

SHAKEN Policy Administrator

Secure Telephone Identity (STI) Service Provider Methods and Procedures

STI-PA Release 1.2

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Executive Summary

This document provides the guidelines and procedures to be followed by VoIP Service Providers (SPs) for enrollment in the Signature-based Handling of Asserted Information Using toKENS (SHAKEN) ecosystem as introduced in [\[ATIS-1000074\]](#), [\[ATIS-1000080\]](#) and [\[ATIS-1000084\]](#) provide the details on the Service Providers roles and responsibilities for interacting with the STI Policy Administrator (STI-PA). This document provides the detailed procedures to be followed by the Service Provider in order to participate in the SHAKEN ecosystem.

1 Introduction

This document describes the process for the approval and enrollment of a Service Provider in the SHAKEN ecosystem. The STI-GA, an industry group under the auspices of the Alliance for Telecommunications Industry Solutions (ATIS), provides a venue for service provider collaboration in establishing the overall governance to ensure that only approved service providers are enrolled in the SHAKEN ecosystem. The STI-GA has established the policy that a Service Provider must have an Operating Company Number (OCN) in order to participate in the SHAKEN ecosystem. To participate, a Service Provider must create an account with the STI-PA. Once the account is created, the Service Provider then has the credentials to interface to the STI-PA to obtain a Service Provider Code Token and link to the Certificate Revocation List, as detailed in [[ATIS-1000080](#)].

These guidelines are provided as a job aid and user guide.

2 Contact Information

iconectiv PA Administrator (Customer Support):

100 Somerset Corporate Blvd.
Bridgewater, NJ 08807

Phone: 1.800.458.4826
E-mail: STI-PA@iconectiv.com

iconectiv PMA Director:

100 Somerset Corporate Blvd.
Bridgewater, NJ 08807

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3 Service Provider Registration

The SP must first complete and submit a registration form on the PA website to be a participant in the SHAKEN ecosystem.

The details for the account registration are in section [7.1 \[Registering for a Service Provider Account\]](#).

Once registration information is received, the SP will receive an email indicating the PA Administrator (PA Admin) has received the application and is currently reviewing it for completeness. The PA Admin will contact the SP for additional information required to complete their account registration as defined in the *STI-GA SPC Token Access and Funding Policy**.

❖ See ***Note** below item #2 in the next section.

4 Service Provider Approval

The PA Admin is responsible for ensuring timely review of the Service Provider's registration submission, and for contacting the SP to complete the registration process. The expected turnaround is 2-3 business days.

Below is the information you will be asked to provide to the PA to obtain an SPC Token and gain access to the system.

4.1 Provide Information to the PA Administrator

1. SP must have an **Operating Company Number (OCN)** that is eligible for Numbering Resource assignments.
 - The OCN will be entered directly on the registration form.
 - OCN format must be 4 character Codes that have a numeric value in the first position.
 - Valid format example: 495j
 - Invalid format example: G141
 - The OCN will be used to verify the SP has direct access to telephone numbers from the North American Number Plan Administrator (NANPA) and National Pooling Administrator (NPA).
2. Have a current **FCC Form 499A** on file with the FCC (filed by all intrastate, interstate, and international providers of telecommunications (including VoIP providers) within the United States). The PA will validate current 499A filing status of the SP with the FCC but per the STI-GA funding policy.
 - Per the STI-GA funding policy, SPs are required to provide the **aggregate revenue dollar amount** from lines 423 or 514 (Column A), whichever is greater, to the PA Admin.
 - This information is required in order to calculate the annual fee for your SP account.
 - *You will not be permitted to use the Policy Administrator services until this information is provided.*

- ❖ **Note:** The above SP information requirements are based on decisions 1 and 3 set in the *STI-GA Policy Decisions Document*. (Click on this [link](#) to view the latest version.)

Policy Decision 1: SPC Token Access Policy - In order to obtain the Secure Telephone Identity (STI) certificates they will use to sign calls, i.e. authenticate Caller ID, from an approved STI Certificate Authority (CA), service providers must first apply to the STI Policy Administrator (PA) to acquire a Service Provider Code (SPC) token. The STI-PA will vet each service provider applicant against rules set by the STI Governance Authority (GA). The STI-GA Board has determined that, to be cleared by the STI-PA for access to the STI certificates, an entity must meet the following criteria:

- 1) Have a current form 499A on file with the FCC
- 2) Have been assigned an Operating Company Number (OCN)
- 3) Have direct access to telephone numbers from the North American Number Plan Administrator (NANPA) and National Pooling Administrator (NPA)

This policy will be reviewed at least on a quarterly basis, or as requested by the STI-GA following implementation in December 2019.

