

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

In the Matter of	)	
	)	
Fostering Innovation and Investment in Wireless Communications Market	)	GN Docket No. 09-157
	)	
	)	
<u>A National Broadband Plan For Our Future</u>	)	GN Docket No. 09-51

**COMMENTS OF THE  
ALLIANCE FOR TELECOMMUNICATIONS INDUSTRY SOLUTIONS**

The Alliance for Telecommunications Industry Solutions (ATIS) hereby submits these comments in response to the Federal Communications Commission’s (Commission) *Notice of Inquiry (NOI)* released August 27, 2009, in the above referenced docket.<sup>1</sup> ATIS supports the Commission’s goal to foster and advance innovation and investment in the wireless communications market.

ATIS and its member companies are engaged actively in developing implementable technical solutions using a variety of communications platforms, including wireless technology, to meet the growing and evolving consumer need for advanced communications services and capabilities. In establishing rules to promote wireless innovation, ATIS encourages the Commission to consider the technical standards work done by the industry through organizations such as ATIS.

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<sup>1</sup> In the Matter of Fostering Innovation in the Wireless Communications Market, GN Docket No 09-157, and A National Broadband Plan for Our Future, GN Docket No.09-51, *Notice of Inquiry*, FCC 09-66 (rel. August 27, 2009).

## **I. Background**

ATIS is a global standards development and technical planning organization that leads, develops, and promotes worldwide technical and operations standards for information, entertainment, and communications technologies. ATIS has been serving the evolving needs of the telecommunications industry for over 25 years by prioritizing the industry's most pressing, technical and operational issues, and creating interoperable, implementable end-to-end solutions and standards. These solutions support the rollout of new products and services into the ICT marketplace.

The ATIS membership spans all segments of the ICT industry, including local exchange carriers, interexchange carriers, wireless equipment manufacturers, competitive local exchange carriers, data local exchange carriers, wireless service providers, providers of commercial mobile radio services, broadband providers, software developers, consumer electronics vendors, digital rights management companies, central authentication service companies and internet service providers. Industry professionals from more than 250 communications companies actively participate in ATIS' open industry forums. ATIS members include key innovators of wireless technologies and services who look to ATIS for the development of the technical specifications that will speed the new products and services to market.

ATIS' industry committees and forums focus on issues ranging from the fundamental elements of offering communications services such as ordering and billing, to network security, reliability and interoperability of current and next generation technologies, to seamless delivery of converged services such as IPTV over multimedia platforms.

## **II. Discussion**

### **A. Development of Next Generation Technologies to Spur Wireless Innovation**

In the *Notice of Inquiry*, the Commission seeks information on developments in network infrastructure and systems such as advances in fourth generation (4G) wireless networks that create opportunities for wireless innovation. The Commission acknowledges that “4G wireless networks may represent the most significant advance in wireless communications... and will be the first converged architecture to be deployed, capable of supporting voice, video, and data services.”<sup>2</sup> ATIS agrees with the Commission on the importance of exploring and maximizing the potential ICT advances that may be gained by the deployment of next generation networks.

ATIS has been working to facilitate the rollout of next generation network technologies. ATIS’ Technology and Operations (TOPS) Council, which is comprised of some of the industry’s most senior technology officers and executives from leading communications companies, launched an Exploratory Group on Convergence (EGC) that has produced a comprehensive analysis of the communications industry’s ability to provide converged services over next generation networks. Additionally, ATIS’ TOPS Council convened a Next Generation Network Focus Group (NGN-FG) to address current and future next generation network standardization needs. The NGN-FG developed a three-part framework document that outlines both the network architecture and the technical and business requirements for NGN, and that provides an NGN roadmap identifying the network architecture capabilities or “service enablers” that will enable the introduction of new NGN services.

ATIS also plays a leading role in promoting the development and use of Long-Term Evolution (LTE) wireless technology, a 4G technology developed by the Third Generation

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<sup>2</sup> *NOI* at ¶ 50.

Partnership Project (3GPP).<sup>3</sup> ATIS is the North American organizational partner of 3GPP, a global collaboration of regional Standards Development Organizations (SDOs) targeted at evolving the Global System for Mobile communications (GSM) specifications to 3G and beyond. ATIS strongly believes that LTE deployments will bring greater wireless capabilities to applications and services that would touch upon and improve the daily lives of consumers.

## **B. Development of “Green” Wireless Technologies**

“Green” issues, such as environmental sustainability and energy efficiency, have become national priorities in the United States and impact all industries including ICT. ATIS notes that the *NOI* seeks comment on innovations in the use of renewable energy and other green technology makes wireless networks more energy efficient.<sup>4</sup>

ATIS is actively engaged in leading the development of practical and technical based solutions and in establishing a common taxonomy and better understanding of how “Green” issues pertain to the ICT industry. The ATIS Board of Directors formed an Exploratory Group on Green (EGG) to assess holistically environment sustainability for the ICT sector and to set a foundation for an industry roadmap to prioritize and advance issues associated with ICT sustainability (such as energy efficiency and management). The EGG has released its *Report on Environmental Sustainability*, which contains the ICT sector’s definition of sustainability and examines the energy efficiency practices of the ICT sector and alternate energy sources. The report also outlines the business drivers behind the ICT sector’s sustainability efforts and demonstrates that the ICT sector can be an enabler of applications and services that improve energy efficiency in other sectors, such as transportation, finance, and health care. ATIS’ EGG *Report on Environmental Sustainability* is made publicly available at <http://www.atis.org/green/>.

