



Alliance for Telecommunications Industry Solutions (ATIS)

Standards that Drive the Business of Communications

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On behalf of

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ATIS Overview

- Established in 1983, an accredited technical planning and standards development organization.
- Committed to rapidly developing and promoting technical and operations standards for the communications and related information technologies industry worldwide.
- Uses a pragmatic, flexible, open, and market-driven approach to develop end-to-end, implementable, interoperable standards and solutions.
- 300+ ATIS member companies represent a wide cross section of the global communications industry.
- An Organizational Partner of 3GPP, Global Standards Collaboration, ITU-T and ITU-R Sector Member and a leading contributor to the ITU, via the U.S. State Department.

ATIS Board of Directors and Executive Level Activities



- A CTO-Level **Board of Directors** identifies Business Objectives and Business Problems
 - The **Technology and Operations (TOPS) Council** – Sets and defines priorities for the industry
 - Focus Groups, Exploratory Groups, and Task Forces provide various depths of assessment
 - Deliverables are work plans and recommendations initiating development of standards required for priority implementation
 - The **Chief Information Officer (CIO) Council** – Sets IT priorities for standards/best practices development
 - Recognizes convergence of Network/IT
 - Working Groups and Initiatives provide perspective and direction on standards for IT priorities facing service providers

ATIS Standards Committees



- 23 Industry Standards Committees and Forums provide end-to-end solutions for:
 - Network Architecture and Interconnection
 - Optical Transport and Synchronization
 - Operations, Administration, and Maintenance
 - Ordering, Billing and Provisioning
 - Information and Data Security
 - IPTV Interoperability
 - Outside Plant
 - Packet-Based Systems
 - Fraud Prevention
 - Performance Monitoring
 - Network Reliability
 - Wireless Systems
 - Emergency Services
 - Industry Numbering
- Incubator Solutions Program:
 - Provides an Alternate approach with Innovative, Focused, Problem-Solving Environment to fast track solutions with little to no impediment
 - *AISP.4-HAC*: Mission is to investigate interoperability and usability for consumers with hearing aids with digital wireless devices.
 - *AISP.5-ISSI*: Mission is to seek solutions for the “Integration Ban” for Multiple Video Service Providers (MVSP) to separate the security functions of their networks from the navigational aspects for IPTV service.

ATIS TOPS Priorities

- The TOPS Council, since its formation in 2001, has identified the following priorities:
 - Voice Over the Internet Protocol (VoIP)
 - Wide Area Ethernet
 - Mobile Wireless Services
 - Security Issues
 - Data Interchange (Billing)
 - Next Generation Networks
 - IPTV
 - Internet Protocol v6

- Current Priorities are:
 - Wireless/Wireline Convergence
 - Service Capabilities Interaction Manager (SCIM)
 - FTTx/Access Optical Networking
 - Broadband Services
 - NGN Identity Management
 - Inter-Carrier VoIP Call Routing

ATIS Current Priorities

- **Wireless/Wireline Convergence:** *A Report and Recommendations* was released in September 2007 to support NGN interworking and evolution:
 - Defines the scope and meaning of convergence;
 - Inventories current standards and requirements activities; and
 - Develops use cases, requirements, and a “bootstrap” assessment of NGN architecture.
 - Identifies high level issues and recommendations for their resolution
 - Included study of Service Interaction Management and Broadband Services

- **Inter-Carrier VoIP Routing:** Assessment to analyze the issues, identify gaps and develop a work plan surrounding the need to ensure interoperability for VoIP interconnection
 - Developed high-level architecture reference models to illustrate current and possible routing scenarios to identify where standards need to be developed.
 - Anticipated completion 3Q07

