I. INTRODUCTION AND SUMMARY

The Telecommunications Industry Association ("TIA")\(^1\) files these comments on promoting the deployment of infrastructure that is necessary to provide the public with advanced wireless broadband services, as raised in the NPRM.\(^2\)

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\(^{1}\) 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 hundreds of 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, cable, satellite and unified communications. TIA’s standards committees create consensus-based voluntary standards for numerous facets of the ICT industry.

\(^{2}\) See Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies WT Docket No. 13-32; WT Docket No. 13-238; WC Docket No. 11-59 (rel. September 26, 2013), ("NPRM").
As the Commission notes, America's use of mobile broadband connectivity is growing exponentially. This increased demand for capacity-intensive access to the Internet is visible with the rapid growth of smartphone adoption. These devices are essentially handheld computers integrated with a mobile telephone, allowing consumers to use them in much the same manner as their home computers. With smartphones replacing feature phones, the growth in the smartphone universe is straining available wireless spectrum. In 2012, wireless subscribers for the first time spent more on data than they did on voice. Spending on data rose by a third in 2012, and during the next four years it will increase by 94 percent. TIA projects that the overall wireless market, including voice and data services, wireless handsets, wireless infrastructure equipment, and services in support of the wireless infrastructure, will expand at a 7.6 percent compound annual rate, reaching an estimated $364.5 billion in 2016 from $272.3 billion in 2012.\(^3\) Innovation and growth have also gone well beyond the smartphones. Demand for bandwidth consuming devices such as netbooks and tablets are skyrocketing.

As the NPRM appropriately observes: “The ability of wireless providers to meet this demand will depend not only on access to spectrum, but also on the extent to which they can deploy new or improved wireless facilities or cell sites.”\(^4\) The Commission can significantly enhance the mobile users’ experience by addressing the barriers that prevent the timely construction of wireless infrastructure facilities.

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\(^3\) This data, as well as all other projections and statistics provided in this document which are not cited to otherwise, are derived from the TIA 2013 ICT Market Review & Forecast, a proprietary annual publication from TIA containing distilled data and analysis on information and communications technology industry trends and market forecasts through the end of 2016. This document is available for purchase at http://www.tiaonline.org/resources/market-forecast.

\(^4\) See NPRM at 2
II. TIA SUPPORTS THE PROPOSED LANGUAGE CHANGES EXEMPTING EXISTING APPROVED FACILITIES FROM FURTHER REVIEW.

Distributed antenna system, “DAS,” and small cell infrastructure deployments are expanding the capacity of wireless networks, as the NPRM notes. The “footprint” of these systems is significantly reduced. In fact the dimensions of these facilities are likely less intrusive than for those that various antenna siting procedures originally anticipated. TIA believes this supports a conclusion that DAS and small cell deployments ought to be excluded from environmental processing, including both NEPA and Section 106 processing. As has already been noted by others, the financial and regulatory costs involved in environmental and Section 106 processing are not warranted due to the minimal environmental effects of small cells and DAS facilities.5

TIA specifically concurs with PCIA’s proposal that the Commission add a sentence to Note 1 of Section 1.1306, stating: “The provisions of § 1.1307(a) do not encompass distributed antenna systems or small cell installations where they are deployed in or on existing buildings, towers or other structures or along or within existing aerial or underground corridors.”6

TIA further supports the proposal to encourage small cell deployment by clarifying that the collocation exclusion under the first sentence of Note 1 to Section 1.1306 applies not only to collocations on existing antenna towers and buildings, but also to facilities mounted on structures

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6 See NPRM at 31
such as utility poles, water tanks, light poles, and road signs, thus excluding them from environmental review except for historic preservation and RF emissions exposure compliance. 7

III. TIA SUPPORTS USING A CUBIC VOLUME APPROACH FOR THE DIMENSIONS OF EQUIPMENT EXCLUDED FROM REVIEW

TIA supports the proposal by PCIA and the HetNet Forum which is contained in the NPRM to use a definition of facilities that relies on defining the maximum cubic volume of the relevant facilities rather than on specific technological labels. As their proposal notes, this “accommodates current DAS and small cell deployments and anticipates foreseeable technological development.”

