



ATIS-1000087

**Mechanism for Initial Cross-Border Signature-based
Handling of Asserted information using toKENS (SHAKEN)**

TECHNICAL REPORT



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Mechanism for Initial Cross-Border Signature-based Handling of Asserted information using toKENs (SHAKEN)

Alliance for Telecommunications Industry Solutions

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Abstract

The Signature-based Handling of Asserted information using toKENs (SHAKEN) standard “ATIS-1000074” specifies operation within the domain of a single national or regional regulatory authority - in most cases this means within a single country. This was a conscious decision by the joint Alliance for Telecommunications Industry Solutions (ATIS) and SIP Forum IP-NNI Task Force (IP-NNI TF) in order to more quickly develop a solution that explicitly addressed U.S. requirements. However, SHAKEN does not assume unique U.S. attributes, and therefore should be equally applicable to other countries. Calls that originate in one country and terminate in another country, are not explicitly addressed in the existing SHAKEN standard. This document provides a mechanism to extend the SHAKEN trust environment to include more than one country without requiring service providers to make changes to their current standard SHAKEN interfaces.

Foreword

The Alliance for Telecommunications Industry Solutions (ATIS) serves the public through improved understanding between carriers, customers, and manufacturers. The Packet Technologies and Systems Committee (PTSC) develops and recommends standards and technical reports related to services, architectures, and signaling, in addition to related subjects under consideration in other North American and international standards bodies. PTSC coordinates and develops standards and technical reports relevant to telecommunications networks in the U.S., reviews and prepares contributions on such matters for submission to U.S. International Telecommunication Union Telecommunication Sector (ITU-T) and U.S. ITU Radiocommunication Sector (ITU-R) Study Groups or other standards organizations, and reviews for acceptability or per contra the positions of other countries in related standards development and takes or recommends appropriate actions.

The SIP Forum is an IP communications industry association that engages in numerous activities that promote and advance SIP-based technology, such as the development of industry recommendations, the SIPit, SIPconnect-IT, and RTCWeb-it interoperability testing events, special workshops, educational seminars, and general promotion of SIP in the industry. The SIP Forum is also the producer of the annual SIP Network Operators Conference (SIPNOC), focused on the technical requirements of the service provider community. One of the Forum's notable technical activities is the development of the SIPconnect Technical Recommendation – a standards-based SIP trunking recommendation for direct IP peering and interoperability between IP Private Branch Exchanges (PBXs) and SIP-based service provider networks. Other important Forum initiatives include work in Video Relay Service (VRS) interoperability, security, Network-to-Network Interoperability (NNI), and SIP and IPv6.

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, PTSC, 1200 G Street NW, Suite 500, Washington, DC 20005.

The **ATIS/SIP Forum IP-NNI Task Force** under the **ATIS Packet Technologies and Systems Committee (PTSC)** and the **SIP Forum Technical Working Group (TWG)** was responsible for the development of this document.

Table of Contents

1 SCOPE, PURPOSE, & APPLICATION 1

 1.1 SCOPE..... 1

 1.2 PURPOSE..... 1

 1.3 APPLICATION..... 1

2 REFERENCES 1

3 DEFINITIONS, ACRONYMS, & ABBREVIATIONS 2

 3.1 DEFINITIONS..... 2

 3.2 ACRONYMS & ABBREVIATIONS 2

4 OVERVIEW 3

 4.1 CROSS-BORDER ARCHITECTURE..... 3

 4.2 SCOPE OF TRUSTED STI-CA 5

 4.3 COMBINED TRUSTED STI-CA LISTS 6

 4.3.1 *Server*..... 7

 4.3.2 *Interface to Server* 8

 4.3.3 *Procedures to Update Server* 8

 4.4 COMPATIBLE IMPLEMENTATIONS..... 8

Table of Figures

FIGURE 4-1: SHAKEN TRUST MODEL 3

FIGURE 4-2: LIST OF TRUSTED STI-CAs 4

FIGURE 4-3: INDEPENDENT LISTS OF TRUSTED STI-CAs 4

FIGURE 4-4: INDEPENDENT DEPLOYMENTS OF SHAKEN 4

FIGURE 4-5: MERGED TRUSTED STI-CA LISTS AT EACH STI-PA..... 5

FIGURE 4-6: MERGED TRUSTED STI-CA LISTS AT EACH STI-PA (NETWORK CONTEXT) 5

FIGURE 4-7: MUTUAL EXCHANGE..... 6

FIGURE 4-8: TRUSTED STI-CA SERVER..... 7

FIGURE 4-9: TRUSTED STI-CA SERVERS 7