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New ATIS Members

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- Alpha Technologies
- Bright House Networks
- Cabicon
- CenturyLink
- Emerson Energy Systems
- ERICO
- National Association of Broadcasters
- New Jersey Office of Homeland Security & Preparedness
- NextNav
- Southwire

President's Message

ATIS continues to deliver the standards and solutions that are helping members advance their business objectives. Most recently, there’s a high level of excitement about our ORCA Project which stands for Open Real-Time Communications APIs. The project’s first major deliverable is orca.js, a JavaScript library offering a “one-stop” vendor-neutral solution for consistently and easily accessing network services through a single communications API. It marks the first open source software project by ATIS.

We also have transitioned many of our Technology and Operations (TOPS) Council Landscape Teams to Focus Groups for in-depth study. We’ve welcomed several new members to our Board of Directors: Kelly Ahuja from Cisco, Rick Svensson of Samsung and Craig Cowden from Brighthouse Networks, who attended their first Board meeting on June 14 in Washington, DC. We’re coming out of a busy conference season, and looking forward to our face-to-face Technology and Operations Council meeting on September 19, and also the meeting of our CIO Council on September 20.

You’ll learn about our recent events and standards work, the activities of the TOPS Council and more in this issue of ATIS Update. We hope you enjoy learning about our progress. We wish everyone a pleasant, safe and productive summer. We look forward to the fall — as the pace of accomplishment continues.

Sincerely,

President & CEO
Susan M. Miller

Technology Development

Initiatives Touching All Aspects of the Network

Big Data Analytics. The Big Data Analytics Focus Group (BDA-FG) is continuing to advance the industry’s ability to help service providers more effectively collect, analyze and monetize the data resident in their networks. Earlier this year, the TOPS Council agreed that the BDA Landscape Team should continue its effort as a Focus Group to assess cross-industry approaches to harness the opportunity of big data analytics. The BDA-FG launched on April 5 to:
1. Develop an Analytics Metadata Framework
2. Investigate specific technologies used in big data analytics
3. Ensure the Metadata Framework can accommodate evolving requirements for data security and consumer privacy
4. Determine the applicability of existing data exchange mechanisms to big data analytics

Already, the BDA-FG has surveyed privacy practices across industry and government bodies to identify common themes that will guide its privacy analysis. The Focus Group is in the process of developing a metadata framework that can help companies effectively share their data, while respecting user’s privacy and preferences. It is anticipated that the BDA-FG will complete its effort in four months.

**Device Solutions**

**Unifying Client Architecture.** The TOPS Council launched the Unifying Client Architecture Focus Group (UCA-FG) to develop the tools to enable web application developers to easily integrate core network capabilities into their real-time communications applications. The goal is to position service providers to benefit from anticipated growth in RTCWeb applications. A recent major UCA-FG deliverable is helping to do this — and marks the first open source software project by ATIS. It will enable application developers to easily incorporate the signaling capability required to support high-quality voice calls in web applications.

On July 24th, ATIS launched ORCA, for Open Real-time Communications APIs, with the release of client-side software called orca.js, with the "js" denoting creation of a JavaScript library. The client-side APIs in ORCA will simplify basic call control when adding real-time communications to web applications by allowing applications to utilize service provider IMS signaling capabilities. Until now, developers who wanted to add real-time communications to web applications had to implement their own signaling mechanism, or adapt their product to use the unique APIs for each service provider. ORCA offers a “one-stop” vendor-neutral solution for consistently and easily accessing network services through a single communications API. The project’s success depends on the software’s widespread adoption. ATIS member companies can play a key role in facilitating use of this tool in the developer community. Learn more at the ORCA.js website.

**Mobile Device Integrity.** The baseline security features of mobile devices can be greatly enhanced by hardware designed to support a rich bring your own device (BYOD) experience. With the work of its Mobile Device Integrity Landscape Team (MDA-LT), ATIS is seizing a major opportunity to investigate security capabilities and develop appropriate standards or guidelines to address industry needs in this area. This work is providing input into the initiatives of the National Institute of Standards and Technology’s (NIST’s) Mobile Device Integrity Panel established by the Enduring Security Framework Operations Group (co-sponsored by DoD and DHS). Most recently, the MDA-LT analyzed the NIST Guidelines on Hardware-Rooted Security in Mobile Devices to identify the infrastructure and service provider impacts. The Team provided input to NIST on the first release of the guidelines which covered: the Roots of Trust (RoT), application programming interface to RoT, device integrity, policy enforcement engine, isolation, protected storage and more. The MDI-LT will also comment on the soon-to-be-released version 2 of the guidelines.

