

Stephen Schmidt
Vice-President – Telecom Policy & Chief Regulatory Legal Counsel
Telecom Policy & Regulatory Affairs

(613) 597-8363 Telephone
(613) 597-8374 Facsimile
regulatory.affairs@telus.com

February 8, 2021

Filed by GCKey
CRTC reference: 8638-M75-202008953

Mr. Claude Doucet
Secretary General
Canadian Radio-television and
Telecommunications Commission
Ottawa, Ontario K1A 0N2

Dear Mr. Doucet:

Re: Application requesting that the Commission instruct the Canadian Secure Token Governance Authority to allow all LECs to participate in STIR/SHAKEN: Intervention of TELUS

1. TELUS has reviewed the application by Mitel Networks Corporation and Mitel Cloud Services Inc. (collectively, “Mitel” or the “Applicant”) dated December 21, 2020 and posted to the Commission’s website January 5, 2021. Pursuant to Rule 26 of the Canadian Radio-television and Telecommunications Commission Rules of Practice and Procedure¹, TELUS Communications Inc. (“TELUS”) hereby notifies the Commission that it wishes to be considered an intervener in the proceeding initiated by the aforementioned Application and hereby submits this Intervention.
2. In the Application, Mitel requested the following relief: “that the CRTC instruct the CST-GA to allow all TSPs to be able to implement STIR/SHAKEN by receiving certificates directly from Neustar”.² Mitel suggested that the CST-GA,³ and by extension its members, were motivated by self-interest in not making

¹ SOR/2010-277

² Application, para 21.

³ Canadian Secure Token Governance Authority

certificates available to TSPs⁴ that do not have direct access to Canadian numbering resources.

3. In principle, TELUS does not object to TSPs without their own numbers obtaining their own certificates. Allowing this may generate greater accountability of TSPs with respect to the attestation of calls that TSPs originate or bring into Canada. Availing themselves of wholesale alternatives to obtaining their own certificates (*e.g.*, delegate certificates) should be at the option of the individual TSP.
4. However, the current state of STIR/SHAKEN does not require excessive haste in making these changes. Importantly, additional Commission scrutiny of TSPs (of any type) that obtain their own tokens is required in order to prevent abuse of STIR/SHAKEN.
5. TELUS denies that it has taken any actions in the establishment of STIR/SHAKEN with the intention of creating a competitive advantage or generating new wholesale revenues by barring any class of TSPs from obtaining their own tokens.

The CST-GA is acting in the public interest

6. At the outset, TELUS objects strongly to the Applicant's suggestions that either the CST-GA or TELUS is acting out of self-interest.⁵ The CST-GA was formed by TELUS and other large TSPs who recognized that a STIR/SHAKEN governance authority was required in order to satisfy the Commission's stated expectations for STIR/SHAKEN. The limited initial membership was a reflection of the need to make decisions quickly, even though a broader membership would have spread the financial burden to others. The CST-GA has, at all times, acted

⁴ For the purpose of this Intervention, TSPs refers to Telecommunications Service Providers that offer voice service.

⁵ Application, para 19: "Indeed, it may be precisely because they wish to obtain a competitive advantage that these carriers are denying some TSPs the ability to obtain certificates from Neustar." Also, para 12b): "Additionally, we understand that Neustar, who was awarded the policy authority contract from CST-GA is actively promoting its delegate authority solution as a revenue source for local exchange carriers..."

with the best of intentions in satisfying the Commission's expectations efficiently and expeditiously, and the public will benefit from the CST-GA's achievements. The Applicant's unfounded and unsupported allegation should be disregarded.

The Applicant overstated the seriousness of the problem

7. The unavailability of certificates is unlikely to constitute a meaningful competitive advantage in the initial implementation of STIR/SHAKEN.⁶ Even with certificates, full "A-level" attestation will be limited initially to a subset of calls from all TSPs, even those TSPs with their own certificates. Moreover, in the absence of handsets compatible with STIR/SHAKEN, even full attestations will be unknown to the called party. The Applicant's suggestion that an absence of full attestation would constitute a meaningful competitive disadvantage is speculative and unsupported, at least in the short term.
8. TELUS does not question that eventually the ability to fully attest outgoing calls will become a competitive necessity, but that will only be when customers or call filtering systems recognize and begin to ignore calls that are unattested. Because this situation is unlikely to be immediate, there is no justification for the Commission to unnecessarily expedite a ruling in this proceeding.

The Commission must promote accountability

9. STIR/SHAKEN has the potential to restore integrity in caller ID (*i.e.*, the calling number displayed to the called party) but the potential for abuse also exists. TSPs will have the incentive and opportunity to provide full "A-level" attestations even when they cannot verify that the caller has a right to use the Caller ID presented, because some customers may fear that their outgoing calls will not be answered unless fully attested. Such abuse could undermine the benefits of

⁶ Application, para 19: "In addition, the TSPs that are denied access to STIR/SHAKEN, will be at a serious competitive disadvantage to the carriers that have access."

