**ATIS-0x0000x**

ATIS Standard on

**Robocall Call Blocking Notification**

**Alliance for Telecommunications Industry Solutions**

Approved Month DD, YYYY

**Abstract**

Abstract text here.

**Foreword**

The Alliance for Telecommunications Industry Solutions (ATIS) serves the public through improved understanding between carriers, customers, and manufacturers. The [**COMMITTEE NAME**] Committee [**INSERT MISSION**]. [**INSERT SCOPE**].

The mandatory requirements are designated by the word *shall* and *must,* 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, [**COMMITTEE NAME**], 1200 G Street NW, Suite 500, Washington, DC 20005.

At the time of consensus on this document, [**COMMITTEE NAME**], which was responsible for its development, had the following leadership:

[**LEADERSHIP LIST**]

The **[SUBCOMMITTEE NAME]** Subcommittee was responsible for the development of this document.

**Revision History**

| **Date** | **Version** | **Description** | **Author** |
| --- | --- | --- | --- |
|  |  |  |  |

**Table of Contents**

[INSERT]

**Table of Figures**

[INSERT]

**Table of Tables**

[INSERT]

# Scope, Purpose, & Application

This document defines a capability for providing real-time notification in backward the call direction towards the calling party, of network blocking of a call due to analytics call processing in the terminating service provider network. It ensures that voice service providers can continue to use analytics to block illegal or fraudulent calls while providing immediate notice to callers.

This capability defines a profile of SIP 603 [RFC 3261]. 603+ is differentiated from a 603 response in that it contains a format where it has a reason phrase NETWORKED BLOCKED (i.e., 603 NETWORKED BLOCKED) with a Reason code that has reason = analytics, and the contact information of whom blocked. The contact information allows the calling party to communicate with the entity responsible for the blocking.

Any 603 received without this syntax included should be treated as current handled today.

This standard is primarily developed for and adoption by US service providers. Other countries may adopt these standards and they may be implemented through bilateral agreement with business partners in the US pursuant to their business agreement. This standard is not precluded from being used internationally

# Normative References

The following standards contain provisions which, 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.

RFC-3261

RFC-3326

RFC-6432

RFC-8606

ATIS-0x0000x, *Technical Report*.[[1]](#footnote-1)

ATIS-0x0000x.201x, *American National Standard*.

# Definitions, Acronyms, & Abbreviations

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

## Definitions

* Analytics: analysis of a call request to determine how likely it is to be fraudulent or undesirable for reasons not specific to, or likely to reveal the identity of, the intended recipient.

## Acronyms & Abbreviations

|  |  |
| --- | --- |
| ATIS | Alliance for Telecommunications Industry Solutions |

# Blocking Call Processing

## Data Analytics Blocking

If a service provider blocks a call due to analytics, the service provider shall reply with a SIP 603 response unless blocking is explicitly allowed by law/regulation or is performed at the direction of the called party. The SIP 603 response shall have a reason phrase of “Network Blocked”. The SIP 603 response shall include a “Reason” header. The “Reason” header shall provide contact information which the calling party may use for redress.

Example “Reason” headers are illustrated below:

Reason: Q.850;cause=21;text="v=analytics1;url=https://example.com";location=LN, or

Reason: SIP;cause=603;text="v=analytics1;url=https://example.com";location=LN

Reason: Q.850;cause=21;text="v=analytics1;url=https://example.com;id=29016905-3bed-4c98-9423-03041160cc67";location=LN, or

Reason: SIP;cause=603;text="v=analytics1;url=https://example.com;id=29016905-3bed-4c98-9423-03041160cc67";location=LN

Reason: Q.850;cause=21;text="v=analytics1;email=support@example.com";location=LN, or

Reason: SIP;cause=603;text="v=analytics1;email=support@example.com";location=LN

Reason: Q.850;cause=21;text="v=analytics1;email=support@example.com;id=29016905-3bed-4c98-9423-03041160cc67";location=LN, or