ATIS Current Priorities



- **Optical Networking/FTTx:** *OAN Assessment and Work Plan* released in July 2007, identifies high priority areas where standards and industry agreements must be developed including:
 - More detailed G-PON architecture, the policing/marketing functions required of the ONT, and preferred methods for providing network timing for Ethernet sourced OLTs.
 - The development of system-level implementation agreements and organizational processes/resource allocation for interoperability testing.
- **Internet Protocol version 6:** Task Force formed to create a consensus view/position on IPv6.
 - Initial report in May 2006, examined and identified the drivers for and issues and complexities raised by the transition from IPv4 to IPv6.
 - Second report in July 2007, addresses “transition challenges” with the identification of standards and initiatives to enable the transition to enable a secure, logical transition to IPv6 that addresses the needs of vendors and network operators.
 - Currently evaluating the scope of a “National Readiness Plan”

ATIS NGN

- **ATIS NGN**
 - In 4Q04, ATIS released the *ATIS NGN Framework, Part I: NGN Definitions Requirements and Architecture*.
 - In 2Q05, ATIS completed the *ATIS NGN Framework, Part II: NGN Roadmap 2005*.
 - In 2Q06, ATIS completed the *ATIS NGN Framework, Part III: Standards Gap Analysis*.
- Ongoing work on NGN takes place:
 - in the ATIS committees (*PTSC, PRQC, WTSC, TMOC, ESIF, OBF*) and
 - in further TOPS priority-related activities (*Convergence, NGN Identity Management*).
- Ongoing collaboration with other organizations (ITU, ETSI, 3GPP, and others)

ATIS NG-Emergency Services



- ATIS committee work supports initiatives by Federal, Regional and State government.
- ATIS committees also act as a feeder group to the ITU-T in support of international general emergency communication services.

<u>General EC Types</u>	<u>N. America Ex.</u>	<u>ATIS Std Role</u>
<i>Citizen-to-Authority</i>	E9-1-1	E9-1-1 for Wireless, VoIP, NGN, NG911 – in ESIF, PTSC, WTSC, NIIF, INC, PRQC
<i>Authority-to-Citizen</i>	Emergency Alert System (EAS); Emergency Notification System	EAS for IPTV – in IIF ; ENS – in NIIF ;
<i>Authority-to-Authority</i>	GETS/ETS (Priority Services in support of National Security & Emergency Prep)	GETS/ETS – in PTSC, PRQC, WTSC, NIIF and TMOC

ATIS IPTV



- The **IPTV Interoperability Forum (IIF)** assesses IPTV issues in the context of the NGN and has commenced an aggressive work program since its establishment in 2005.
 - Eight publications released to date covering Architecture, Digital Rights Management, and QoS Metrics.
 - Information actively contributed into the ITU-T Focus Group on IPTV and other forums.
- ATIS IPTV work is comprehensive, including work planned or underway in areas such as architecture, multiple access network technologies, digital rights, testing, interoperability, metadata, OSS/BSS, identity management, QoS, and QoE.
 - IPTV work is coordinated between the IIF and other ATIS committees on OSS/BSS and Identity Management.

ATIS Security



- **PTSC Security Subcommittee (PTSC-SEC)**
 - Coordinates and develops security standards relevant to packet-based US telecommunications networks, including Lawful Intercept, and reviews and prepares contributions for submission to the U.S. ITU-T and U.S. ITU-R Study Groups or other SDOs.
- Following the ATIS TOPS NGN Work Plan in 2006, collaborative efforts between multiple ATIS committees (*PTSC*, *PRQC*, and *TMOC*) have resulted in the development of standards for a comprehensive NGN Security Roadmap.
- Information and Data Security Committee (IDSC) develops IT based security standards and has published a white paper in December 2006 on Data Privacy and Protection Guidance.

Conclusion

- ATIS' market-driven approach to industry priorities drives critical standards development for its members and the industry to:
 - consider the business implications of standards in the marketplace, and
 - respond to and resolve relevant pressing business issues.
- ATIS takes a comprehensive approach to standards:
 - consideration of both network and IT needs, and
 - creation of end-to-end interoperable, implementable standards and solutions to support of network evolution (NGN) and convergence.
- ATIS continues to place importance on and seek productive collaborative relationships to achieve timely results.
- **Questions?** www.atis.org