comments of TIA, RM-11433 (filed Jul. 25, 2011).

in Project 25, the initiative that continues to develop standards for narrowband interoperability.<sup>5</sup> Numerous TIA representatives are manufacturers of equipment used in both 700 MHz public safety narrowband as well as broadband networks, and therefore have a significant interest in ensuring the most efficient and interoperable public safety communications landscape.

## **II. A GRANTING OF THE PETITION SHOULD BE PREDICATED ON NOT CAUSING HARMFUL INTERFERENCE**

TIA wishes to emphasize its strong backing of the Commission's efforts to promote more efficient use of spectrum in public safety narrowband channels, and fully supports the use of narrowband channels by States in an increasingly efficient manner. As the Petition notes, the public safety needs of Maryland suggest that aerial users be able to communicate with Maryland's statewide 700 MHz land mobile radio ("LMR") system.<sup>6</sup> The record reflects wide support of this proposal from numerous surrounding jurisdictions and other key stakeholders.<sup>7</sup>

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<sup>5</sup> TIA's TR-8 has created a series of technical documents known as the TIA-102 suite of standard. This consensus-based standard describes and/or defines a number of the interfaces associated with The Project 25 Standard digital land mobile radio system. Law enforcement and other public safety entities may or may not utilize wireless communications systems and equipment which include the TIA-102 standard, in whole or in part. Additionally, in cases where public safety utilizes TIA-102-based equipment, such equipment may also include features and functions that are not defined by the standard, but which features and functions a public safety agency requires for addressing that agency's operational needs. *See* <http://www.tiaonline.org/standards/committees/committee.cfm?comm=tr-8>. An overview of the most recent TR-8 activity is provided in TIA's annually released report on its standards activity. *See* TIA, *2011-2012 Standards & Technology Annual Report* (rel. Apr. 2012) at 4-5, available at [http://www.tiaonline.org/standards/about/documents/STAR\\_2011-2012.pdf](http://www.tiaonline.org/standards/about/documents/STAR_2011-2012.pdf).

<sup>6</sup> *See* Petition at 7.

<sup>7</sup> *See* Comments of The National Association of State Emergency Medical Services Officials, RM-11433 (filed Apr. 24, 2012); Comments of the Technical Committee of Regional Planning Committee Twenty, RM-11433 (filed Apr. 17, 2012); Comments of the Airborne Law Enforcement Association, Inc., RM-11433 (filed Apr. 26, 2011); Comments of the Maryland State Police Aviation Command, RM-11433 (filed Apr. 26, 2011); Comments of the Commonwealth of Virginia, RM-11433 (filed Apr. 27, 2011); Comments of the District of Columbia, RM-11433 (filed Apr. 27, 2011); Comments of Motorola Solutions, Inc., RM-11433 (filed Apr. 27, 2011); Comments of NPSTC, RM-11433 (filed Apr. 27, 2011); Comments of the State of Delaware, RM-11433 (filed Apr. 27, 2011); Comments of the Commonwealth of Pennsylvania, RM-11433 (filed Apr. 27, 2011).

The Petition was rightfully included in the same rulemaking as the NPSTC Petition since both ask the Commission to allow aircraft voice operations on secondary trunking channels (eight 12.5-kHz channels) in the 700 MHz Public Safety Narrowband (PSNB) block (i.e., 769-775 MHz for downlink and 799-805 MHz for uplink), and both propose that transmission in the 700 MHz should be limited to two (2) watts as found in FCC CFR Title 47 Part 90.541(d). However, as with the NPSTC Petition and related supportive comments on the record, TIA notes that consideration of commercial broadband network services in adjacent broadband blocks does not appear to be adequately addressed. We submit that the following potential interference scenarios may exist under the proposals from both NPSTC and Maryland:

- interference from a public safety narrowband aircraft transmitter to non-serving 700 MHz public safety narrowband base stations (“BS”) receiver;
- interference from public safety narrowband aircraft transmitter to 700 MHz Public Safety Broadband (“PSBB”) Block and Upper D Block BS receivers; and
- interference from public safety narrowband aircraft transmitter to a commercial Upper 700 MHz C Block BS receiver.

As TIA has previously emphasized to the Commission in this same rulemaking, integral to the increased efficiency in spectrum use is the protection from harmful interference.<sup>8</sup> Generally, protection from harmful interference is consistent with the statutory requirement that the Commission’s spectrum management policies, among other effects, encourage new

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<sup>8</sup> See Comments of TIA, RM-11433 (filed Jul. 25, 2011) at 3-4.

technologies and services, ensure efficient use of spectrum, and protect primary licensees from harmful interference.<sup>9</sup> TIA believes that the Commission should continue policies that take the utmost care with regards to interference protection for public safety communications.<sup>10</sup> Specifically, ground-based communications should be protected from air-to-ground communications with such operations not imposing additional requirements on 3GPP Band 14 radio infrastructure.

Based on these concerns, should the Petition be acted on, TIA urges that the Commission require comprehensive steps to review the potential impact of the proposed narrowband operations on 700 MHz public safety and commercial broadband network services in adjacent broadband blocks are taken by Maryland, and that appropriate measures to safeguard such broadband operations from potential interference moving forward are adopted. Uses proposed in the Petition should not derail near-term narrowband deployments. We support, after proper assurances that harmful interference will not occur to sharing or adjacent licensees, that any instances of interference to shared or adjacent licensees due to operations on secondary trunking frequencies for air-to-ground interoperable communications in conjunction with the Maryland First Responders Interoperable Radio System Team system and the Maryland State Police-Maryland Institute for Emergency Medical Services Systems emergency medical system be the

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<sup>9</sup> See 47 U.S.C. § 303(f).

<sup>10</sup> See, e.g., Comments of TIA, WT Docket No. 11-69, ET Docket No. 09-234 (filed Jun. 27, 2011) at 3.

responsibility of Maryland to identify and resolve under a granted Petition.<sup>11</sup> We also support that, if it is assured that harmful interference is not experienced by sharing or adjacent licensees, the acting of the Petition in lieu of a full rulemaking as proposed by NPSTC would be appropriate in this instance given the narrowbanding deadline.<sup>12</sup>

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<sup>11</sup> TIA appreciates Maryland's assurances to coordinate the use of frequencies as applicable to avoid interference. *See* Petition at 15, 21-25. However, frequency coordination may not always suffice to protect public safety systems against interference, and we urge the Commission to place the condition on Maryland that any actual interference after the grant is the responsibility of Maryland to either take all reasonable measures to eliminate the interference, and failing those, cease the interfering operation(s), in order to ensure that grant of the waiver would be in the public interest.

<sup>12</sup> *See* Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended; Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies, *Order*, WT Docket No. 99-87, RM-9332, 25 FCC Rcd 8861 (2010).

### **III. CONCLUSION**

For the foregoing reasons, TIA requests the Commission to take the above concerns into consideration should it elect to entertain the Petition.

Respectfully submitted,

**TELECOMMUNICATIONS INDUSTRY ASSOCIATION**

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May 2, 2011