



**ATIS Next Generation Network  
(NGN) Framework, Part III:  
Standards Gap Analysis**

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*Next Generation Network (NGN), Part III: Standards Gap Analysis*

Is an *ATIS Work Plan* developed by the **Next Generation Network Focus Group** for the **TOPS COUNCIL**.

**This document is a *work in progress* and subject to change.**

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EXECUTIVE SUMMARY

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This document has been prepared by the ATIS Next Generation Networks Focus Group (NGN-FG) as the third part in a series of documents intended to identify the requirements, objectives, and priorities for the NGN from the perspective of ATIS member companies, and the identification and creation of standards for a global NGN.

The first document released by ATIS in November 2004 was the *ATIS Next Generation Network (NGN) Framework Part I: NGN Definitions, Requirements, and Architecture, Issue 1.0*. The Part I document contains a snapshot of NGN target architectures, requirements, and features for which phased implementation requirements will be developed. In August 2005, the second document, the *ATIS NGN Framework Part II: NGN Roadmap 2005* was released. *Part II* built upon *Part I* to identify the primary criteria for an NGN Roadmap. The Roadmap focused on the necessary components and capacities of an infrastructure that enables the flexible creation of new NGN services and identified the underlying service enablers that will allow new services to be efficiently introduced.

This document builds upon the previous documents, in particular the requirements identified in *Part I* and priority enablers identified by service providers in *Part II*, to identify standards activities and assess the potential impacts of NGN across other priority issues specified by the ATIS Technology and Operations (TOPS) Council. Through a bottom-up assessment of NGN service enablers, based on company focus, resources, and standards activities, an assessment of the progress of NGN standards development is provided. Where gaps are identified, additional issues are proposed.

While engaging in this gap analysis, the NGN-FG sought to identify gaps, overlaps, and synergies in the existing and anticipated standards activities taking place within ATIS as well as external organizations such as 3<sup>rd</sup> Generation Partnership Project (3GPP), European Telecommunication Standards Institute (ETSI), and the International Telecommunication Union (ITU).

Government mandates such as the Communications Assistance for Law Enforcement Act (CALEA) and lawful intercept are not addressed in this document. Industry responds to these mandates as they are required with the development of appropriate standards. Hence, the identification of standards gaps in the implementation of government mandates, although priority service enablers, are not fully explored in this gap analysis.

As with any new area of standards development, the process and progress of the NGN and its implementation is an ongoing activity. ATIS thus intends this document as a work in progress, expects its periodic revision, and welcomes any comments on its content and conclusions.

## 1 INTRODUCTION

The purpose of this Gap Analysis is to identify standards activities and assess the potential impacts of NGN across other TOPS priority issues in support of the timely development of the NGN.

The ATIS NGN Focus Group is an activity of the TOPS Council, a standing committee of the ATIS Board of Directors. The NGN-FG inherently involves the executive level of ATIS member companies in its participants and perspectives. Unique to this Gap Analysis is also the participation of the elected leaders of the ATIS committees and fora. These leaders formally provided input, feedback, and assessment of the content of this analysis from the perspectives of their various committees.

The topics addressed in this gap analysis should, by and large, be familiar to the reader of the previously released *ATIS NGN Framework (Part I)* and *Roadmap (Part II)* documents. While the initial intent of this document was to assess standard needs with respect to the service enablers previously identified and ranked by service providers in order of importance in *Part II*, in recognition of the emergent nature of the NGN, additional areas, such as Wireless/Wireline Convergence and Emergency Related Services are included. Each section addresses an area from which a function or service of the NGN is enabled. In most cases, each section will provide information on the following:

1. Requirements
2. Function/Service Enabled
3. Current Standards Activity
4. Identified Gaps
5. Proposed Work Items

The Requirements sections contain a definition of the character of the NGN which must or should be developed in order to fulfill the expectation of a function or service. The Function/Service Enabled is a description of what the fulfillment of the requirements will allow to take place. The Current Standards Activities references the activities and documents undergoing work within standards development committees, within ATIS, and externally. The Identified Gaps defines where and what is not being addressed by the current activity.

Proposed work items are the suggested activities which need to take place to close the gap left by current activities. The work items vary in their specificity. When appropriate, a specific committee or organization has been named as a primary or secondary recipient of the work item. The nature of the work items is that they can build upon current work taking place, are akin to an Issue statement, give general direction, propose a new group or committee, and propose inter-committee and organization harmonization activity. The work items are as varied as the topics they address. When known, a timeline or target completion date is given.