

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

In the Matters of

Commercial Availability of Navigational Devices	)	CS Docket No. 97-80
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	)	
	)	GN Docket No. 09-47
International Comparison and Survey Requirements in the Broadband Data Improvement Act	)	
	)	
	)	GN Docket No. 09-137
Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act	)	
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A National Broadband Plan for Our Future	)	GN Docket No. 09-51

**COMMENTS – NBP PUBLIC NOTICE #27**

The Alliance for Telecommunications Industry Solutions (ATIS) hereby submits these comments in response to the Federal Communications Commission’s (Commission) *National Broadband Plan Public Notice #27* released December 3, 2009. In this *Public Notice*, the Commission seeks information to allow it to better promote innovation in the development and use of set-top boxes and other video devices to achieve established broadband goals.<sup>1</sup> As a leading developer of technical standards relating to the delivery of converged services and

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<sup>1</sup> American Recovery and Reinvestment Act of 2009, Pub.L.No. 11-5, 123 Stat. 115 § 6001(k)(2)(2009).

internet protocol television (IPTV), ATIS appreciates the opportunity to offer comments in this proceeding.

## **I. Background**

ATIS is a global standards development and technical planning organization committed to providing leadership for, and the rapid development and promotion of worldwide technical and operations standards for information, entertainment and communications technologies using a pragmatic, flexible and open approach. ATIS' membership is diverse, including all stakeholders from the ICT industry – wireline and wireless service providers, equipment manufacturers, competitive local exchange carriers, data local exchange carriers, providers of commercial mobile radio services, broadband providers, software developers, consumer electronics companies, digital rights management companies, and internet service providers.

Nearly 600 industry subject matter experts from more than 250 ICT companies work collaboratively in ATIS' 18 open industry committees, which focus on a broad range of priorities for the ICT industry, including network architectures and platforms, the ordering and billing of services, E-911, cyber security, the reliability and interoperability of current and next generation technologies, the seamless delivery of converged wireline and wireless services such as IPTV over multimedia platforms, and the networks of the future.

## **II. Considerations for IPTV Standards**

In the *Public Notice*, the Commission considers how it may take an active role in formulating a solution to spur the development of portable video devices that will work across numerous platforms including multichannel video programming distribution (MVPD)

platforms and broadband-based video platforms. Specifically, the Commission inquires about “how [it] could develop standards that would achieve a retail market for devices” that support its goal of ensuring consumer access to commercially available navigation devices. While the Commission correctly observes that “the convergence of the television and content delivered by IP makes this a critical time to promote innovation in set-top devices that could support the Commission’s effort to drive broadband adoption and innovation,” ATIS believes that the Commission should not impose any regulations or technology mandates on the industry at this time. Rather, ATIS urges the Commission to support and encourage the collaborative work of industry pertaining to IPTV and set top boxes underway in ATIS committees.

ATIS has been recognized globally as the leading developer of requirements, standards, and specifications for IPTV. More than 25 companies representing a diverse cross section of the ICT industry actively participate in ATIS’ IPTV Interoperability Forum’s (IIF), which was established in 2005 to enable the interoperability, interconnection, and implementation of IPTV systems/services. The IIF also examines the standardized delivery of Internet-sourced content over an IPTV (i.e., managed) network and the development of specifications needed to standardize delivery of Internet-sourced content to consumers over IPTV networks.

The ATIS IIF has significantly advanced the development of IPTV specifications and standards and has produced key requirements and framework documents that serve as the foundation for IPTV standards. For instance, ATIS IIF has produced, among other things:

- The industry’s first set of IPTV architecture requirements that define the scope of IPTV services and the high level requirements that will guide the development of architecture specifications. *IPTV Architecture Requirements* (ATIS-0800002);

- A description of the high level architecture to enable end-to-end systems' implementation and interoperability for supporting network design. *IPTV High Level Architecture* (ATIS-0800007);
- Technical and operations standards for the provisioning, configuring and monitoring of IPTV devices in the consumer domain and for ensuring the integrity and authenticity of content within the interoperable environment. *Remote Management of Devices in the Consumer Domain for IPTV Services* (ATIS-0800009); *Secure Download and Messaging Interoperability Specification* (ATIS-08000014); and

