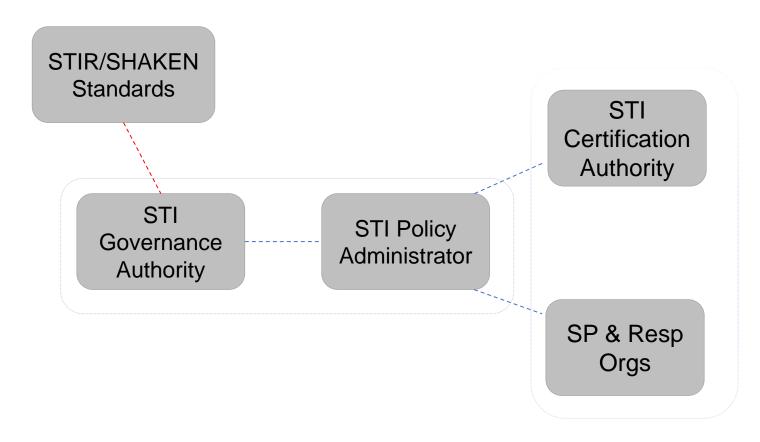


# STIR/SHAKEN Enterprise Summit 2022

Linda Vandeloop Chair, STI-GA Board Brent Struthers
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

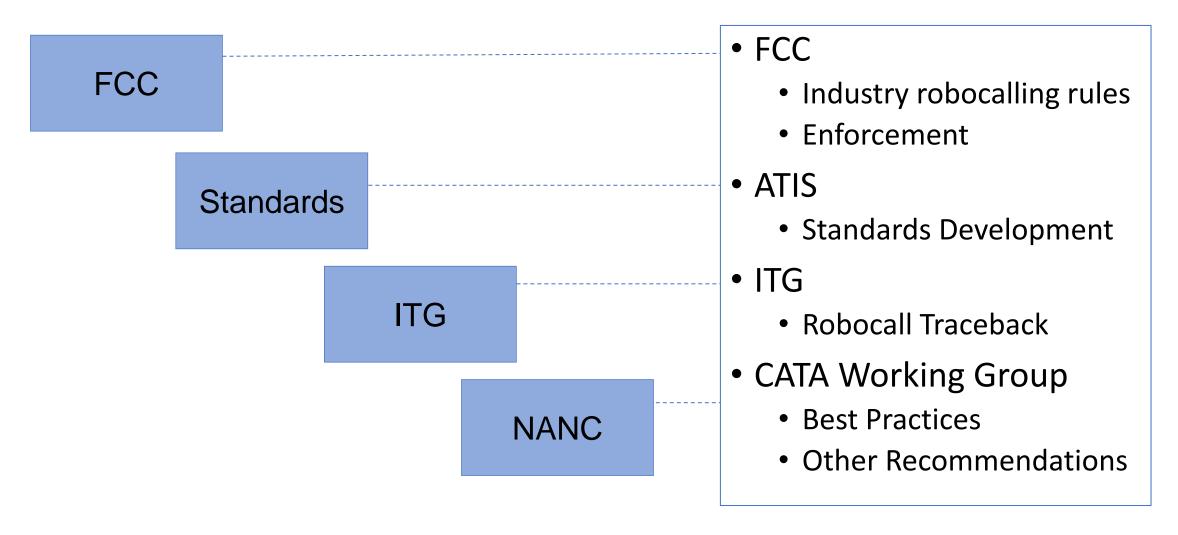


## STI-GA Board

- 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)



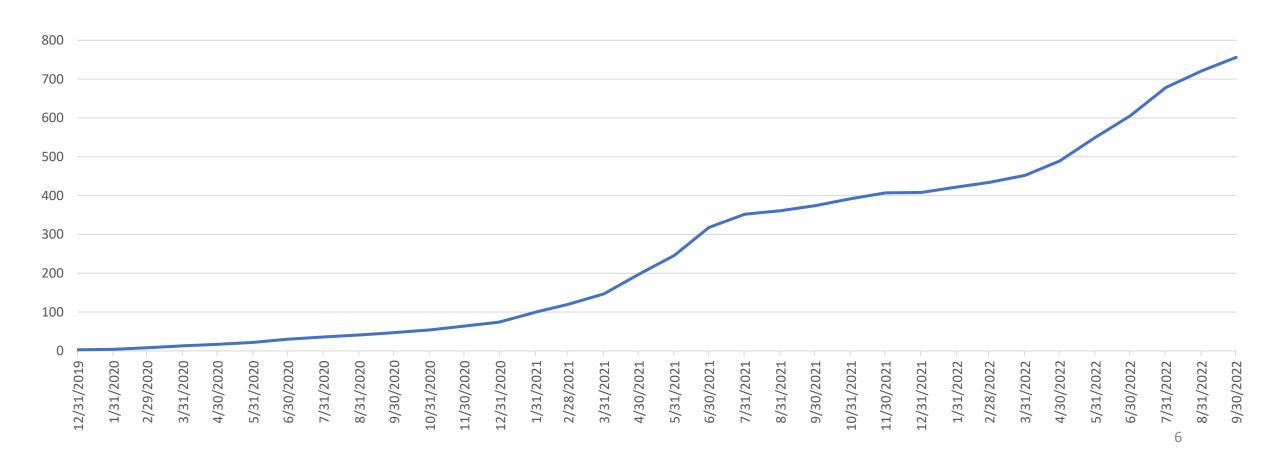
# Partners in Robocall Mitigation





# 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 3<sup>rd</sup>, 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 an 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: <a href="https://sti-ga.atis.org/resources/">https://sti-ga.atis.org/resources/</a>
  - All STI-GA Advisories & Press: <a href="https://sti-ga.atis.org/news/">https://sti-ga.atis.org/news/</a>
- STI-PA
  - Service Provider & Resp Org Registration:
    - <a href="https://authenticate.iconectiv.com/service-provider-authenticate">https://authenticate.iconectiv.com/service-provider-authenticate</a>
  - Authorized STI-CAs:
    - <a href="https://authenticate.iconectiv.com/approved-certification-authorities">https://authenticate.iconectiv.com/approved-certification-authorities</a>



# Questions?