STIR/SHAKEN Canadian Status

Canadian Secure Token Governance Authority

Establishing the GA for Canada

In early 2018 the Canadian Radio-television and Telecommunications Commission (CRTC) issued Decision 2018-32 in which the Commission directed implementation of STIR / SHAKEN in Canada to mitigate nuisance calling to Canadians including establishment of a Governance Authority.

A group of carriers, (Bell Canada, Bragg, Rogers, SaskTEL, Shaw, TELUS and Videotron-the "Founders"), all Shareholders in the Canadian LNP Consortium (CLNPC) approached CLNPC Management and suggested that there was an opportunity to leverage the CLNPC framework to establish the GA for Canada.

CLNPC Synergies

- All LECs and WSPs in Canada as directed by the CRTC are Shareholders in the CLNPC.
- CLNPC has well established external credentials, including with the regulator, as an advocate for its Shareholders.
- CLNPC has administrative and procedural processes in place which can be leveraged to minimize costs.
- CLNPC has the confidence of the industry to provide experienced, neutral leadership.

The carriers agreed to fund an opportunity assessment and development of an implementation plan.

Canadian Secure Token Governance Authority (CSTGA)

CSTGA was incorporated; an agreement was executed between the CLNPC and the CSTGA for the delivery of management and administrative support, i.e. Shared Services.

This model is cost effective and permits the Founders to leverage existing expertise.

No cross liability between the two organizations and no need to establish a separate footprint for CSTGA.

Corporate Governance

- CSTGA delivered a detailed report to the CRTC in April 2019, in which they proposed:
 - CSTGA as the GA for Canada
 - Term sheet including their conclusions wrt:
 - Eligibility
 - Cost recovery
 - Voting thresholds
 - Procurement Process
 - Role of the CLNPC

CRTC

- The CSTGA report concluded with a request that the CRTC accept the CSTGA proposals and endorse CSTGA as GA.
- CSTGA members advised the regulator that no further expense would be incurred on this project until there was direction from the CRTC.
- There has been no response to the report.

Technical Committee

- In parallel a technical committee (TC) was established to understand the STIR/ SHAKEN standards and their application in Canada.
- TC developed Canadian technical requirements largely synonymous with the US.
- TC formed the opinion that the earlier a framework to establish a cross border technical solution with the US was developed the better.
- CSTGA contracted with ATIS to assist in developing and advancing a cross border proposal.

Carrier Readiness

- Most major carriers have completed some level of internal "self signing" tests; none are involved in bilateral testing using self signed certificates.
- Carriers are actively engaged with vendors to assess their individual requirements and solutions.
- Carriers submitted a 2nd "readiness report" to the CRTC in May 2019. most carriers who responded reported December 2020 as their estimated readiness date. The report is public:

https://crtc.gc.ca/public/cisc/nt/ntre 065.pdf

Carrier readiness

- The value of STIR/ SHAKEN in nuisance call mitigation will increase as IP interconnection expands. There is presently a low level of IP interconnection in Canada, as only traffic which is IP from origination to termination is mandated for IP interconnection.
- Deployment will take time; most large carriers have complex, hybrid networks which will require multiple solutions.
- Issues such as display guidelines and delegation of certificates will require careful consideration with well planned deployments.

Related Activities

- CRTC Decision 2019-215: Establish a traceback process
 - Serial method (similar to UK)
 - Terminating carrier is traceback monitor
 - No restrictions on volume
 - 6 month trial underway, with report to go to the CRTC, December 2019

Related Activities

- CRTC Decision 2018-484:Universal Call Blocking
 - As a condition of providing voice telecommunications services, effective December 19, 2019, Canadian carriers must implement universal call blocking on calling numbers which do not conform to an established numbering plan i.e. NANP or ITU E.164.
 - Carriers must establish a redress method and track and make available "on demand" a report of UCB statistics.
 - Carriers who implement a call filtering solution are <u>exempt</u> from this obligation.