



COMMUNICATION
SERVICES

IMPLEMENTING STIR/SHAKEN AS A VOICE SERVICE PROVIDER

This document is a complete step by step summary for Voice Service Providers that need to implement STIR/SHAKEN by the June 30th, 2022 deadline

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Disclaimer - All details presented in this document are for informational purposes only and do not constitute any form of legal or regulatory advice. VI recommends that all voice services providers seek consultation from legal and/or telecom compliance experts regarding your company’s obligations for STIR/SHAKEN and all other FCC rules and regulations. Recommendations regarding Professional consultations services can be found [here](#).

All information in this document is based on [FCC-21-122A1](#), released December 10th, 2021, and is subject to change if/when additional information by the FCC is released.

Introduction

As announced by the FCC on December 10th, 2021, the FCC has shortened the STIR/SHAKEN implementation extension for **all small¹ non-facilities-based voice services providers** to June 30th, 2022. Facilities-based voice services providers² still have until June 30th, 2023, to implement STIR/SHAKEN.

To summarize -- this change means that any company operating as an OTT (over the top) service provider³ is required to implement STIR/SHAKEN by June 30th of this year.

This 12-month shift in deadline has left many voice service providers scrambling to determine what steps they need to take to prepare their network to be compliant for STIR/SHAKEN, and information regarding what steps to follow can be difficult to find publicly online.

The purpose of this document is to de-mystify the STIR/SHAKEN implementation process and create a simple summary of the steps that OTT providers need to follow to be ready for the June 30th deadline.

Do these Requirements Apply to my Telecommunications Business?

A common misconception amongst OTT service providers is that, if your downstream carrier is signing all your outbound traffic, then you can claim Complete STIR/SHAKEN implementation with the FCC. **This line of thought is incorrect.**

Qualification for STIR/SHAKEN implementation essentially boils down to the following two points:

- You are operating a business that provides voice service to end users.
- Your company is operating its own SBC (Session Border Controller) and/or PBX (Private Branch Exchange) that is routing phone calls to/from end users.

If your business checks both boxes, you are a voice service provider that operates your own voice network, and you are subsequently required to implement STIR/SHAKEN into your network and obtain your own SHAKEN certificate, a process that starts with contacting the STI-PA⁴ to register and receive a token that is unique to your company.

¹ The FCC defines a small service provider as an entity with 100,000 or fewer voice service subscriber lines. A voice service subscriber line would be a call path or line that you report on Form 477.

² A **Facilities-based voice services provider** is a service provider that serves a subscriber using its own network facilities for which it holds a license, manages, or for which it has obtained the right to use via a leasing agreement.

³ An **OTT (Over the Top) Service Provider** delivers telecommunication services to the end-user's premises over a high-capacity connection that the customer obtains (that is, buys), or has the use of, from an entity not affiliated with the interconnected VoIP service provider. This business type is also commonly referred to as a **reseller** in general conversation.

⁴ [Iconectiv](#) is operating as the STI-PA (Secure Telephone Identity Policy Administrator) and approves all service provider applications for STIR/SHAKEN

If you are operating as a switchless service provider, that is, a business that is not operating their own SBC and/or PBX, VI recommends that you seek legal consultation regarding how to file with the FCC.

What is Complete STIR/SHAKEN implementation?

Before diving into the steps, it's important to understand what your actual end-goal is as a voice services provider.

Complete STIR/SHAKEN implementation means that your business has completed the following steps:

- You have registered with the STI-PA, [iconectiv](#).
- You have purchased a SHAKEN certificate from an authorized STI-CA.
- You are signing **all** outbound calls sent from your voice network using your own SHAKEN certificate.
- You are verifying **all** signed inbound calls sent to your voice network.
- You have registered in the Robocall Mitigation database with all required information as mandated by the FCC.

Without all steps completed, your business will not be able to attest to complete STIR/SHAKEN implementation with the FCC. In addition, if you do not implement STIR/SHAKEN, your calls may be blocked by terminating carriers or marked as potential spam.