STIR/SHAKEN. The value of STIR/SHAKEN therefore depends entirely on the accountability of TSPs and the potential consequences for abuse.

10. The caller's TSP is in the best position to attest to the validity of the Caller ID transmitted and must be accountable for the attestations it provides. By virtue of technological limitations or through service agreements, the caller's TSP can either determine or be assured that the Caller ID presented by the customer is one that the customer has a right to use. By allowing all TSPs to sign their calls with their own certificates, the accountability for the attestation will be where it belongs, with the caller's TSP.
11. The delegate certificates referred to by the Applicant⁷ show promise in their ability to reduce the disruption that may be caused by STIR/SHAKEN to enterprises, governments and other large organizations. However, they have a fundamental shortcoming when used for TSPs, *i.e.*, the responsibility for certification and the potential consequences of an invalid number being attested falls to the Originating TSP,⁸ who may have no business relationship with the caller, the caller's TSP or the TNSP⁹ that provided the delegate certificate to the caller's TSP.
12. Delegate certificates are issued by a TNSP to the caller's TSP, but the caller's TSP may have service arrangements with other TSPs which allow the caller's TSP to have the calls it originates completed in a manner that satisfies its goals for cost and reliability. The TSP to which the caller's TSP sends a call is the Originating TSP. The concept of delegate certificates requires that the Originating TSP attach its own certificate to the call, staking its own reputation on the validity of Caller ID even though the Originating TSP has no way, through network arrangements

⁷ Application, paras 12, 13.

⁸ In a situation when a TSP does not have its own certificates (in this case, the caller's TSP), the caller's TSP (the TSP that provides retail service to the caller) will send calls into the PSTN through another TSP, the Originating TSP.

⁹ Telephone Number Service Provider – the TSP that provided to the caller's TSP the telephone number in question and the associated delegate certificate.

or contract, to know or be assured that it is a valid number for the caller to use.¹⁰
At the same time, the caller's TSP is shielded from accountability.¹¹

13. For STIR/SHAKEN to live up to its potential, all TSPs must be accountable for their own certifications and no TSPs must be expected to certify calls on behalf of another TSP. TSPs must get their own certificates or enter into a trust relationship with a wholesale provider who can reliably attest to the Caller ID included on calls from the caller's TSP. In this respect, TELUS agrees with the Applicant that TSPs should be able to obtain their own certificates, subject to a condition discussed below. The wholesale option (*i.e.*, obtaining delegate certificates from another TSP or other alternatives) should also remain available.

Participation of TSPs should be conditional on assurances of integrity

14. Notwithstanding TELUS' position that all TSPs should be able to obtain their own certificates, the potential for abuse suggests that TSPs should provide some reasonable assurances that they will adhere to the rules and guidelines for STIR/SHAKEN, as they may be set out or approved by the Commission. Moreover, these assurances should ensure that TSPs who abuse the system for their own gain cannot easily re-appear under a new name, which must be given serious consideration in an environment of virtual cloud-based networks operated by TSPs who may have no physical assets in Canada. Exactly what those assurances should be are not within the scope of this proceeding, but are worthy of a full public proceeding.

¹⁰ The TNSP may have the necessary assurances that the numbers are correctly because it assigned certain numbers to the caller's TSP. Other TSPs (including the Originating TSP) would not have the necessary information to make the same determination.

¹¹ This is not to say that delegate certificates or similar means cannot be used for this purpose when the Originating TSP has a trust relationship with the caller's TSP. This arrangement should be part of a competitive wholesale market. Many CLECs that have the right to get their own numbers choose to get numbers from other LECs, and it is reasonable to expect that some TSPs will choose not to get their own certificates even if they can. However, such a trust relationship is a special case that cannot be assumed.

15. It would not be unreasonable in the meantime to restrict certificates to local exchange carriers and wireless service providers, who have tariffs and tangible assets (in the form of non-exempt telecommunications facilities), and cannot easily change their identities to avoid accountability.
16. The integrity of Caller ID can only be restored if STIR/SHAKEN certificates themselves have integrity, and the Commission should not take this integrity for granted. Steps must be taken to prevent abuse of STIR/SHAKEN before its integrity is compromised.

Yours truly,

{Original signed by Stephen Schmidt}

Stephen Schmidt
Vice-President - Telecom Policy & Chief Regulatory Legal Counsel
Telecom Policy & Regulatory Affairs

Attachment
JM/jr

cc. Mitel, vmartin@telecomcounsel.com
CST-GA, Jacques.sarrazin@cstga.ca
John MacKenzie, TELUS, (780)508-2565, john.mackenzie@telus.com

* * * End of Document * * *