**Trust & Identity**

**Trust & Identity.** Launched on April 10, the Trust & Identity Focus Group (T&I-FG) is further addressing the industry’s needs to provide secure, reliable communications. It has developed business requirements needed to define an industry trust and identity model that encompasses devices, networks and applications. A key focus of this work is determining the existing identity capabilities in use by service providers that could provide a basis for a federated trust and identity model. The TI-FG has recently finalized a white paper on its findings containing recommendations on advancing solutions to several key ICT industry challenges in this area. A better understanding of our industry’s common trust and identity issues is essential in the defense against cybersecurity threats. Yet, currently, no single, viable solution satisfies our industry’s demanding requirements. The new white paper recommends specific actions to link existing identity systems and leverage service provider assets to address foundational weaknesses with web identity solutions. The ATIS Trust and Identity (T&I) Focus Group White Paper is available at no cost in the ATIS Document Center.

http://www.atis.org/newsletter/summer13.asp
Network Evolution

**Software-Defined Networking.** Software-defined networking will enable a “programmable network” that will open the door to greater service flexibility while lowering deployment and management costs. In April, the TOPS Council formed an SDN Focus Group to identify operational issues and opportunities associated with increasing programmability of the network infrastructure. This effort’s scope includes OSS/BSS impacts, reliability/fault detection, administration and maintenance issues. The SDN-FG began work in early May to conduct a top-down analysis to identify service provider opportunities, standards needs/issues and ATIS opportunities. The Focus Group is currently examining detailed use cases covering enhanced network programmability to identify requirements for business process changes, information exchange between components, and in particular, requirements for information exchange between the network and management systems (i.e. “northbound interfaces”). The SDN-FG expects to complete its work in six months.

For more information on these TOPS Council initiatives, contact Yvonne Reigle, Director, Program Management Office, atyreigle@atis.org.

Latest Standards and Solutions

Emergency Services Innovation

ATIS standards and solutions are advancing next-generation emergency services on a variety of fronts. Most recently these include work to enable texting to 9-1-1, which is progressing beyond standards into the implementation phase. In March, ATIS, along with the Telecommunications Industry Association (TIA), released J-STD-110, *Joint ATIS/TIA Native SMS to 9-1-1 Requirements & Architecture Specification*, which will provide short message service (SMS) subscribers the ability to send an SMS text message to 9-1-1. Guidelines are now being completed that will provide a coordinated approach, including common procedures and service operations to assist commercial mobile radio services providers, text control centers, and others to implement J-STD-110. In addition, field tests are being identified to verify compliance with the standard.

ATIS also is serving on a coordinating group with the National Emergency Number Association and Federal Communications Commission to ensure that all future guidelines for implementing the text-to-9-1-1 standard are met. An overarching goal of this work is to ensure that texting to 9-1-1 services maintain the reliability and consistency that customers have come to expect from nationwide voice calling to 9-1-1.

- A standard is being completed that defines North American emergency call-handling procedures in IMS-based origination networks (including steps taken by the originating device) and appropriately routing such calls. This work is being led by the Wireless Technologies and Systems Committee (WTSC) along with the Emergency Services Interconnection Forum (ESIF) and Packet Technologies and Systems Committee (PTSC).
- Work has been completed on defining Use Cases and Requirements for applying common IMS to NG9-1-1 networks, a product of ESIF.
- Work has been initiated to define an architecture in support of a common IMS-based Next Generation Emergency Services Network. ESIF is leading this joint work with WTSC and PTSC.
- In April of this year, ESIF published a *Comparison of SIP Profiles (ATIS-0500024)*. With multiple Standard Development Organizations (SDOs) and industry forums defining communications protocols using SIP, this Technical Report compares SIP profiles defined by ATIS, 3GPP, and NENA as they relate to emergency services.

