



Who is the Telecommunications Industry Association (TIA) and What Have We Done in the Past, Present and Will Do in the Future?

The Telecommunications Industry Association is dedicated to support the telecommunications industry and our society through its ability to listen and address the needs of member companies. TIA members represent the entire information and communications technology (ICT) ecosystem from the edge of the network to the support structures that carry our wireless signals. TIA's mission is to ensure quality, performance, consistency and excellence in all aspects of the network to enable a better life for everyone around the world. TIA's standards development program exemplifies this commitment. The structure of TIA is such that it facilitates addressing the concerns expressed by its members and others in support of the industry.

When discussing telecommunications wireless infrastructure, there is no standard better at addressing the full support of the community in the communications infrastructure space than ANSI/TIA-222, *Structural Standard for Antenna Supporting Structures and Antennas*.

With this one document TIA and its members are successfully addressing the needs of tower owners, carriers, regulators, consumers, contractors, engineers and manufacturers.

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The ANSI/TIA-222 provides consistent design requirements safeguarding performance. TIA has a long history and working relationship with the IBC (International Building Code) and revisions of the ANSI/TIA-222 Standard have been adopted into new releases of the IBC. Reference in such a widely used and regulated code ensures consistency in tower deployments across the country and around the world. When properly utilized, this standard facilitates the planning for the site to ensure the structure is designed to meet the loading requirements. TIA-222 represents many thousands of hours of development from the input of a wide segment of the telecommunications industry. Currently the TIA Standards Development Committee, TR-14, consists of over 250 individuals representing over 100 companies.

In the TIA process every company has an equal vote and can impact the work of the committee. The development process is guided by the ANSI (American National Standards Institute) Essential Requirements to ensure the standard development process is open, balanced, consensus driven and ensures due process. These ANSI development principles ensure that a standard has opportunity to have many industry voices and inputs into the final standard. This strengthens the standards authority and that improves the proper planning of the networks, design and maintenance of the infrastructure, and confidence when local planning and zoning officials are seeking to ensure the design requirements are effective.

The TIA TR-14 Committee is diligently working to provide two new publications. In the very near future, TR-14 will publish its first Technical Systems Bulletin. This inaugural document, titled TSB-5053, *Technical Bulletin Mounting Systems Classification*, will provide a means of assigning to a mount a capacity that can be used to complete a comparative analysis when new antenna technology is introduced. The goal is to reduce the time required and resources assigned to ensure that the antenna mounts will provide the required support without an extensive structural review. Other benefits will be consistency in the marketplace and an effective means to communicate with planning and zoning officials. By the end of 2017, the TIA TR14 Committee will provide Revision H of the TIA-222 Standard. The development of Revision H has been a long and arduous process that will update TIA-222-G to ensure the TIA-222 Standard continues to evolve to meet the changing demands while updating the technology and resources detailed within the standard.

While you might be familiar with the efforts of the TIA TR-14 Standards Development Committee, you might not be aware that TIA works to solve all kinds of challenges in the Information and Communications

Technology (ICT) and connectivity community. For example, for over 50 years TIA has been supporting our first responders with Land Mobile Radio (LMR) performance standards for the radios that first responders rely upon every day. Working with such prominent companies as Motorola and Harris, engaging with the user community through Association of Public-Safety Communications Officials (APCO) and Department of Homeland Security (DHS), TIA's members have transitioned LMR technology from analog to digital platforms and brought greatly improved performance to the technology used by police, fire, EMT's and others. Since the inception of FirstNet, TIA has maintained a strong relationship with them, to ensure first responders receive the quality of service and improved feature they need and deserve to safe guard our society.

TIA members such as CommScope and Corning have been driving cable performance and installation for fiber and copper cables for 20 years. TIA's Data Center Design and Performance Standard (TIA-942) was the first data center standard published in 2005. This year it will finish Revision B and add new media types to the guidance contained within the standard. This group also addresses such challenges as in building DAS designs, as well as the development of interior wiring for residential, multi-tenant and campus structures.

TIA members brought forth 3G and 4G mobility and features including text to 911 and improved voice services. Through deep engagement by Qualcomm, ALU, Ericsson and others TIA took that effort to the international arena and founded an international partnership project with Japan, Korea, and other countries so customers can port their connectivity all over the world and have the same quality of service from D.C. to Seoul to Mumbai. TIA continues to work with the international community to bring the future mobility services to life and enable the 5G network.



TIA in the last 10 years has launched technical programs to drive the Internet of Things (IoT) through

machine to machine (M2M) communications, vehicular telematics and smart utility networks. In this space TIA became one of five founding organizations of the oneM2M partnership project deploying a base architecture to accelerate the deployment of IoT. As TIA considers societies technological demands over next few decades, it will be shepherding the industry through the Network Function Virtualization transition and bringing 5G networks to life around the world.

Through efforts, partnerships with others and TIA's strength in building communities to accelerate and improve ICT connectivity, these are some of the areas where TIA has been working to bring quality, performance and excellence into the people's lives, companies and communities world-wide.

Our intent with this PAN is to provide a high-level overview into the support TIA provides to our great industry, and how essential that support is to industry participants. TIA looks forward to the new developments and working groups that will assist in its ability to respond, develop, clarify and communicate as part of its continuous support of the telecommunications industry. Please review additional PAN's. We are listing a few key websites for your consideration and reference.

<https://natehome.com/>

<https://www.osha.gov/doc/topics/communicationtower/>

<http://www.tiaonline.org/>

<http://www.tirap.org/>

<http://wia.org/> ■

