



White Paper

STIR / SHAKEN

What You Need to Know



What is STIR/SHAKEN?

STIR/SHAKEN is short for **Secure Telephony Identity Revisited** (STIR) and **Secure Handling of Asserted information using toKENs** (SHAKEN) and is a technology framework designed to reduce fraudulent robocalls and illegal phone number spoofing. The FCC adopted rules requiring all service providers to deploy STIR/SHAKEN technology by June 30, 2021.

Why is STIR/SHAKEN Important?

STIR/SHAKEN is an industry-wide initiative to restore trust in voice communications. The framework establishes methods that allow carriers to identify and block fraudulent calls while making sure legitimate calls can reach their recipient.

How does it work?

The technology uses digital certificates, based on common public key cryptography techniques which essentially provides the basis to ensure the authenticity of a phone call.

STIR/SHAKEN will introduce two new aspects to calls: Attestation and Authentication.

- **Attestation** will demonstrate a trust level between the originating service provider, the originating caller, and the calling party number (outbound CallerID) used for the call.
- **Authentication** will use certificates to validate that the call originated from a service provider known to the FCC via the STIR/SHAKEN landscape.

All outbound calls are assigned an attestation grade, based on the ability for the outbound service provider to prove they have a verified association to the telephone number being used as the outbound CallerID.

An “A” attestation grade is received and treated as normal, with the full CallerID Name and Number being passed to the recipient, by the receiving carrier. A “B” or lower attestation grade may have the CallerID Name overwritten with “SPAM” or “SCAM Likely” and may even be blocked by the receiving carrier, significantly reducing illegal phone number spoofing and fraudulent calls.

How do I ensure my calls are not blocked?

The easiest way to receive an “A” attestation so that your calls are not blocked by the receiving carrier is to always use telephone numbers purchased from, or ported to, TPx and assigned to your account, for your outbound CallerID. With numbers assigned to your TPx account, TPx is the carrier on record for that telephone number and can always verify the association.

There are legitimate times when TPx customers need to use a telephone number that will not be ported to TPx as a CallerID. For these situations, TPx may still assign an “A” attestation if the customer provides proof that they either own the number through another carrier or have been authorized to associate with the number by the owner of the number. Once this proof is established and on record, TPx will be able to attest that calls with those phone numbers are verified and hence assign the “A” attestation to them.

TPx has a process known as Authorization to Associate (ATA) which establishes necessary proof that the telephone number owner grants TPx’s customer permission to associate to the telephone number for use as caller ID but not give permission to TPx to port away the number from its owner.

About TPx

Founded in 1998, TPx provides access, communications, collaboration, and managed service offerings such as firewalls, Microsoft 365, SD-WAN and endpoint security. Delivering IT solutions and services across the U.S. to approximately 23,000 customers in more than 50,000 locations, TPx keeps customer service at the core of everything we do. We manage our customer's technology needs, so our customers can do what they do best – run their business. For more information, visit www.tpx.com.



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