

TRACED Act & STIR/SHAKEN

October 11, 2022

Jessica Schlesselman

Product Manager - Aureon

Jessica.Schlesselman@Aureon.com

Blake King

Sales Manager - Transnexus

blake.king@transnexus.com





TRACED Act: From 2019-Present

The Traced Act was signed into law in December 2019

- STIR/SHAKEN framework assigns a certificate of authenticity to each phone call acting as a digital signature of trust passed from carrier to carrier.
- Within STIR/SHAKEN, the originating service provider attests (or signs) the relationship with the caller, as well as their right to use that number.
 - Attestation is the originating signer's ability to vouch for the accuracy of the source of the call.
 - The levels of Attestation do not necessarily correlate to their trustworthiness.
 - Based on the current language provided by the TRACED Act, providers are not blocking calls based on its according Attestation Level.



Voice providers were required to implement STIR/SHAKEN on the IP portions of their network by June 30, 2021.



TRACED Act: From 2019-Present

The Traced Act mandated that for non-IP (TDM) networks, carriers must implement an effective caller ID authentication program to prevent the origination of unlawful robocalls

Analytics

Blacklisting

“Know Your Customer”

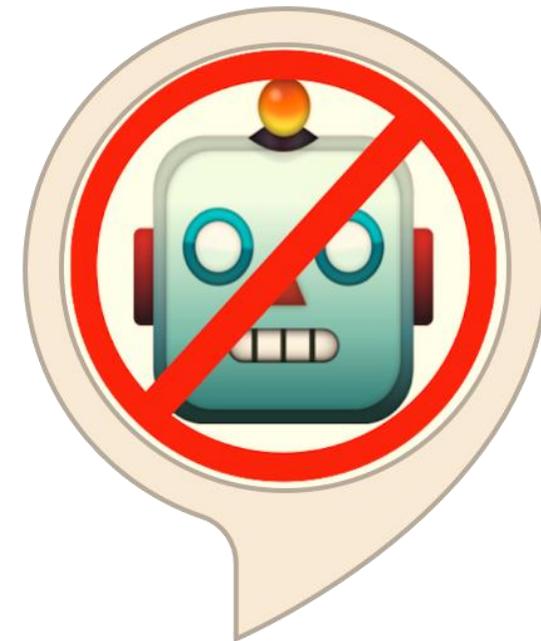




TRACED Act: From 2019-Present

Subsequent orders have been issued by the FCC to further define and detail the mandates for voice providers.

- July 2020: Safe harbor allowances for providers who block suspected unlawful robocalls
- September 2020:
 - **STIR/SHAKEN extensions for small providers and TDM voice networks**
 - Requirement for providers operating under the exception to implement an appropriate robocall mitigation plan AND report the details of that program within the FCC's Robocall Mitigation Database
- December 2020:
 - SIP/ISUP response & notification requirements for blocked callers
 - Best practices for voice providers





What have been the challenges?

- Wireline subscribers are twice as likely to receive scam robocalls than cellular subscribers.
- 95% of spam calls originate from numbers owned by smaller carriers.
- Small carriers still rely on voice service for 50% or more of their revenue.
(Neustar)



What have been the challenges?

While much of the robocall attention centers around mobile phones, 41% of inter-carrier calls placed to wireline numbers in the first half of 2021 were unwanted compared to 21% of calls to wireless numbers. (TNS)

72% of enterprises still see voice as critical to reaching their customers. (Forrester)

77% of consumers never answer phone calls from numbers they do not recognize.



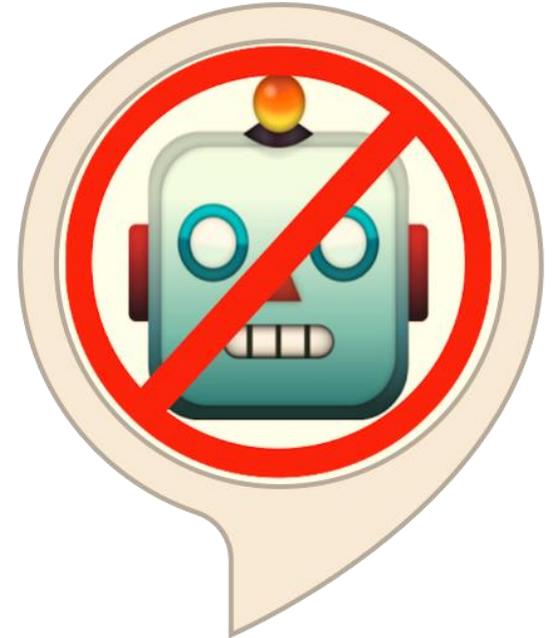
Penalties & Enforcement

In January 2020, the Department of Justice (Department) brought two civil actions against U.S.-based Voice over Internet Protocol (VoIP) companies and their owners, alleging that the defendants knowingly transmitted fraudulent robocalls to U.S. consumers.

Spiller/Mead, Rising Eagle

In June 2020, the FCC issued a Notice of Apparent Liability proposing a forfeiture of \$225,000,000 against persons allegedly responsible for making approximately one billion spoofed robocalls in the first quarter of 2019 alone.

The FCC has begun holding carriers responsible for unlawful robocalling they originate.





What is the current state?

For TDM networks:

Exempt from requirement to implement STIR/SHAKEN

Must still implement an effective strategy to ensure they are not originating unlawful & nuisance robocalls

ISUP code 21 for calls on TDM networks blocked by analytics

For IP Networks:

STIR/SHAKEN must be implemented to reduce the impacts of unlawful robocalls that might originate on their networks

SIP code 603 for calls on IP networks blocked by analytics. 603+ has been recommended by ATIS as the next logical step.

ALL Providers:

Must respond to Industry Traceback requests



What's next?

December 2022

- The TRACED Act required that **the Commission provide to Congress every three years an assessment of the efficacy of call authentication frameworks and on any actions the Commission finds necessary to replace them.** Due by December 30, 2022 (and every three years thereafter).



STIR/SHAKEN & The Future of the Network

TDM SHAKEN exemption has created Two PSTNs

- SIP PSTN with SHAKEN
 - Trusted phone calls
 - Higher call completion
 - Fewer robocalls
- TDM PSTN without SHAKEN
 - Calls without SHAKEN PASSporTs are labeled as SPAM
 - Falling call completion rates
 - No protection from spoofed calling numbers
- RLECs dependent on TDM interconnects offer inferior phone service



STIR/SHAKEN & The Future of the Network

The Solution Debate:

- Proposal from tier 1 carriers
 - Get rid of tandem switches.
 - Tier 1 carriers will offer several Points of Interconnect (POI) for the US.
 - RLECs can access tier 1 POI via the internet or pay for dedicated transport.
- Proposal from NTCA
 - FCC should mandate SHAKEN authentication for all calls.
 - Tier 1 providers should either:
 - Implement SIP at their tandem or
 - Implement one of the SHAKEN for TDM standards.
 - Financial responsibilities for tandem interconnect do not change.

QUESTIONS?