



Compliance and Enforcement and Telecom Decision CRTC 2019-402-2

PDF version

References: 2019-402 and 2019-402-1

Ottawa, 15 September 2020

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Rogers Communications Canada Inc. – Request for a nine-month postponement of STIR/SHAKEN implementation

*The Commission **approves** RCCI's request to extend the deadline for the implementation of STIR/SHAKEN by nine months. The extension to 30 June 2021 will apply to all telecommunications service providers.*

Background

1. In Compliance and Enforcement and Telecom Decision 2018-32, the Commission determined that telecommunications service providers that provide voice telecommunications services in Canada (collectively referred to in this decision as TSPs) should implement the STIR/SHAKEN¹ framework on the Internet Protocol (IP) voice portion of their networks by no later than 31 March 2019. In Compliance and Enforcement and Telecom Decision 2019-402, the Commission approved an extension of this deadline to 30 September 2020.
2. In Compliance and Enforcement and Telecom Decision 2018-32, the Commission also directed TSPs to submit to the CRTC Interconnection Steering Committee (CISC) every six months a report on their efforts and progress in implementing STIR/SHAKEN. CISC would then consolidate the TSPs' reports into a single report for the Commission.
3. In Compliance and Enforcement and Telecom Decision 2019-403, as part of the deployment of STIR/SHAKEN, the Commission approved the establishment of the Canadian Secure Token Governance Authority (CSTGA) as Governance Authority. The CSTGA is tasked with providing the Policy Administrator and Certificate Authority functions necessary for the implementation of STIR/SHAKEN.
4. In Compliance and Enforcement and Telecom Notice of Consultation 2019-404, the Commission called for comments on its proposal to require TSPs to implement STIR/SHAKEN as a condition of offering and providing telecommunications services

¹ STIR/SHAKEN stands for Secure Telephony Identity Revisited/Signature-based Handling of Asserted information using toKENS. It is a suite of protocols and procedures intended to combat caller identification (ID) spoofing by providing authentication and verification of caller ID information.

pursuant to sections 24 and 24.1 of the *Telecommunications Act*, effective 30 September 2020. The Commission is currently analyzing the interventions filed.

Extension request

5. The Commission received a letter from Rogers Communications Canada Inc. (RCCI), dated 29 June 2020, in which the company requested that the Commission postpone the required STIR/SHAKEN launch date by nine months to 30 June 2021, citing the following reasons:
 - the reallocation of resources during the COVID-19 crisis;
 - the need to renegotiate contracts with vendors and contractors and to reacquire financial capital for STIR/SHAKEN implementation after the disruption caused by the COVID-19 crisis;
 - the lack of voice over Internet Protocol (VoIP) interconnections between certain TSPs;
 - the fact that some technical standards relating to STIR/SHAKEN are not yet fully defined; and
 - the fact that the STIR/SHAKEN implementation date in the United States is 30 June 2021.
6. Quebecor Media Inc., on behalf of Videotron Ltd. (Videotron), and Shaw Communications Inc. (Shaw) filed letters supporting RCCI's request, substantially invoking the same reasons.
7. Although it also supported RCCI's request for an extension, the Independent Telecommunications Providers Association (ITPA) submitted that the Commission should consider whether nine months is sufficient for all TSPs – especially small ones, such as ITPA members – to be able to implement STIR/SHAKEN.

Commission's analysis and determinations

8. Although many TSPs have had to reallocate resources during the COVID-19 crisis, work on some essential aspects of STIR/SHAKEN implementation has still progressed. For instance, participating TSPs have continued to contribute to the CSTGA and the CISC Network Working Group (NTWG) during the crisis. In addition, the work done by many TSPs to enable them to handle the increase in traffic caused by the COVID-19 crisis – such as the deployment of VoIP trunks and interconnections – is actually beneficial to the effective deployment of STIR/SHAKEN. However, according to RCCI, Shaw, and Videotron, this work was completed at the expense of efforts on other critical elements of STIR/SHAKEN deployment. The Commission considers that RCCI's submission that the COVID-19 crisis had a negative impact on the STIR/SHAKEN deployment timeline is reasonable.