Becoming STIR/SHAKEN Compliant – A Step by Step Guide

The next section of this document will cover all steps required to apply as an authorized provider and subsequently implement STIR/SHAKEN into your voice network. Existing Voice Service Providers who have already fulfilled their FCC and 499 Filer obligations may skip to [Step 3](#) of the guide.

Step 1: Getting Started with the FCC

| **Estimated time to complete: 1-2 days** |

If you are a new voice service provider, you will first need to register with the FCC by obtaining an FRN⁵ and submitting a filing in the [Robocall Mitigation Database](#)⁶.

⁵ An FRN, or FCC registration number, is a 10-digit number that is assigned to a business or individual registering with the FCC. This unique FRN is used to identify the registrant's business dealings with the FCC and will be used to determine if all of a registrant's fees have been paid.

⁶ As noted in [47 CFR 64.6305\(c\)](#), all Intermediate and voice service providers are forbidden from accepting traffic from service providers that are not listed in the Database as of September 28th, 2021. Please note that this also includes foreign/non-US Service Providers that use NANPA resources.

A filing in this database is required by the FCC and must note what is being done by ***your company*** to stop illegal robocalls from originating on your network, along with details regarding your current STIR/SHAKEN implementation status⁷.

- You can apply for an FRN [here](#).
- Robocall Mitigation Database Filings can be submitted [here](#).
 - o The FCC has also uploaded [filing instructions](#) for those looking for a step-by-step breakdown for submitting your filing.

Step 2: Registering for a 499 ID / Becoming a 499 Filer

| Estimated time to complete: 2-4 days |

Your STI-PA Authorized Service Provider application will require your business to have a current 499-A⁸ form on file with the FCC and be registered with the [USAC](#). Before beginning the registration process, you will need to make sure that you are able to provide the following information:

- FCC Registration Number (as detailed in the previous step)
- Employer Identification Number (EIN) or Tax ID Number
- Contact Information for your company and company officers
- Contact information for person who will be designated as the DC Agent for Service of Progress

More information regarding the 499 ID Registration Process can be found at the USAC's [website](#).

As with all tax-related items, your business may want to seek professional consultation before filing. More information regarding VI-recommended compliance resources can be found [here](#).

Step 3: Acquiring an OCN (Operating Company Number)

| Estimated time to complete: 1-2 weeks |

Your STI-PA Authorized Service Provider application will also require you to have an OCN (Operating Company Number⁹) that has been assigned by NECA (National Exchange Carrier Association).

If you are operating as an OTT voice services provider, you will likely want to apply to NECA as an **IPES (Internet Protocol Enabled Services)**. The following documentation is required for this service type:

- Proof of service and customers

⁷ Your implementation status is **solely** based on your own voice network. Your company cannot attest to complete STIR/SHAKEN implementation if you operate your own equipment and have not been approved as an Authorized Provider with the STI-PA.

⁸ All intrastate, interstate, and international telecommunications providers in the United States are required to file a 499-A form with the USAC (Universal Service Administrative Company). More information regarding this requirement is available [here](#).

⁹ An OCN (Operating Company Number) is a four-character code assigned by the National Carrier Association (NECA) and is specifically used to identify CLEC and Reseller Usage Data.

- This includes
 - Proof of interconnection agreements (or evidence of an interconnection order pursuant to an approved tariff)¹⁰
 - proof of contractual agreements with end-user customers.
- Regulatory administration approval, if applicable¹¹

More information and instructions for applying for a OCN can be found directly on NECA's website, [here](#).

Step 4: Applying as an Authorized Service Provider with the STI-PA

| Estimated time to complete: 2-3 weeks with acceptance testing, or 1 week without acceptance testing |

Once you have registered with the FCC, obtained your 499-Filer ID, and acquired your OCN, and you will finally be ready to submit your Authorized Service Provider application to the STI-PA.

There is a great deal of documentation available on [Iconectiv's website](#) that is worth reviewing, however, VI does recommend that providers review Iconectiv's [Service Provider Guidelines](#) in particular.

You can begin the registration process with Iconectiv, [here](#).

Step 5: Choosing an STI-CA (Secure Telephone Identity Certification Authority)

| Estimated time to complete: 2-3 days |

Your STI-CA (Secure Telephone Identity Certification Authority) will be the party that provides you with digital certificates to authenticate and sign your phone calls.