In addition to the IIF, ATIS has been actively working towards an objective of developing technical specifications and solutions for separable security in the emerging IPTV market consistent with the objectives set forth by the Commission for the commercial availability of navigation devices. First, in June 2007, ATIS created the IP-Based Separable Security Incubator (AISP.5-ISSI) to fast-track the development of a solution for IP-based separable security related to IPTV and established technical enhancements to the existing CableCARD™ specification that would enable IP flows which are agnostic to the network technology of the service or network provider.

In 2008, AISP.5-ISSI completed a VueKey™ specification and physical interface solution to allow consumers the option of purchasing a commercially available TV, DVR or set-top box from retailers separate from the security function. This forum also successfully conducted interoperability testing of this solution to demonstrate its viability.

Second, to further advance the work of a downloadable security solution, ATIS formed the ATIS IPTV Downloadable Security Incubator in 2009 (AISP.6-IDS). AISP.6-IDS's mission is to create a target solution for downloadable security functionality that would enable portability of interoperable devices across networks. AISP.6-IDS is at the beginning stages of this work.

ATIS strongly believes that technological innovation of video devices would best be promoted by the Commission's support and encouragement of the continued market-driven standardization of work through open consensus-based standards organizations such as ATIS.<sup>2</sup> The imposition of non-industry based standards could have the affect of inhibiting the very technical innovation the Commission seeks to spur with this *Public Notice*.

### **III. Considerations for Home Networking Standards**

In the *Public Notice*, the FCC asks whether Digital Living Network Alliance and High Definition Audio/Video Networking Alliance are the only home networking standards that the Commission should consider. ATIS would like to make the Commission aware of relevant work completed by the ATIS Technology and Operations (TOPS) Council on this matter.

In 2008, the ATIS TOPS Council, which consists of senior technology officers and executives from leading communications companies and identifies pressing technical and operational priorities, commissioned the Home Networking Focus Group (HNET-FG) to address the issue of home networking, specifically to assess the issues in the development of a cohesive home networking infrastructure able to support VoIP, IPTV, and other IP based services. As part of this effort, the HNET-FG strove to understand the current status of standards development in the industry pertaining to the Home Network and performed an in-depth standards analysis of the industry. This study revealed 34 different Standards Developing Organizations (SDOs) and Standard Industry Groups (SIGs) with study programs relevant to the elements of a home network as identified by the HNET-FG.

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<sup>2</sup> The National Technology Transfer and Advancement Act of 1995, Public Law 104-113 (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.

As a result of its assessment, the HNET-FG concluded that almost the full spectrum of technical elements for home networking are currently under study, but also that a significant overarching concern existed. The HNET-FG noted that work was needed to ensure that specifications can be successfully integrated to enable a home network that can be deployed with reasonable effort, and be easily maintained (according to the characteristics and parameters the HNET-FG established).

In addition, while assessing the different SDOs and SIGs, the HNET-FG identified specific areas where additional standards development is needed in order to have a comprehensive suite of implementable, end-to-end home networking standards. The following technical areas were identified where additional standards development is needed as they pertain to the Home Network: multiple access networks, connection and discovery for the user experience, transport medium within the home network, managing the home network, QoS, security, and content in the home network, remote access and energy consumption.

ATIS believes that the Commission may want to consider ATIS' HNET-FG assessment in its identification and evaluation of the various home networking standards.

#### **IV. Conclusion**

ATIS shares the Commission's enthusiasm in exploring the potential use of IPTV as a mechanism to achieve universal broadband access. However, ATIS cautions the Commission to avoid imposing governmental regulations or developing governmental standards that may stifle the very innovation the Commission wishes to promote in the emerging IPTV market. Instead, ATIS strongly encourages the Commission to look to the significant body of technical and operations standards work taking place in ATIS, which utilizes open standards

development process with broad industry participation, due process and consensus-based decision making.

Respectfully submitted,

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