



Telecom Decision CRTC 2026-186

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CISC Business Process Working Group – Consensus report BPRE096c – Transition to Transport Layer Security (TLS) 1.3

Summary

The CRTC Interconnection Steering Committee (CISC) Business Process Working Group (BPWG) submitted consensus report [BPRE096c](#) to the Commission. The report confirmed telecommunications service providers' migration from Transport Layer Security (TLS) 1.2 to TLS 1.3. It also outlined best practices for validating intercarrier connectivity and proposed updates to the Canadian Data Interchange Guidelines (the Guidelines).

In this decision, the Commission approves consensus report [BPRE096c](#) and version 5.1 of the Guidelines. The Commission finds that adopting TLS 1.3 will improve security and performance of data exchanges between Canadian carriers, and its implementation aligns with international best practices and ensures that Canadian carriers use the latest technology. Moreover, the updates to the Guidelines are clear and practical, will shorten the onboarding period for new connections, and promote consistency across organizations.

Background

1. The Commission has established rules and guidelines to ensure efficient electronic data exchange between local exchange carriers. The Canadian Data Interchange Guidelines (the Guidelines) set out the process for transferring local service requests and local service confirmation data.
2. Transport Layer Security (TLS) is a protocol used to secure data exchanges over the Internet. The protocol applies to Applicability Statement 2 (AS2) links, which carriers use to transfer files for local service order management, billing, directory listings, and other types of exchanges. In Telecom Decisions 2010-118 and 2016-150, the Commission approved the CRTC Interconnection Steering Committee (CISC) Business Process Working Group's (BPWG) recommendation to use TLS rather than Secure Sockets Layer (SSL) as the basic standard for transfers using AS2 links.
3. On 1 June 2016, the BPWG initiated Task BPTF0096 to address the implementation of enhanced TLS. The BPWG began working on improving TLS in 2017.

4. On 29 September 2017, the BPWG submitted consensus report [BPRE096a](#) which described the purpose of TLS using AS2 links and supported increasing intercarrier exchange security to TLS 1.3. [BPRE096a](#) also assessed the readiness of Canadian carriers to implement TLS 1.3 using AS2 links and recommended preparing for the upgrade to TLS 1.3. The Commission approved [BPRE096a](#) in Telecom Decision 2018-62 and directed carriers to prepare and budget for the implementation of TLS 1.3.
5. On 19 May 2022, the BPWG submitted a follow-up report, [BPRE096b](#), in which it recommended adopting TLS 1.3 based on updated standards from the Internet Engineering Task Force. The BPWG noted that vendors of TLS-supported equipment were beginning to phase out support for TLS 1.2. The Commission approved [BPRE096b](#) in Telecom Decision 2022-264 and directed all telecommunications service providers (TSPs) to migrate to TLS 1.3 by 30 June 2023.
6. On 12 June 2023, the BPWG requested an extension to allow TSPs to continue using TLS 1.2 until 30 September 2023, with the agreement of their trading partners. The Commission approved this extension request in a [letter](#) dated 27 June 2023.
7. TSPs completed the migration to TLS 1.3 by the extended deadline of 30 September 2023. During the migration, TELUS Communications Inc. (TELUS) proposed best practices for Canadian carriers to confirm secure data exchanges, which other BPWG participants who used them indicated they helped facilitate and expedite connectivity testing.

The Report

8. In December 2023, the BPWG submitted consensus report [BPRE096c](#) (the Report), which confirms that all Canadian carriers successfully migrated to TLS 1.3 by the 30 September 2023 deadline. The report highlights TELUS's contribution in developing best practices for testing and validating secure connections between Canadian carriers.
9. These best practices, which were incorporated into version 5.1 of the Guidelines, aim to improve the consistency and reliability of intercarrier connectivity testing. They include using standard testing procedures, coordinating testing schedules between trading partners, documenting expected TLS behaviours, and maintaining up-to-date contact information for technical teams. The best practices were found to reduce troubleshooting time and improve the overall efficiency of the TLS 1.3 migration.
10. The BPWG requested that the Commission approve both the Report and the proposed updates to the Guidelines, which include incorporating best practices for testing and validating intercarrier connectivity. If approved, the BPWG will close Task Identification Form 96 given that the associated work will be considered complete. The Report indicated that the BPWG will continue to monitor industry developments and facilitate communication between carriers through regular meetings.

Commission's analysis

11. The BPWG consists of Canadian TSPs and interconnection experts. The Commission considers that the BPWG's participation in respect of the issues raised in the Report is sufficient, reflect the general view of the industry and that no further process is necessary.
12. The Commission has reviewed the Report and considers that the migration to TLS 1.3 was completed successfully and in accordance with the Commission's directives.
13. TLS 1.3 improves security and performance compared to TLS 1.2. Its adoption aligns with international best practices and ensures that Canadian carriers use the latest technology.
14. Incorporating best practices for testing and validating intercarrier connectivity in the Guidelines is a positive development. These practices were tested during the migration to TLS 1.3 and were found to improve the speed and reliability of connectivity.
15. The Guidelines serve as a shared, industry-maintained reference for how carriers interoperate on AS2 links. The proposed updates to the Guidelines are clear and practical and reflect the consensus of a wide range of industry participants, including major carriers and independent experts. They shorten the onboarding period for new connections and promote consistency across organizations with different tools, change windows, and risk profiles.
16. The BPWG's collaborative approach and thorough documentation demonstrate a strong commitment to improving industry standards and ensuring secure data exchanges. The Report raises no concerns, and participants supported the proposed changes.
17. The Commission considers it appropriate to close Task Identification Form 96, given that the task's objectives have been met and the work has been completed.
18. The BPWG signalled its intent to continue monitoring industry developments and maintaining open communication among carriers. This ongoing engagement will help keep the Guidelines relevant and effective.

Conclusion

19. In light of the above, the Commission approves the Report and the proposed updates to the Guidelines, version 5.1, which include incorporating best practices for testing and validating intercarrier connectivity (section 3.2.4).

Secretary General

Related documents

- *Changes to the Canadian Data Interchange Guideline and migration to Transport Layer Security 1.3*, Telecom Decision CRTC 2022-264, 26 September 2022

- *CISC Business Process Working Group – Consensus report BPRE096a regarding readiness of Canadian carriers to implement enhanced Transport Layer Security via Applicability Statement 2*, Telecom Decision CRTC 2018-62, 15 February 2018
- *CISC Business Process Working Group – Consensus report BPRE093b regarding revised Canadian Data Interchange Guidelines*, Telecom Decision CRTC 2016-150, 26 April 2016
- *CISC Business Process Working Group – Non-consensus report BPRE071a – Minimum requirement for the exchange of local service request and local service confirmation data*, Telecom Decision CRTC 2010-118, 26 February 2010