9. The Commission notes that in the progress reports that it requested in Compliance and Enforcement and Telecom Decision 2018-32, many TSPs considered the 30 September 2020 implementation date to be too ambitious.² Notably, smaller TSPs were concerned about their ability to meet the deadline, given their reliance on external vendors and relationships with interconnecting TSPs. Larger TSPs raised a broad range of issues, including network readiness and the status of some STIR/SHAKEN standards.
10. Regarding network preparedness, the Commission notes that the necessary software and equipment needed to upgrade TSPs' core IP voice networks for STIR/SHAKEN compliance became available later than previously expected. This delay has hindered the ability of TSPs to conduct the necessary testing required to validate the new software and equipment.
11. In addition to upgrading their own equipment, TSPs must collaborate to establish IP interconnection between each other to obtain the Session Initiation Protocol (SIP) end-to-end connectivity necessary to implement STIR/SHAKEN. While many SIP interconnections have already been established, the Commission considers that some critical links between large TSPs are still missing. Moreover, although TSPs are now testing or are about to test their own equipment, minimal inter-TSP testing has been performed at this point.
12. Therefore, from a network-preparedness point of view, the Commission considers that probably only a small portion of the IP-voice network would be able to perform authentication using STIR/SHAKEN by 30 September 2020, resulting in only a minimal percentage of calls being properly authenticated.
13. Regarding the status of the STIR/SHAKEN standards, RCCI submitted that the specific guidelines regarding call attestation and display are still in development. RCCI considers that there is a risk that premature deployment of STIR/SHAKEN without clear guidelines may result in inconsistent and erroneous authentication and display, causing a lack of trust in the system by the public. Given that a paramount aspect of STIR/SHAKEN is the correct authentication of the caller ID by the originating TSP, the Commission considers that RCCI's concern is justified, and that it would be counterproductive to launch STIR/SHAKEN before those issues are resolved.
14. Furthermore, the Commission considers that there are benefits in aligning Canadian and American STIR/SHAKEN implementation dates. This alignment would allow TSPs providing services in Canada to benefit from the technology and standards developments occurring in the United States as well as broader vendor offerings, given that the American implementation date is 30 June 2021.

² This notion is also supported by TSPs in their interventions filed in response to Compliance and Enforcement and Telecom Notice of Consultation 2019-404. The Commission is currently analyzing those interventions.

15. In Compliance and Enforcement and Telecom Decision 2018-32, the Commission considered it imperative to restore Canadians' trust in caller ID information and indicated that STIR/SHAKEN is likely the only current viable solution for IP-based voice calls to achieve this goal. The Commission reaffirms its view that there is an urgent need to act to protect Canadians against unwanted, unsolicited, and illegitimate telecommunications, such as telephone calls that fraudulently spoof caller IDs.
16. However, the Commission considers that although some TSPs may be able to partially deploy STIR/SHAKEN by 30 September 2020, only a negligible percentage of calls would receive STIR/SHAKEN authentication. In addition, there is a risk of inconsistency in both the authentication process and the display of attestation between different TSPs. The Commission therefore concludes there is a risk that maintaining the 30 September 2020 deadline (i) will result in an incomplete and unreliable deployment of STIR/SHAKEN, and (ii) will not have the required impact on combatting spoofing of caller IDs.

Conclusion

17. In light of all of the above, the Commission **approves** RCCI's request to extend the deadline for the implementation of STIR/SHAKEN by nine months to **30 June 2021**. The extension will apply to all TSPs.
18. As a result of this determination, and consistent with the Commission's determination set out in Compliance and Enforcement and Telecom Decision 2018-32, TSPs are required to submit to CISC by **4 January 2021** reports on their efforts and progress in implementing STIR/SHAKEN. CISC is required to submit the resulting consolidated report to the Commission by **29 March 2021**. Similarly, consistent with the Commission's determinations set out in Compliance and Enforcement and Telecom Decision 2019-403, the CSTGA is required to submit a progress status report by **9 December 2020**.
19. Also as a result of this determination, the Commission will take into account an effective date of 30 June 2021, rather than 30 September 2020, in its analysis of the comments filed in the Compliance and Enforcement and Telecom Notice of Consultation 2019-404 proceeding.

Secretary General

Related documents

- *Call for comments – Authentication/verification measures for caller identification for IP-based voice calls – Implementation of STIR/SHAKEN framework*, Compliance and Enforcement and Telecom Notice of Consultation CRTC 2019-404, 9 December 2019
- *Establishment of the Canadian Secure Token Governance Authority*, Compliance and Enforcement and Telecom Decision CRTC 2019-403, 9 December 2019

- *CISC Network Working Group – Status of implementation by telecommunications service providers of authentication/verification measures for caller identification*, Compliance and Enforcement and Telecom Decision CRTC 2019-402, 9 December 2019; as amended by Compliance and Enforcement and Telecom Decision CRTC 2019-402-1, 13 December 2019
- *Measures to reduce caller identification spoofing and to determine the origins of nuisance calls*, Compliance and Enforcement and Telecom Decision CRTC 2018-32, 25 January 2018; as amended by Compliance and Enforcement and Telecom Decision CRTC 2018-32-1, 24 October 2018; and Compliance and Enforcement and Telecom Decision CRTC 2018-32-2, 18 December 2018