Using various “volume” standards for equipment, antenna and infrastructure provides a simpler and more objective criterion than one which depends upon any more refined inspection of the technical characteristics of equipment.

IV. TIA SUPPORTS ENVIRONMENTAL NOTIFICATION EXEMPTION FOR REGISTRATION OF TEMPORARY TOWERS

Among the advantages of distributed antenna systems and small cell systems is their deployment flexibility, including meeting short term increases in demand with temporary installations. Antenna siting procedures did not anticipate the potential of such short-term applications. TIA supports the NPRM’s proposed approach for temporary towers as expressed in the May 15, 2013 waiver.

7 See NPRM at 34
8 See NPRM at 31, citing PCIA July 22, 2013 Ex Parte at 3.
IV. TIA SUPPORTS BROAD “IMPLEMENTATION OF SECTION 6409(A)”

As the NPRM notes, Section 6409(a) of the Spectrum Act gives the Commission additional authority to meet Congress’ clearly expressed policy goal of expediting antenna siting. The NPRM offers appropriate definition for the text:

- “Transmission equipment” and “wireless.” TIA concurs with the Commission that this applies broadly to “the collocation, removal, or replacement of equipment used in connection with any Commission-authorized wireless transmission, licensed or unlicensed, terrestrial or satellite, including commercial mobile, private mobile, broadcast, and public safety services, as well as fixed wireless services such as microwave backhaul or fixed broadband.” 9

- “Transmission equipment” - TIA concurs with the Commission that this applies broadly to encompass antennas and other equipment associated with and necessary to their operation, including, for example, power supply cables and a backup power generator. 10

- “existing wireless tower or base station,” TIA concurs that this term encompasses structures that support or house an antenna, transceiver, or other associated equipment that constitutes part of a base station, even if they were not built for the sole or primary purpose of providing such support. 11

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9 See NPRM at 104.
10 See NPRM at 105
11 See NPRM at 107.
• “Base station” - TIA concurs that the transmission equipment definition includes antennas, transceivers, and other equipment associated with and necessary to their operation, including coaxial cable and regular and backup power equipment.12

• “Substantially change the physical dimensions” - TIA supports the approach taken in the NPRM which uses the same standard as 2009 Declaratory Ruling to determine whether an application will be treated as a collocation when applying Section 332(c)(7).25113

• “Collocation” - TIA supports the NPRM conclusion that collocation is defined as “the mounting or installation of an antenna on an existing tower, building or structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes.”

V. REVIEW AND PROCESSING OF APPLICATIONS, TIME LIMITS, AND REMEDIES

TIA supports allowing localities to condition “the approval of a modification on the underlying structure’s compliance with the hardening standards under TIA-222 Revision G, Structural Standards for Antenna Supporting Structures and Antennas.” 14

The Telecommunications Industry Association (TIA) is accredited by the American National Standards Institute (ANSI) to develop voluntary, consensus-based industry standards for a wide variety of ICT products. The TIA-222 standard provides the requirements for the structural design and fabrication of new -- and the modification of existing -- structural antennas,

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12 See NPRM at 110.
13 See NPRM at 118.
14 See NPRM at 125.
antenna-supporting structures, mounts, structural components, guy assemblies, insulators and foundations. The standard applies to steel antenna towers and antennas supporting structures built for all classes of communications.

The standard allows owners and operators of broadcast and wireless towers to effectively and reliably relay communications via antenna towers. The standard is referenced in the International Building Code and is therefore accepted by building officials. Revisions of the TIA-222 standard are published so that modern practices are used by industry in the design and modification of new and existing antenna towers.

VI. CONCLUSION

For the foregoing reasons, TIA urges the Commission to act consistently with the recommendations above.

Respectfully submitted,

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