PSTN Transition

Since the publication of the *PSTN Transition Focus Group Assessment and Recommendations* in January of this year, a number of ATIS committees are furthering the work that is providing critical guidance in our industry’s transition to an all-IP network. PTSC will be coordinating PSTN transition efforts in its PSTN Transition Subcommittee, including:

- Outlining models that accommodate for IP interconnection, including stage 1 service requirements and stage 2 architecture definitions.
- Analyzing the impact of emerging technologies and services (e.g., OTT, cloud, WebRTC) on evolution of interconnection models.
- The Industry Numbering Committee (INC) is addressing numbering implications.
- The Copper/Optical Access, Synchronization and Transport Committee (COAST) is developing new synchronization standards to bridge changes needed to support a TDM/SONET/IP hybrid network and eventually, an all-IP network.

Other Standards Activity
UVC Quality of Service/Quality of Experience (QoS/QoE). The Performance, Reliability and Quality of Service Committee (PRQC), working collaboratively with Cloud Services Forum (CSF), is leading an effort to address QoS/QoE considerations, focusing on differences when non-immersive devices (smart phones, tablets, laptops, etc…) enter an immersive UVC call, and the potential impact on QoS/QoE.

Energy Efficiency and Power. The Sustainability in Telecom: Energy and Protection Committee (STEP) is conducting work to develop new Telecommunication Energy Efficiency Ratio (TEER) standards addressing efficiency metrics for devices used on small networks, such as home and home office network devices.

Since the last issue of ATIS Update in March, ATIS has developed 61 new standards. You’ll find completed standards in the ATIS Document Center—your leading resource for global technical and operations standards for information, entertainment and communications technologies produced by ATIS forums and committees. Learn more about all of ATIS’ standards addressing our industry’s most pressing issues at www.atis.org.

For more information on the standards you’ve read about here, contact Steve Barclay, Director of Global Standards Development at sbarclay@atis.org.

Cloud Services

Since completing the first phase of unified visual communications (UVC) testing in early 2013, the Cloud Services Forum (CSF), has turned its attention to identifying use cases for enhanced functionality. Next steps include examining additional interconnection and interoperability scenarios for videoconferencing not addressed in Phase 1, as well as capabilities related to IMS and Web-RTC. In parallel with protocol interoperability testing, CSF is continuing the development of specifications describing end-to-end message flows for access-agnostic, inter-provider UVC with a target completion date of 4Q 2013. Outside of the extensive work in UVC, efforts also continue to address cloud-based content distribution networks, with significant progress in the identification of use cases and requirements for multicast content delivery to mobile end-user handsets.

For more information on the work of the CSF, contact Yvonne Reigle, Director, Program Management Office at vreigle@atis.org.

The ATIS Legislative and Regulatory Report

The next Legislative and Regulatory Report is scheduled for Friday, September 13, from 1:00 pm – 2:00 pm (EDT). Any ATIS member is welcome to attend this presentation. Add this event to your calendar.

FirstNet Expert Addresses ATIS Board of Directors

In their June 14, meeting held in Washington, DC, the ATIS Board of Directors received a briefing from guest speaker Ed Reynolds, a member of the First Responder Network Authority, or FirstNet, Board of Directors. Mr. Reynolds noted that FirstNet is an independent authority within the National Telecommunications and Information Administration (NTIA), the President's principal adviser on telecommunications and information policy. Its mission is to take all actions necessary to ensure the design, construction, deployment, and operation of the nationwide broadband network dedicated to public safety. Specifically, FirstNet will:

- Hold a single public safety 700 MHz wireless broadband license;
- Act in consultation with federal, state, tribal, and local public safety entities, Director of NIST, the FCC, and FirstNet’s public safety advisory committee;
- Ensure deployment phases with substantial rural coverage milestones;
- Leverage existing state, federal and commercial assets; and
- Reinvest fees from the use of FirstNet and its spectrum to build, operate, maintain and improve the network.

