



Technology and Operations (TOPS) Council

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Overview

The Technology and Operations (TOPS) Council identifies the industry's most pressing technical and operational priorities and coordinates standardization efforts industry-wide to produce interoperable, implementable, end-to-end solutions. The TOPS Council is a standing committee of the ATIS Board of Directors and consists of the industry's most senior technology officers and executives from leading communications companies.

TOPS Council Initiatives

Convergence

For the past several years, ATIS has been leading standards development work to provide converged communications services over the Next Generation Network (NGN). In 2006, the TOPS Council launched an Exploratory Group on Convergence (EGC) to address industry needs from both a technical and business perspective. In August 2007, ATIS released its ATIS EGC Report and Recommendations, which provided a comprehensive analysis of convergence issues along with recommended steps for its committees and member companies that, when implemented, will advance industry abilities to deliver converged communications services.

IVCR

The **Inter-Carrier VoIP Call Routing Focus Group (IVCR-FG)** convened throughout 2007 to produce the *ATIS Inter-Carrier VoIP Call Routing (IVCR) Assessment and Work Plan*. The IVCR-FG sought to investigate, define and prioritize issues arising from or preventing call routing for inter-provider VoIP interconnection. It also sought to provide a technical assessment of standards gaps for common interconnection. This assessment included the consideration of Internet Protocol (IP)-based call flows, routing databases, different industry and vendor approaches and existing standards activities affecting North American as well as international call routing.

OAN

The **Optical Access Network Focus Group (OAN-FG)** released its *Optical Access Networks Assessment and Work Plan* in September 2007. The *Assessment and Work Plan* provides a comprehensive analysis of G-PON-based optical access systems and specifications, noting high-priority areas in which standards and industry agreements must be developed for deployment in North America. In September 2007, the ATIS NIPP formed a new sub-committee, the NIPP-OAN, whose initial work will be to progress the issues defined in the OAN-FG's report and to provide a venue for ATIS to address issues in the OAN arena.

IPv6

In June 2007, the TOPS Council's IPv6 Task Force completed the second phase of its work to provide further detail on the priority areas defined in its initial report and to ensure standards and business drivers needed to support the transition to IPv6 are known and met. This second phase resulted in the *ATIS Internet Protocol Version 6 (IPv6) Task Force Report on Transition Challenges*. The report identifies standards development initiatives that will enable the transition to take place in a secure, logical manner that fits with the needs of vendors and network operators to provide solutions and best practices. Following the release of the IPv6 Task Force report, the TOPS Council initiated an IPv6 Study Group to investigate the need to develop a Readiness Plan for the transition to IPv6. The IPv6 Study Group's work will be published in 2008.

New TOPS Priorities in 2007

The TOPS Council identified in late 2007 three new priorities: Home Networking, Next Generation Carrier Interconnect and Service Oriented Networks.

Home Networking

As the customer's home network becomes more complex, service providers, network operators and consumer electronics vendors face a set of challenges to support the deployment of IP-based services in the Home Network. The TOPS Council commissioned in late 2007 the Home Networking Focus Group (HNET-FG) to evaluate the home networking landscape in order to, among other objectives, define a "high-level" functional architecture of the home network; ascertain the roles and responsibilities of the multiple standards organizations operating in the space of home networks; evaluate the need for a certification process, and if necessary, identify the certification services needed and potential providers; and develop recommendations to address the coexistence of different home networking technologies in the same home and nearby homes. The HNET-FG is expected to complete its objectives in 2008.

Next Generation Carrier Interconnect (NGCI)

The transition from traditional circuit switched services to IP will allow service providers to offer network-to-network IP interconnection and will enable customers to enjoy a seamless end-to-end experience. To support this migration, standards are needed to ensure the interoperability of legacy domains within IP domains and network-to-network interfaces. In early 2008, ATIS held a workshop on the topic of NGCI to identify near-term priorities as well as areas slated for longer-term consideration including: the transition from legacy to IP architecture, emergency government services, service agreements, border session controls, security, traffic management, and signaling and media protocols. Technical work on these topics is currently ongoing within ATIS committees and will continue to be tracked in 2008.

Service Oriented Networks (SON)

As the IMS platform continues to evolve, the industry will aim to enhance its ability to provide services across multiple domains including the Web. The new Web 2.0 development platform or some hybrid of the IMS and Web 2.0 platforms offers opportunities for further study. The TOPS Council commissioned the formation of the SON-FG in early 2008 to assess gaps in industry standards and implementation. The SON-FG will, among other objectives, direct an examination into the different approaches across communication, information and entertainment application domains; investigate and identify a set of interfaces that enable rapid service development for communication, information (profiles and preferences) and back office management operations; and determine service enablers and complementary business models in a cost effective, secure manner.



1200 G Street NW
Suite 500
Washington, DC 20005
www.atis.org

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