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<sup>3</sup> *NOI* at ¶ 50, footnote 54.

<sup>4</sup> *NOI* at ¶ 54.

Additionally, ATIS has produced technical standards and solutions designed to increase the energy efficiency of ICT products and services and to establish benchmarking tools that are available to industry, policy makers and regulators. ATIS' Network Interface, Power and Protection (NIPP) Committee, which develops standards and technical reports related to power systems, electrical and physical protection for the exchange and interexchange carrier networks, and interfaces associated with user access to telecommunications networks, has published four standards that can be used to determine telecommunication equipment's energy efficiency.<sup>5</sup> These standards introduce the Telecommunications Energy Efficiency Ratio, or TEER, as a measure of network-element efficiency and provide ICT equipment manufacturers and service providers with a methodology to calculate the TEER of an individual piece of ICT equipment or network configuration. These standards are available through ATIS online Document Store at <https://www.atis.org/docstore/default.aspx>.

### **C. Use of Technical Standards in Promoting Wireless Innovation**

Finally, ATIS notes that the *NOI* seeks comment on how standards can affect wireless innovation.<sup>6</sup> The Commission acknowledges its long-standing support for the flexibility in the standard-setting process and notes that it does not anticipate altering the overall approach to the process.<sup>7</sup> ATIS encourages the Commission's continuing participation in, and reliance on, open and consensus-based industry standards development organizations such as ATIS to facilitate industry innovation.

In the *NOI*, the Commission seeks comment on whether it should play a role in “developing, promoting, or seeking to find consensus about standards.”<sup>8</sup> While ATIS welcomes

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<sup>5</sup> An additional five energy efficiency-related documents are under development by NIPP.

<sup>6</sup> *NOI* at ¶ 60.

<sup>7</sup> *Id.*

<sup>8</sup> *Id.*

the Commission's input in the standards setting process, ATIS believes that the current approach for developing private-sector technology standards works quite well and cautions the Commission against imposing restrictions or mandates that may have a chilling effect on voluntary industry involvement.

ATIS particularly notes that the National Technology Transfer and Advancement Act of 1995, Public Law 104-113 (NTTAA) establishes a cornerstone policy promoting the government's use of industry-developed standards. The NTTAA directs federal government agencies to use, wherever feasible, standards and conformity assessment solutions developed or adopted by private, voluntary consensus standards bodies in lieu of developing government-unique standards or regulations. Additionally, the Office of Management and Budget (OMB) Circular A-119, Federal Participation in the Development and Use of Voluntary Consensus Standards in Conformity Assessment Activities, encourages the government to work with industry to develop standards and promotes close interaction and cooperation between the public and private sectors in the development of standards.

There are many examples of ATIS' industry standards being used or referenced by the government. These standards range from security, lawful intercept, wireless, quality of service, ordering/billing to name only a few. For instance, the Commission requires the North American Numbering Pooling Administrator to comply with the guidelines developed by the ATIS Industry Numbering Committee (INC) Guidelines.<sup>9</sup> In developing rules pertaining to the exchange of customer information between service providers, the Commission acknowledges the successful work of the ATIS Ordering and Billing Forum (OBF) in developing Customer Account Record Exchange (CARE) guidelines and encourages providers to use these guidelines

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<sup>8</sup> See 47 CFR §52.13(b)(3).

<sup>9</sup> See 47 CFR §52.13(b)(3).

and to work with the OBF to further develop and refine them.<sup>10</sup> The Communications Assistance for Law Enforcement Act, Public Law 103-414, also acknowledges industry standards work by establishing that service providers may rely on industry-developed standards when determining compliance with CALEA.<sup>11</sup> One such “safe harbor” standard is ATIS-1000678.2006, Lawfully Authorized Electronic Surveillance (LAES) for Voice over Packet Technologies in Wireline Telecommunications Networks (version 2).

ATIS also is pleased to note that several government agencies have participated with measurable success in its voluntary consensus-based standards development process. Those agencies include the National Communication System, Department of Defense, Federal Bureau of Investigation, Department of Commerce (which includes the National Institute of Standards and Technology and National Telecommunications and Information Administration) and the Commission.

### **III. Conclusion**

ATIS shares the Commission’s view that the pace of change in the wireless marketplace over the past decade has moved at light speed “to deliver new and empowering technologies to American consumers.”<sup>12</sup> For continued rapid advances in wireless technology, ATIS encourages the Commission to continue its support for the development of 4G technologies such as LTE and to promote the valuable work of open, voluntary, consensus-based standard setting organizations such as ATIS. ATIS believes that the open, voluntary and consensus-based standard-setting process has been, and will continue to be, instrumental in facilitating rapid technological

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<sup>10</sup> See *Report and Order and Further Notice of Proposed Rulemaking*, CG Docket No. 02-386, at ¶59 (rel. Feb. 25, 2005).

<sup>11</sup> One such “safe harbor” standard is ATIS-1000678.2006, Lawfully Authorized Electronic Surveillance (LAES) for Voice over Packet Technologies in Wireline Telecommunications Networks (version 2).

<sup>12</sup> *NOI* at ¶ 3.

advances that affect and transform all aspects of daily life from the use of wireless cell phones to global positioning systems to wireless gaming.

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Dated: September 28, 2009