FirstNet will build a network for millions of public safety users who need to be able to send data and talk to one another to meet their mission. Creating FirstNet will require an unprecedented level of public-private partnership, collaboration and shared commitment to the well-being of all Americans. Learn more about FirstNet on the NTIA website.
ATIS Participates in GSC Meeting in Korea

In May, ATIS participated in the 17th Global Standards Collaborative (GSC) meetings held on Jeju Island, Republic of Korea. The purpose was to collaborate with other communications standards development organizations on common high interest topics including: M2M, emergency services, cloud services, NGN, identity management, and IPR.

AMOC: An Event of Celebration and Recognition

ATIS Holds 30th Anniversary Celebration at AMOC

More than 196 participants representing 67 companies of ATIS member companies attended the ATIS Annual Meeting of Committees (AMOC) held April 22–26 in Minneapolis, Minnesota. More than 24 committees, subcommittees, and forums met during the week to progress work efforts. In addition, the event was a celebration of ATIS’ 30 year anniversary. The speech given by ATIS President and CEO, Susan Miller at the event provides highlights of some of the organization’s major accomplishments since its inception.

ATIS 2013 Annual Awards Presented at Annual Meeting of the Committees

AMOC is the venue for the presentation of the ATIS 2013 Annual Awards. This year, awards were presented in three categories: Outstanding Contributions to an ATIS Forum or Committee, Leadership in Standards Development and the President’s Award.

Nine individuals received an Award for Outstanding Contributions to an ATIS Forum or Committee. This award is presented to individuals who have provided valuable contributions to the development, acceptance or completion of ATIS standards during the past year. The 2013 recipients are: John Colombo of Verizon, Rose Fiala of T-Mobile USA, Jim Calme of Alcatel-Lucent, Penn Pfautz of AT&T, Steve Edwards of CenturyLink, Jean-Yves Bernard of Rogers Communications, Terry Reese of Ericsson, Larry Payne of AT&T, and Terry Jacobson of Alcatel-Lucent.

The Award for Leadership in Standards Development is given to ATIS Forum or Committee leaders responsible for one or more major initiatives and whose vision and leadership over the past 12 months have resulted in the creation of ATIS solutions that meet the industry’s standardization needs in a timely and productive manner. The recipients of this award are: Robin Howard of Verizon, former Co-Chair of the Network Reliability Steering Committee, and Peter Musgrove, Chair of the Wireless Technologies and Systems Committee Systems and Networks Subcommittee.

The 2013 President’s Award was presented to Stacy Hartman of CenturyLink for her outstanding leadership, significant contributions, and promotion and representation of ATIS in the ICT industry, particularly in the critical aspects of network reliability and resiliency.

In addition, Joseph Hanley, ATIS Treasurer and Senior Vice President of Technology, Services and Strategy for Telephone & Data Systems presented Susan Miller with a 25-year Achievement Award. Access the full version of Hanley's Speech "In Recognition of the Vision and Leadership of Susan Miller."

CTIA

On May 21, ATIS produced its third Today’s Technology Leaders, Tomorrow’s Networks Executive Roundtables at the CTIA 2013™ conference in Las Vegas. CTIA provides a high-visibility, recurring platform for ATIS to showcase the thought leadership of our member companies’ senior executives to a wide audience. This year’s Roundtables were: Growing Up Fast: The Maturing of Wireless Networks, by keynote speaker Kris Rinne, Senior Vice President – Network Technologies, AT&T Labs, and Chair of the ATIS Board of Directors; Services of Tomorrow; Change the Model: Device Solutions; Monetizing Big Data; and Operator Solutions to Security, Device and Identity Management. Presenting ATIS and its work to the industry is invaluable — and could not have
happened without the support of our member companies as speakers, attendees and our event sponsors: Cisco, Ericsson, Nokia Siemens Networks and TEOCO.

More than 2,230 pre-registrants — from C-level executives to senior analysts — converted to approximately 250 attendees over the course of our four-session program. Our pre-event marketing generated several hundred thousand impressions from multiple HTML distributions. Additionally, many ATIS members held meetings throughout the day in our Member Lounge. Immediately following the event, ATIS has followed up on membership leads and surveyed attendees, speakers and sponsors for feedback to build into future programming. Visit www.atispresents.com for additional details on ATIS’ Executive Roundtables.