TNS Defend App Suite

The number of telephony-based fraud schemes, robocalls and imposter scams in the market are on the rise at an alarming rate. Service providers are challenged to regulate these fraudulent activities and protect their customers with anti-spoofing technologies.

The industry has responded initially with STIR/SHAKEN, which is an important first step but not a foolproof solution.
There is a need for more comprehensive fraud detection and notification capabilities to provide ultimate protection for customers.

TNS Defend provides comprehensive fraud detection and real-time notification mechanism to protect users from fraudulent calls. Defend offers a powerful set of applications by combining intelligent screening, audio-CAPTCHA testing, call content analysis and voice biometrics. Blending these technologies, TNS provides accurate and defensible user protection.

Key Applications

Integrated with TNS Mobile Apps

Intelligent Data Hub	Call Screener	Spam Blocker	Anti CLID Spoofing
• Reputation score-based call treatment accessing Call Guardian Analytis Engine • Flexible call treatment: accept, deny, route to VM, modify CNAM	• Challenge unknown caller to provide call reason • Real-time notification to subscriber for call reason and call guardian reputation score	• Call screening at network level with blacklist and whitelist • Self-managed subscriber B/W list	• Block CLID presentation of international inbound call • Allow CLI presentation only if user is roaming

Intelligent Data Hub

Applies a reputation-score based call treatment to the incoming phone call, an announcement is played to called party, with a choice to accept or deny the call, or route to voicemail. Integrates with reputation score database such as TNS call guardian for analytics.

Call Screener

Performs intent analysis of call transcripts by applying speech analysis, keyword detection and voice biometrics to detect the fraud call and notify the subscriber.
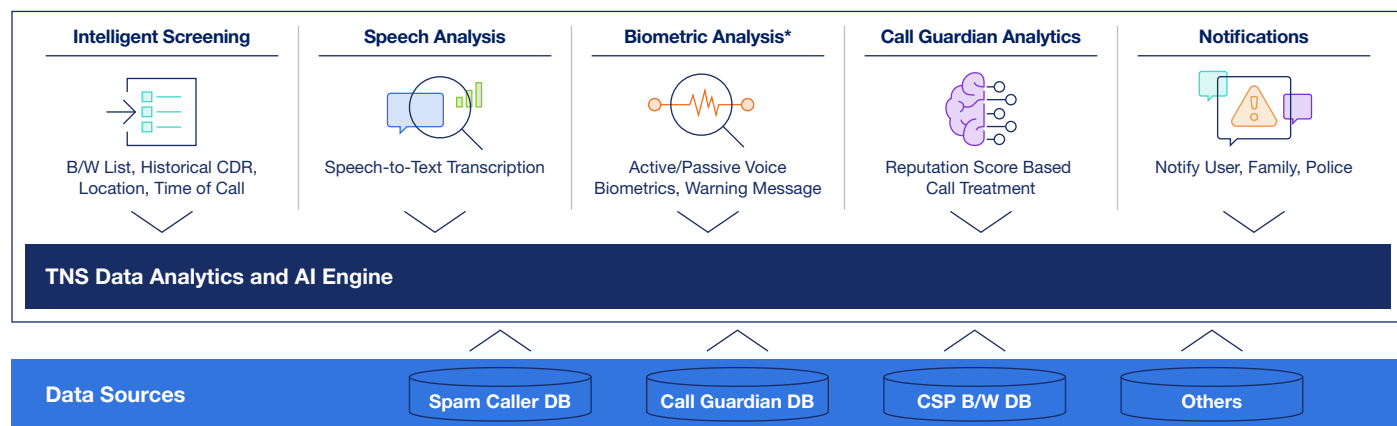
Spam Blocker

Performs the call screening at the network level with global block-list, and allow-list defined and managed by the subscriber, allows the subscriber to add the last-called-number to the blacklist.

Anti CLID Spoofing

Blocks the CLID presentation of international inbound calls, allows the CLI presentation only if the subscriber is roaming.

TNS Defend Advantage

Intelligent Screening	Speech Analysis	Biometric Analysis*	Call Guardian Analytics	Notifications
B/W List, Historical CDR, Location, Time of Call	Speech-to-Text Transcription	Active/Passive Voice Biometrics, Warning Message	Reputation Score Based Call Treatment	Notify User, Family, Police

TNS Data Analytics and AI Engine

Data Sources

Spam Caller DB   Call Guardian DB   CSP B/W DB   Others

*which indicates its on roadmap

Technical Specifications

Network Interfaces

- IMS – ISC, NGN – SIP, SIP-T
- Legacy – INAP
- Media – SIP/MSML
- SOAP/REST APIs

Charging

- Flexible CDR (Call Detail Record) fields
- Secure file transfer
- Info for billing and debugging
- Flexible licensing model

Operation/Management

- APIs for customer provisioning
- NOC (Network Operation Center) integration
- Reports for KPIs (Key Performance Indicators)

Customer Interface

- B/W list registration (IVR/web)
- Manage friends/family contacts
- Audio CAPTCHA challenges
- Rest and SOAP API
- White label self-care portal

Deployment Models

- Phased deployment support
- Third-party reputation DB integration
- NFV and Cloud native deployment

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

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