Policy Decision 3: Funding - The STI-GA Board of Directors unanimously voted on a method for determining a service provider's fee for obtaining a token to be used as part of the STI-GA call authentication ecosystem:

- The fee is based on a providers' revenue as detailed on the provider's Telecommunications Reporting Worksheet, FCC Form 499-A, and is calculated by applying a contribution factor of 0.0000385 to the amount reported on Form 499-A Revenue Lines 423 or 514 (column A), whichever is greater.
 - If the SP files more than one Form 499A for different affiliates or subsidiaries, it should total the amounts on all forms filed. It will add up all the revenues reported among all its filed forms on lines 423. It will also add up all the revenues reported among all its filed forms on line 514. It will then report the larger of the two numbers to the STI-PA. It is this total revenue figure to which the contribution factor will be applied to determine the payment.
- Minimum and maximum annual fees have been established:
 - Maximum annual fee -- \$240,000
 - Minimum annual fee -- \$825
- Fee information will be collected as part of the online registration process. Revenue information will be used by STI-PA only for the purposes of determining fees for joining the STI framework. The STI-PA will not share this information with anyone, including ATIS, any ATIS member, any successor governance authority, or any Policy Administrator affiliate or parent. An SP that does not provide the required 499A data will be assessed the Maximum annual fee by default.

3. Any additional OCN's that the SP wishes to request SPC's with
4. SPC Token Expiry timer value
5. Billing information
6. IP addresses for whilelisting for production and staging.

4.2 Test for Readiness in the PA Staging Environment

- ❖ Note: If you are working with a Certified Vendor, you do not need to go through these steps.

The SP will need to go through the Readiness Evaluation Test Plan Iss 2 within the PA Staging environment prior to accessing the PA Production environment.

The SP must submit results from the completed Readiness Evaluation Test to the PA Admin for readiness evaluation. Once deemed ready, the PA Admin will notify the SP by email with login instructions to the Production environment.

5 Adding a Service Provider to the SHAKEN Ecosystem

Once an SP has been approved, the SP is notified via email. The SP must follow the procedures in Section [7.2 \[Activating the Service Provider Account\]](#) to log into the PA portal. The procedures in section [7.3 \[Obtaining SPC Tokens\]](#) are required in order for an SP to establish the credentials that allow them to use the automated mechanism (API) in order participate in the SHAKEN ecosystem, as described in [\[ATIS-1000080\]](#).

6 Procedures for Company Name Change, Business Termination or Sale

Once an SP has been added to the ecosystem they must notify the PA of any company name changes, including those related to sales. The SP must also notify the PA if the company terminates business or the SP chooses to no longer be a part of the SHAKEN ecosystem.

- ◆ In the case of a company name change, whether it be due to a sale or other legal or marketing reasons, the SP must notify the PA Admin to have their account updated to reflect the name change.
- ◆ If business changes result in the need to consolidate OCNs that result in other changes to an account (e.g., merging accounts for example) the SP should notify the PA Admin.
- ◆ If a business terminates, the SP must notify the PA so that the account can be deactivated.

7 Account Management

7.1 Registering for a Service Provider Account



A onetime registration is required for your company to become an authorized SHAKEN Service Provider company. Your company account authorizes usage of the PA to all OCNs operating within your company; however, these must be configured as individual Service Provider Codes under the main account.

Registering for a PA Account is a 2-part process:

7. Complete the registration form on the PA website and verify your contact email address.
8. Provide additional information to the PA Admin, who will contact you to complete the registration.

Once registration is complete and your company account is approved, you will receive an email with instructions for accessing the initial login, accepting the Account Level Agreement, and establishing a password. You will be able to begin using the PA as well as add new users for service providers in your company.

Instructions to register on the PA website:

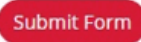
1. Open a browser window and go to the Policy Administrator website:
<https://authenticate.iconectiv.com>
Recommended browser:
 - Google® Chrome
2. Click the **GET STARTED**→**SERVICE PROVIDER** link on the page header, or the **GET STARTED** () button below Service Provider Registration section of the same page to go to the Service Provider Registration page.
3. Click on the **BEGIN REGISTRATION** () button at bottom of the page to go to the registration page. See [Figure 1](#) below.
4. Select the *Service Provider* account type.
 - The **Service Provider ID** field will display.
 - Provide your company's **OCN** in the text box provided.