Reason: SIP;cause=603;text="v=analytics1;email=support@example.com;id=29016905-3bed-4c98-9423-03041160cc67";location=LN

Reason: Q.850;cause=21;text="v=analytics1;tel=+12155551212";location=LN, or

Reason: Q.850;cause=21;text="v=analytics1;tel=+12155551212";location=LN

Reason: Q.850;cause=21;text="v=analytics1;tel=+12155551212;id=29016905-3bed-4c98-9423-03041160cc67";location=LN, or

Reason: SIP;cause=603;text="v=analytics1;tel=+12155551212;id=29016905-3bed-4c98-9423-03041160cc67";location=LN

Reason: Q.850;cause=21;text="v=analytics1;url=https://example.com;email=support@example.com;tel=+12155551212";location=LN, or

SIP;cause=603;text="v=analytics1;url=https://example.com;email=support@example.com;tel=+12155551212";location=LN

Reason: Q.850;cause=21;text="v=analytics1;url=https://example.com;email=support@example.com;tel=+12155551212;id=29016905-3bed-4c98-9423-03041160cc67";location=LN, or

SIP;cause=603;text="v=analytics1;url=https://example.com;email=support@example.com;tel=+12155551212;id=29016905-3bed-4c98-9423-03041160cc67";location=LN

The “Reason” header value shall start with “Q.850” or “SIP”.

The “Reason” header value shall include exactly one “cause” parameter. The “cause” parameter shall have a value of “21” if the “Reason” header value starts with “Q.850” or shall have a value of “603” if the “Reason” header value starts with “SIP”.

The “Reason” header value shall include exactly one “text” parameter. The value of the “text” parameter shall be a quoted list of parameters and values. The semicolon character (“;”) shall be used to separate parameter/value pairs. The equals character (“=”) shall be used to separate parameters and values. The “text” value shall include a “v” parameter with a value of “analytics1”. The “text” value may include a single “url” parameter. The “url” parameter value shall be a valid HTTPS URL. The “text” value may include a single “tel” parameter. The “tel” parameter value shall be a valid telephone number in E.164 format. The “text” value may include a single “email” parameter. The “email” parameter value shall be a valid email address. The “text” value shall include at least one “url”, “tel”, or “email” parameter. The “text” value may include a single “id” parameter. The “id” parameter value shall be a string containing only alpha, digit, underscore, and/or dash characters and shall have a length of no more than 64 characters.

The “Reason” header value shall include exactly one “location” parameter. The “location” parameter shall have a value of “RLN” when blocking occurred in the network serving the called party. The “location” parameter shall have a value of “TN” when blocking occurred in a transit network. The “location” parameter shall have a value of “LN” when blocking occurred in the originating network. The “location” parameter shall have a value of “RPN” when blocking occurred in the private network serving the called party. The “location” parameter shall have a value of “LPN” when blocking occurred in the originating private network.

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Mandatory** | **Value** |
| “cause” | Yes | “21”, “603” |
| “text” | Yes | See Table 2 |
| “location” | Yes | “LN”, “TN”, “LPN”, “RPN”, or “RLN” |

Table 1: “Reason” header parameters

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Mandatory** | **Value** |
| “v” | Yes | “analytics1” |
| “url” | If neither “tel” nor “email” are included | Valid HTTPS URL for the calling party to visit for redress |
| “tel” | If neither “url” nor “email” are included | Valid E.164 formatted telephone number for the calling party to call for redress |
| “email” | If neither “url” nor “tel” are included | Valid email address for the calling party to email for redress |
| “id” | No | Identifier used by the SP that blocked the call to facilitate redress (e.g., call identifier, blocking reason identifier, network segment identifier, etc.) |

Table 2: “text” value parameters

### Transit Network Processing

The transit network shall transparently forward a SIP 603 received.

### Originating Network Processing

The originating network shall forward the SIP 603 message toward the CgP.

Editor’s note: Add text on reason header manipulation or changes.

1. This document is available from ORGANIZATION at <website>. [↑](#footnote-ref-1)