



ATIS-0300116

ATIS Standard on -

**Interoperability Standards between Next Generation Networks  
(NGN) for Signature-based Handling of Asserted information  
using ToKENS (SHAKEN)**



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# **Interoperability Standards between Next Generation Networks (NGN) for Signature-based Handling of Asserted information using ToKENS (SHAKEN)**

**Alliance for Telecommunications Industry Solutions**

Approved June 18, 2024

## **Abstract**

This document provides Next Generation Network (NGN) service providers (SPs) with a framework and guidance for interoperability as calls process through core networks implementing Signature-based Handling of Asserted information using ToKENS (SHAKEN) technologies to ensure the validation as well as the completion of legitimate calls and the mitigation of illegitimate spoofing of telephone identities.

## Foreword

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The Alliance for Telecommunications Industry Solutions (ATIS) serves the public through improved understanding between carriers, customers, and manufacturers. The Next Generation Interconnection Interoperability Forum (NGIIF) addresses next generation network interconnection and interoperability topics associated with emerging technologies. Specifically, it develops operational procedures that involve the network aspects of architecture, disaster preparedness, installation, maintenance, management, reliability, routing, security, and testing between network operators. In addition, the NGIIF addresses issues that impact the interconnection of existing and next generation networks and facilitate the transition to emerging technologies.

The mandatory requirements are designated by the word *shall* and recommendations by the word *should*. Where both a mandatory requirement and a recommendation are specified for the same criterion, the recommendation represents a goal currently identifiable as having distinct compatibility or performance advantages. The word *may* denotes an optional capability that could augment the standard. The standard is fully functional without the incorporation of this optional capability.

Suggestions for improvement of this document are welcome. They should be sent to the Alliance for Telecommunications Industry Solutions, NGIIF, 1200 G Street NW, Suite 500, Washington, DC 20005.

At the time of consensus on this document, NGIIF, which was responsible for its development, had the following leadership:

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## 1 Scope & Purpose

### 1.1 Scope

This document provides Next Generation Network (NGN) service providers (SPs) with a framework and guidance for interoperability as calls process through their networks implementing Signature-based Handling of Asserted information using ToKENS (SHAKEN) technologies to ensure the validation as well as the completion of legitimate calls and the mitigation of illegitimate spoofing of telephone identities.

### 1.2 Purpose

This document defines the operationalization between NGN SPs, for SHAKEN framework.

## 2 Normative References

The following standards contain provisions that, through reference in this text, constitute provisions of this Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

ATIS-1000074, *Signature-based Handling of Asserted information using ToKENS (SHAKEN)*.<sup>1</sup>

ATIS-0300106, *Intercarrier Call Completion/Call Termination Handbook*.<sup>1</sup>

*Report and Order and Further Notice of Proposed Rulemaking in Federal Communications Commission (FCC) 13-135 and WC Docket No.13-39, adopted October 28, 2013 and released November 8, 2013.*<sup>2</sup>

*Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991, CG Docket No. 02-278, WC Docket No. 07-135, Declaratory Ruling and Order, FCC 15-72, (released July 10, 2015).*<sup>2</sup>

RFC 8224, *Authenticated Identity Management in the Session Initiation Protocol (SIP)*.<sup>3</sup>

RFC 8588, *Persona Assertion Token*.<sup>3</sup>

## 3 Definitions, Acronyms, & Abbreviations

For a list of common communications terms and definitions, please visit the *ATIS Telecom Glossary*, which is located at <<http://glossary.atis.org>>.

<sup>1</sup> This document is available from the Alliance for Telecommunications Industry Solutions (ATIS) at <<https://www.atis.org/docstore/>>.

<sup>2</sup> This document is available from the Federal Communications Commission (FCC) at: <<https://www.fcc.gov/>>.

<sup>3</sup> This document is available from the Internet Engineering Task Force (IETF) at: <<https://datatracker.ietf.org/doc/>>.