

# TNS Call Guardian

## STIR/SHAKEN Capabilities

TNS Call Guardian is an industry-leading call analytics solution that uses cross carrier real-time call events combined with crowd-sourced data to create accurate and comprehensive reputation profiles differentiating legitimate users of communications services from abusive, fraudulent and unlawful users. TNS Call Guardian is the most accurate reputation profile solution using a layered approach, big data analytics and integration of call attestation parameters from STIR/SHAKEN to deliver a better customer experience for consumers.

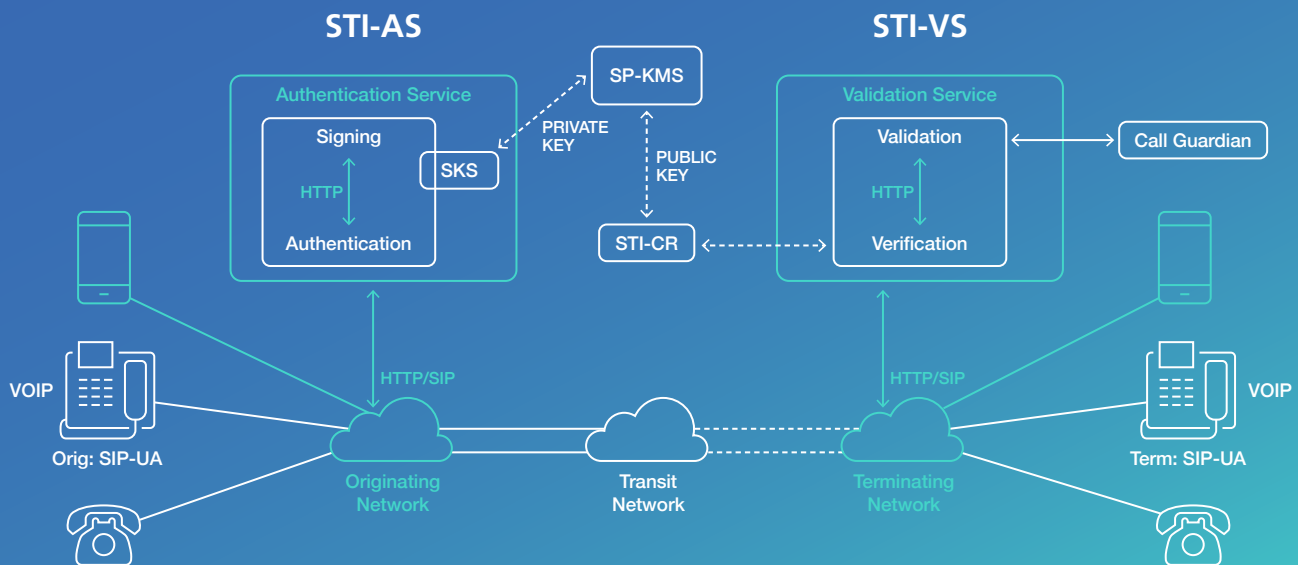
### Robocalling Epidemic

The FTC received 4.5 million robocall complaints in 2017, up from 3.4 million the prior year. Robocall bad actors continue to adjust their strategy to elude detection. The time is now to improve your subscribers' call experience.

Regulators are increasingly applying pressure to carriers to solve the robocalling problem. In the US, FCC Chairman Pai sent letters to 11 voice providers asking those that had not yet established concrete plans to implement the Signature-based Handling of Asserted Information Using toKENs (SHAKEN) framework and the Secure Telephone Identity Revised (STIR) standards to implement such standards without delay. In Canada, the CRTC has mandated deployment of STIR/SHAKEN by March 2019.

### What is STIR/SHAKEN?

STIR and SHAKEN use digital certificates, based on common public key cryptography techniques, to ensure the calling number of a telephone call is secure. STIR/SHAKEN will identify Caller ID spoofing, a common technique used by robocallers, by authenticating the Caller ID at the origination point of the call, then validating this Caller ID at the termination point. Operators can use STIR /SHAKEN, in conjunction with Call Guardian real-time analytics, to determine the validity and intent of a call.



# TNS Call Guardian STIR/SHAKEN Deployment Options

- Call Authentication Hub - pre-STIR/SHAKEN solution that authenticates calls originating from networks that use TNS Signaling Hub.
- Full STIR/SHAKEN solution in hosted environment.
- On-premise STIR/SHAKEN solution.
- Ingest verstat parameter from self deployed STIR/SHAKEN solutions into Call Guardian.

## Features

- **Insight** - Analysis of over 1 billion call events daily across more than 500 operators.
- **Reputation profiles** - Caller reputation on over 1 billion telephone numbers.
- **Real-time scoring** - Detect problems as they occur.
- **Accuracy** - High quality of identifying bad actors, including neighbor spoofing.
- **Layered approach** - Support for Do Not Originate, invalid, unallocated, unassigned numbers, STIR/SHAKEN and big data analytics using machine learning.
- **Compliance** - Full compliance with standards in ATIS test bed:

**STIR:** RFC 8224, RFC 8225, RFC 8226

**SHAKEN:** ATIS 1000074, ATIS 1000080, ATIS 1000082

## Benefits

- **Reduce calls into customer care** - Provide your subscribers with caller reputation of incoming calls and reduce the number of reported spam calls into your care organization.
- **Reduce customer churn** - Decrease the chance of your subscribers falling prey to scams and fraud.
- **Increase Net Promoter Score** - Provide your subscribers with the tools to combat unwanted calls.
- **Attestation** - Ingests parameters from STIR/SHAKEN to provide improved call management for your subscribers.
- **Reduce network costs** - Doesn't require simultaneous ring or honeypots to identify bad actors.
- **Ubiquitous solution** - Supports multiple network protocols (SIP, AIN, IMS, NGN) and integrates with major Telecom Application Servers.



## The Most Trusted Partner for Solutions for Telecommunication Carriers or Providers

TNS addresses the evolving needs of network operators around the globe. As the industry evolves to IoT and 5G technologies, TNS leads the development of solutions to help carriers navigate a host of infrastructure complexities and maximize their network reach through the creation of unique multi-service hub solutions.

To find out more about how TNS can help you with a wide range of telecom solutions:

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