VI recommends [Sansay, Inc.](#) for any businesses taking advantage of our hosted call signing solution.

A full list of approved CAs can be found on [Iconectiv's website](#).

Step 6: Onboarding with VI's STIR/SHAKEN Service

| Estimated time to complete: 2-3 days |

VI's STIR/SHAKEN service allows voice service providers to provide attestation for outbound calls using their unique certificate. This solution provides a quick and easy path to compliance with the TRACED act.

How does it work?

1. VI provisions and hosts a dedicated signing server on our network
2. VI configures the dedicated server with your unique certificate and desired attestation rules

¹⁰ VI customers should be able to provide NECA with a copy of the VI MSA as a replacement for the interconnection agreement. You can download a copy of the MSA [here](#).

¹¹ This information is only required if your company is seeking approval for direct assignment of numbering resources.

3. Once live, the server applies attestation to all outbound calls sent to the VI network using your unique certificate. If all outbound calls from your company are sent to VI, you will be able to attest to complete STIR/SHAKEN implementation with the FCC.

What are the primary benefits?

- **Zero** configuration changes required to voice network and/or on-prem devices
- No SBC or SIP proxy required
- Quick and easy onboarding process
- SIP traffic flow remains the same as prior to installation
- VI manages all necessary monitoring and maintenance for the dedicated server
 - o In the event of an issue, VI will make routing changes to ensure that your traffic continues to be signed

If you are interested in learning more, please contact your account manager or email customersuccess@voipinnovations.com for more information.

Step 7: Completing the Final Steps

| *Estimated time to complete: 1 Day* |

Once you have completed the technical requirements and are signing all outbound calls on your network, you will be able to update your [Robocall Mitigation Database](#) filing to confirm your voice network's Complete Implementation of STIR/SHAKEN. Congratulations!

VI's Recommended Partners

Recommended Consultation Services

VI is unable to provide any legal consultation regarding STIR/SHAKEN implementation, taxes, or filings for the FCC's Robocall Mitigation Database. If you are looking for more in-depth assistance than what is offered in this guide, we recommend reaching out to one of the entities listed below.

CLA

[CLA](#) exists to create opportunities for our clients, our people, and our communities through industry-focused wealth advisory, outsourcing, audit, tax, and consulting services. We help MSPs and telecommunications providers by offering full outsourcing of registrations, compliance, and exemptions as well as provide business strategies and support for growth, profit, and ultimately exit. With 7,500 people, more than 120 U.S. locations, and a global affiliation, we promise to know you and help you. Investment advisory services are offered through CliftonLarsonAllen Wealth Advisors, LLC, an SEC-registered investment advisor.

Contact us today to discuss your needs to complete your STIR/SHAKEN requirements with the FCC.



COMMUNICATION SERVICES

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Thomas Lynch & Associates

[Thomas Lynch & Associates](#) (TLA) has been assisting large and small telecommunications companies with regulatory compliance and transactions since 1998, and Mr. Lynch has been a practicing telecommunications attorney for nearly 30 years. Mr. Lynch is a 1993 graduate of the Georgetown University Law Center in Washington, DC. He is also the co-author and editor of *The Telecommunications Act Handbook: A Complete Reference for Business*, a book describing the principal provisions of the Telecommunications Act of 1996. He has represented some of the largest telecommunications carriers in the industry and also assists small carriers with routine and complex compliance matters. More information about TLA and access to their online portal for compliance assistance can be found at www.telecomlawyers.com.

TLA offers an affordable flat-fee federal compliance package for small telecommunications companies that takes the mystery out of legal invoices. Most other compliance-related services are also available for small carriers on a flat-fee basis. Contract drafting, negotiation and review services are also available, usually on an hourly basis.

[Contact TLA](#) to discuss your legal needs and for applicable pricing.

Recommended SHAKEN Vendors

Sansay, Inc.

Sansay offers the highest performance STIR/SHAKEN solutions complete with Certificate Authority and Database. Free evaluations for Service Providers with or without Sansay SBC's can be deployed in 2 hours or less. STIR/SHAKEN is included for Sansay SBC maintenance customers.

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