NOTE: Only 1 OCN is required at registration.

Figure 1 Registration Page – Select **Service Provider** to display **Service Provider ID** fields

- Complete all required (*) fields on the form, using correct formats as per noted.

❖ **IMPORTANT NOTE:** Write down the **User ID** separately as you will need this ID to log into the STI-PA web application. **This will be the SP Admin User ID for your company's PA account.**

- Click the **I'm not a robot** checkbox next to the User ID field (and any additional prompt(s) that may display), then click the **Submit Form** () button.

Upon successful form validation, a success message will display with information on the next step to completing the registration process.

- Verify **Registrant Contact Email Address**.

Check the mailbox of the Email Address indicated in the success message for the email sent from **STI-PA Do Not Reply** containing the email verification link.

- ❖ Note: You may need to search for the email in your **Junk** mailbox.
- You must click on the link in the email prior to its expiry.

- If you are unable to complete the verification prior to code expiry, contact the PA Admin as noted in section [2](#) of this document to send a new verification email.
8. Complete the Email Verification by clicking the link in the email.

A **Success** message will display if you complete the verification prior to link expiry. You will receive an email explaining the review and registration completion process.

7.2 Activating the Service Provider Account

Once registration is approved, the SP will receive an email containing the temporary password and link to the PA login page.

1. Using the **SP Admin User ID** created on the registration form as login ID and the password provided in the email, fill in the login fields and click the Log In button.
 - The SP Admin user will be prompted change the password before they can log in for the first time.
 - Password Guidelines:
 - Must be length of 8-99 characters
 - Must have at least one number 0-9
 - Must have one lower case letter a-z
 - Must have one upper case letter A-Z
 - Must include one of the following special characters: ^\$*.[\{\}() ? -"!@#%&^><'";|_~`
2. Following password change and initial login the SP Admin user will be required to accept both the **Account Level Agreement**, and **Service Provider Annual Fee Agreement*** in order to activate their account in the PA.
 - ❖ Note: For information on how pricing is determined, please refer to **Funding Methodology** in the STI-GA policy page using the link below:
<https://www.ativ.org/sti-ga/resources/>

Once the account is activated, the account portal allows an SP to update any contact information, add users as well as to notify the PA of any revoked certificates per section [7.4 \[Adding Revoked Certificates to the CRL\]](#). Online Help Pages will be available to guide you in your tasks.

7.3 Obtaining SPC Tokens

Once the account is activated, the SP must create additional credentials that are used to authenticate access when the SP is using the automated mechanism (API) for requesting SPC tokens. Note, that the SPC tokens are required to obtain certificates in the SHAKEN ecosystem per the procedures defined in [\[ATIS-1000080\]](#). When an SP requests an SPC token using the API, they are also provided a link to the Certificate Revocation List (CRL).

The SP uses the same credentials in order to obtain the list of Trusted STI-CAs, which is required to validate certificates by the SP to which a call terminates in the SHAKEN ecosystem.

7.4 Adding Revoked Certificates to the CRL

Once the SP has an active account, they are able to use the account to provide the PA with any certificates that have been revoked. *The SP must notify the PA of all known revoked certificates as soon as possible.*

7.5 Account Maintenance

It is the responsibility of the SP to keep their accounts updated, in particular contact information. If an SP fails to do so, the PA reserves the right to deactivate the SP's account until updated contact information is provided.

8 Glossary

<u>ACRONYM</u>	<u>MEANING</u>
ATIS	Alliance for Telecommunications Industry Solutions
CA	Certification Authority
CP	Certificate Policy
CPS	Certification Practice Statement
CRL	Certificate Revocation List
OCN	Operating Carrier Number
SP	Service Provider
STI-CA	Secure Telephone Identity Certification Authority
STI-GA	Secure Telephone Identity Governance Authority
STI-PA	Secure Telephone Identity Policy Administrator

9 References

- ◆ *ATIS-1000074* - Signature-based Handling of Asserted Information using Tokens (SHAKEN)
- ◆ *ATIS-1000080* - Signature-based Handling of Asserted Information using Tokens (SHAKEN): Governance Model and Certificate Management
- ◆ *ATIS-1000084* - Technical Report on Operational and Management Considerations for SHAKEN STI Certification Authorities and Policy Administrators

