STIR/SHAKEN Enterprise Summit 2022

Linda Vandeloop
Chair, STI-GA Board

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Director, ATIS/STI-GA
SHAKEN Governance Model

STI Governance Authority (STI-GA)
- Defines the rules governing SHAKEN ecosystem
- Manages the STI Policy Administrator (STI-PA)
- Ensures security and integrity of STIR/SHAKEN ecosystem
STI-GA Role

• The STI-GA ensures the integrity of the issuance, management, security and use of STI Certificates issued in compliance with the SHAKEN specifications.

• The STI-GA establishes and governs the policies and the security around issuance and use of STI Certificates by SHAKEN participants in the U.S. Policies include:

  • SPC token Access Policy
  • STI Participant Revocation & Reinstatement Policy
  • Certificate Policy
  • STI-CA Revocation policy
  • SHAKEN Framework Funding Policy
STI-GA Board

• Board composition (and nominating organization):
  • Chair: Linda Vandeloop, AT&T
  • Vice Chair: Glenn Clepper, Charter Communications (NCTA)
  • Clint Lee, Jackson Energy Authority (ACA)
  • Nathan Sutter, Nex-Tech Wireless (CCA)
  • Beth O’Donnell, Comcast
  • Indra Chalk, T-Mobile (CTIA)
  • Darah Franklin, Google
  • Greg Rogers, Bandwidth (INCOMPAS)
  • Dave Frigen, Wabash Communications (NTCA)
  • Philip Linse, Lumen (US Telecom)
  • Gunnar Halley, Microsoft (VON)
  • Michael Starkey, QSI Consulting, Inc. (Western States CLEC Coalition)
Partners in Robocall Mitigation

- FCC
  - Industry robocalling rules
  - Enforcement
- ATIS
  - Standards Development
- ITG
  - Robocall Traceback
- CATA Working Group
  - Best Practices
  - Other Recommendations
Service Provider Participation

• 756 authorized STI Participants as of 09/30/2022
• Mix of Large, medium and small SPs, urban and rural, wireline, wireless and interconnected VoIP, and Resp Orgs
Budget and Funding

SHAKEN Framework Budget

• STI-GA, STI-PA, and Contingency Fund for other costs, such as Change Orders

2022 SP Payments

• Minimum - $825
• Maximum – $143,925
• Contribution Factor: .000053
• All the above 2022 costs apply through 12/31/2022

2023 Budget in line with prior years

• Costs not increasing as number of participating SPs rises
• 2023 STI-PA fees will be announced soon
STI-CA Growth

• 12 authorized STI-CAs
  • 10 are public, 2 private
    • All but one STI-CA now approved for the assignment of intermediate certificates
    • Issuance of delegate certificates
• STI-CA authorization is a detailed process
  • Prospective CAs must submit:
    • Certification Practice Statement (CPS) conforming with the SHAKEN specifications and in compliance with STI-GA Certificate Policy
    • PKI expert involved with all CPS reviews
Data Breach

• Summary
  • On February 3rd, an authorized STI-CA gained unauthorized access to data held by the STI-PA.
    • The STI-CA was required to submit to a number of reinstatement conditions including:
      • Monthly reporting, internal training and third-party security audit
      • All conditions have been successfully met and the STI-CA has been fully reinstated

• Policy Updates
  • Board created STI-CA Revocation Policy to protect against such future issues with the STI-CAs
Certificate Policy Revisions

- Policy Management Authority has worked through the backlog of CPS revisions from 2021 CP changes
  - All but one STI-CA has had a revised CPS approved
    - Approved for the issuance of intermediate certificates that will be the parents to delegate certificates
- Technical Committee is working on next CP revision (version 1.4)
  - CP Revisions due to:
    - Industry security practices advancements
    - Support of new services
    - General clean-up due to young and growing PKI ecosystem
  - Timing by end of 2022
Cross-Border SHAKEN

• MoU with Canada
  • STI-GA & CST-GA agreed on an MoU to further cross-border collaboration on call signing
  • MoU outlines areas of cooperation
    • Development of educational materials for other countries on cross-border collaboration;
    • Discussion of cross-border traffic and specific SHAKEN framework interconnection issues
    • A combined list of trusted Certification Authorities and sharing of Certificate Revocation Lists
    • Sharing of information related to enforcement, such as the revocation of SPC tokens
    • Common technical issues relevant to the implementation of STIR/SHAKEN
    • Discussion of and possible coordination on GA policies and procedures
      • Not all policies will be the same
  • Coming update to the public list of STI-CAs and CRL
    • Mid-November launch of lists in an automated format
International SHAKEN

• STI-GA Board considering international SHAKEN:

  1) Criteria for the STI-GA to evaluate any SHAKEN Governance Authority, either jurisdictional or non-jurisdictional
  2) Process for applying the criteria in the evaluation of international SHAKEN Governance Authorities

• Objective is to develop a process that allows for cooperation with other call authentication models while not compromising the security and integrity of the U.S. SHAKEN ecosystem
STI-GA Enforcement

• Delinquent Payers
  • First SPC token revocation
    • Due to non-payment
      • STI Participant agreement allows for revocation in the event of non-payment
      • Each SP more than 180 days delinquent
      • In process for revocation by October 21, 2022

• Other STI-GA Enforcement Consideration
  • FCC Action against SPs
    • If FCC removes SP from the Robocall Mitigation Database, the SP no longer qualifies for SPC token access
    • No SP removed from the database has been an authorized SP to date
  • STI-GA Discussing Improper Attestation
    • Definition of improper attestation
    • Identifying sources for information on SPs improperly attesting to calls
    • Potential coordination with Industry Traceback Group
Resource Links

• STI-GA
  • STI-GA Policy: [https://sti-ga.atis.org/resources/](https://sti-ga.atis.org/resources/)

• STI-PA
  • Service Provider & Resp Org Registration:
    • [https://authenticate.iconectiv.com/service-provider-authenticate](https://authenticate.iconectiv.com/service-provider-authenticate)
  • Authorized STI-CAs:
    • [https://authenticate.iconectiv.com/approved-certification-authorities](https://authenticate.iconectiv.com/approved-certification-authorities)
Questions?