Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of:	)
	) PS Docket No. 06-229
Petitions for Waiver to Use	)
the 700 MHz for Regional Public	)
Safety Broadband Communications	)
	)
Interoperability, Out of Band	)
Emissions, and Equipment	)
Certification for 700 MHZ Public	)
Safety Broadband Networks.	)

COMMENTS OF
THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION

INTRODUCTION.

The Telecommunications Industry Association (TIA) hereby submits comments to the

Federal Communications Commission (Commission) in the above-captioned

proceeding.[1] TIA appreciates the Commission's efforts to develop policies that will

ensure the deployment of a nationwide interoperable public safety network, and is eager

to provide comments on this vital issue.

TIA represents the global information and communications technology (ICT) industry

through standards development, advocacy, tradeshows, business opportunities, market

intelligence and world-wide environmental regulatory analysis. Its 500 member

companies manufacture or supply the products and services used in the provision of

broadband and broadband-enabled applications. Since 1924, TIA has enhanced the

business environment for broadband, mobile wireless, information technology, networks,

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[1] *See* Public Safety and Homeland Security Bureau Seeks Comment on Interoperability, Out of Band
Emissions, and Equipment Certification for 700 MHZ Public Safety Broadband Networks. (rel. May 18,
2010) (Interoperability, Out of Band Emissions, and Equipment Certification PN).

cable, satellite and unified communications. Members' products and services empower communications in every industry and market, including healthcare, education, security, public safety, transportation, government, the military, the environment and entertainment.

SUMMARY.

The public safety broadband network must have vital attributes for it to provide seamless, interoperable broadband communications. To do so, priority access must include priority capacity based upon application and user needs and establish bandwidth and queuing requirements that can ensure effective communications. Additional 700 MHz public safety broadband roaming requirements beyond those of the Waiver Order must be further evaluated before mandated. Additionally, tighter out of band emission (OOBE) requirements than those in the Waiver Order should not be imposed. Moreover, the Commission should maintain waiver of equipment certification requirements, provided that the waiver grantees and manufacturers adhere to the technical requirements of the network specifications. Finally, TIA urges the Commission to monitor applications selections and governance approaches and allow users themselves to drive the standards in these areas.

DISCUSSION.

> I.   **PRIORITY ACCESS CAPABILITIES MUST INCLUDE APPLICATION- AND USER-BASED PRIORITY, AFFORD BANDWIDTH BASED UPON NEED, AND ESTABLISH COMMON-SENSE QUEUING PARAMETERS.**

Priority access is an essential component of an effective public safety broadband network. The Commission seeks identification of key capabilities to be included in the

definition of priority access.[2] TIA believes that the public safety broadband network

must offer, at minimum, several priority access capabilities. First, the network must

provide individual user quality of service and priority based upon application. Moreover,

bandwidth must be assignable on a per-user or basis based upon the type of user and/or

the priority of the incident. Additionally, priority access must afford queuing upon lack

of resources at a site based upon priority. These capabilities will speed emergency

communications and prioritize calls based upon levels of urgency.

II.   **ADDITIONAL 700 MHZ PUBLIC SAFETY BROADBAND ROAMING REQUIREMENTS MUST BE FURTHER EVALUATED BEFORE MANDATED.**

In its Waiver Order, the Commission stated that each Petitioner's system must be capable

of supporting roaming by all other Petitioners' systems and support roaming by

additional future regional, state, Tribal and local public safety broadband systems.[3]

These requirements reflect two categories of roaming as specified in NPSTC BBTF

Report. TIA believes that implementing any requirements beyond those in the Waiver

Order would be premature at this time. There are currently a number of technical and

operational complexities surrounding other network roaming capabilities that require

further examination by the Commission and public safety community, and these must be

examined as the regional and local networks operate their systems to make a more

informed decision.[4]

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[2] Interoperability, Out of Band Emissions, and Equipment Certification PN at 2.

[3] Waiver Order at 16.

[4] In fact, TIA notes that inter-network roaming category number 2 may no longer be an applicable roaming category as a result of the recommendations made by the Commission in the National Broadband Plan for structuring the public safety broadband network and conducting a commercial auction of the D-Block.

III. THE OOBE REQUIREMENTS ESTABLISHED IN THE WAIVER ORDER SHOULD BE APPLIED TO THE PUBLIC SAFETY BROADBAND NETWORK.

The Commission has asked if tighter OOBE requirements should be imposed for the public safety network.[5] Wireless operators who are in adjacent spectrum blocks typically have to coordinate deployments to minimize adjacent channel interference. TIA believes public safety agencies and the D block licensee(s) will be faced with a similar scenario at 700 MHz under the provisions of the FCC's Broadband plan. TIA notes that imposing tighter requirements on public safety transmissions would do nothing to prevent interference to public safety. It would only potentially impact interference to the D block licensee(s).

Potential engineering solutions to minimize interference between adjacent spectrum blocks include: a) using common sites, b) imposing a guard band between the D and PSST spectrum blocks, or imposing tighter OOBE requirements on both the D block and public safety block. However, these all come with a cost and each have their own issues from a business perspective.

For example, using common sites constrains both public safety and the D block licensee(s) into agreements that otherwise may not support operational or business needs. Further, it is likely that the sites needed by public safety and those decided on by the D block licensee(s) will not always be the same. Imposing a guard band entails removing spectrum from either the D block and/or public safety, bands that already are limited to 5+5 MHz each. Equipment economies of scale for 4G broadband equipment do not exist for channel widths smaller than 5 MHz. Finally, imposing tighter out of band emissions impacts the cost of equipment for both public safety and the D block licensee(s), and

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[5] Interoperability, Out of Band Emissions, and Equipment Certification PN at 4.

further analysis would need to be done to determine if any reasonable and accomplishable OOBE requirement would yield the degree of reliability public safety requires.

IV. TIA SUPPORTS EQUIPEMNET SELF-CERTIFICATION.

In the Waiver Order, the Commission waived the equipment certification requirements under 47 C.F.R. § 90.203, provided that waiver grantees and manufacturers adhere to the technical requirements of the specifications of the network mandated by the Commission.[6] TIA supports this action, and believes that equipment operating in the public safety broadband network should be allowed to be manufacturer-certified going forward. This will allow effective, commercially-available products to be utilized by public safety in the most efficient manner.

V. ISSUES SUCH AS GOVERNANCE AND APPLICATIONS SHOULD BE DETERMINED BY USERS AS THE NETWORKS ARE TESTED.

The Commission seeks input on how to best ensure a governance structure that promotes interoperability.[7] The Commission also seeks to determine what applications are necessary for the purpose of promoting nationwide interoperability.[8] TIA agrees that the issues of governance and applications are important to ensure interoperability of the public safety network. Further, determining the best methods of governance and the essential applications of the public safety network will take time and experience. The waiver grantees should be afforded the opportunity to determine those applications that are essential and establish effective governance approaches. Thus, TIA urges the

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[6] *See* Waiver Order at n. 88.

[7] *See* Interoperability, Out of Band Emissions, and Equipment Certification NOI at 4.

[8] *See id*. at 1-2.

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Commission to monitor applications selections and governance approaches and allow

users themselves to drive the standards in these areas.

CONCLUSION.

For the foregoing reasons, TIA encourages the Commission to take action in this

proceeding consistent with the recommendations set out above.

Respectfully submitted,

TELECOMMUNICATIONS INDUSTRY
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