



SIP FORUM

ATIS-1000078

**National Security / Emergency Preparedness Priority
Service Session Initiation Protocol Resource-Priority
Header (SIP RPH) Signing and Verification using PASSporTs**

JOINT STANDARD



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ATIS-1000078, National Security / Emergency Preparedness Priority Service Session Initiation Protocol Resource-Priority Header (SIP RPH) Signing and Verification using PASSporTs

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National Security / Emergency Preparedness Priority Service Session Initiation Protocol Resource-Priority Header (SIP RPH) Signing and Verification using PASSporTs

Alliance for Telecommunications Industry Solutions

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Abstract

This standard defines how the extension to the IETF Personal Assertion Token (PASSporT) [IETF RFC 8443, *PASSporT Extension for Resource-Priority Authorization*] and the associated Secure Telephone Identity Revisited (STIR) mechanisms are used to sign the Session Initiation Protocol Resource-Priority Header (SIP RPH) field of National Security / Emergency Preparedness (NS/EP) Priority Services calls (i.e., calls containing the “ets” and/or “wps” namespace parameter values) and convey assertions of authorization for Resource-Priority. Specifically, this standard provides a mechanism for an originating service provider to cryptographically sign the SIP RPH field of an authorized NS/EP Priority Service call and allow a receiving service provider to verify the validity of the authorization for Resource-Priority and act on the information with confidence (i.e., verifying that the RPH information has not been spoofed or compromised).

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 a 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	1
1.1	Scope	1
1.2	Purpose	1
1.3	General Assumptions	2
2	Normative References	2
3	Definitions, Acronyms, & Abbreviations	3
3.1	Definitions	3
3.2	Acronyms & Abbreviations	4
4	Overview	5
4.1	SIP RPH Signing Protocols Overview	6
4.1.1	<i>Personal Assertion Token (PASSporT)</i>	6
4.1.2	<i>Authenticated Identity Management in the Session Initiation Protocol</i>	6
4.1.3	<i>PASSporT Extension for Resource-Priority Authorization</i>	6
4.2	Governance Model and Certificate Management	7
4.3	Reference Architecture for SIP RPH Signing	7
4.4	SIP RPH Signing and Verification Call Flow for NS/EP NGN-PS	9
5	Procedures for SIP RPH Signing	11
5.1	PASSporT Token Overview	11
5.2	Token Construction and Procedures	11
5.2.1	<i>PASSporT & Identity Header Construction</i>	11
5.2.2	<i>PASSporT Extension "rph"</i>	12
5.2.3	<i>STI-AS (RPH-AS) Procedures</i>	13
5.2.4	<i>STI-VS (RPH-VS) Procedures</i>	13
5.2.5	<i>Verification Error Conditions</i>	13
5.2.6	<i>Use of the Full Form of PASSporT</i>	13
5.3	Other Considerations	13
5.3.1	<i>Call Validation Treatment (CVT)</i>	13
5.3.2	<i>Display</i>	14

Table of Figures

Figure 4-1	– Architecture for Signing and Verification of SIP RPH of NS/EP Calls	8
Figure 4-2	– NS/EP SIP RPH Signing and Verification Call Flow Example	10