Abridged

Reference: 8000-C12-201909780
SON7/22/2026-BC-1

6 August 2026

Mr. Marc Morin
Secretary General
Canadian Radio-television and
Telecommunications Commission
Gatineau, Quebec
K1A 0N2

Subject: **22 July 2026 Incident Affecting 9-1-1 Service to the Brandon Public Safety Answering Point (PSAP) in Manitoba – Post-Incident Report**

Dear Mr. Morin,

1. In accordance with the Commission's direction in Telecom Notice of Consultation CRTC 2023-39 (TNC 2023-39)[1] at paragraph 22(b), Bell Canada (Bell) hereby submits this Post-Incident Report regarding a service interruption that occurred on 22 July 2026, affecting 9-1-1 service to the Brandon PSAP in the Province of Manitoba. The Brandon PSAP is the sole PSAP supporting all 9-1-1 calling for the Province of Manitoba outside the City of Winnipeg. Between approximately 11:40 a.m. and 3:25 p.m. Central Daylight Time (CDT)[2] on 22 July 2026—a period of approximately three hours and forty-five minutes—the Brandon PSAP was unable to receive 9-1-1 calls due to two independent, concurrent infrastructure failures on the transport path serving the PSAP.

2. Bell takes its role as the provider of 9-1-1 network services in Manitoba with the utmost seriousness, and has approached this incident accordingly: this report sets out not only what occurred on 22 July 2026, but also how that failure differed from an April outage, what Bell has done in response, and how the legacy limitations at the root of both incidents will be eliminated on migration to our next-generation 9-1-1 (NG9-1-1) network. In other words, the type of errors that occurred in both instances cannot occur in an NG9-1-1 environment and Manitoba PSAPs are anticipated to have completed their migration to our NG9-1-1 network by the end of the year.

1 Telecom Notice of Consultation CRTC 2023-39, *Call for comments – Development of a regulatory framework to improve network reliability and resiliency – Mandatory notification and reporting about major telecommunications service outages.*

2 All time references in this Letter are in CDT.

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3. In accordance with section 39 of the *Telecommunications Act* (the Act)[3] and section 32 of the *Canadian Radio-television and Telecommunications Commission Rules of Practice and Procedure*,[4] certain information in this Letter is filed in confidence and is marked between number signs (#). Although we have endeavored to disclose as much as possible on the public record, the information for which confidentiality is claimed includes specific details concerning the affected central office locations and equipment, network topology, and alarming arrangements, PSAP routing and backup configurations, vendor identities, and other operational, network, and security-related information pertaining to the incident. Disclosure of this information could reasonably be expected to identify vulnerabilities, devices, or facilities that may be exploited by malicious actors, thereby posing a risk to the security, reliability, and resilience of 9-1-1 and other telecommunications services. Disclosure of such information could result in direct harm to Bell Canada and the 9-1-1 network serving the public and, accordingly, to the public interest within the meaning of section 39 of the *Act*. Bell therefore respectfully requests that this information be accorded confidential treatment by the Commission, in accordance with the procedures set out in Broadcasting and Telecom Information Bulletin CRTC 2010-961.[5] An abridged version of this Letter and the Attachment is provided for the public record.

4. The 22 July 2026 incident was caused by the occurrence of three independent failures: (i) a third-party fibre cut near # # in the City of Winnipeg, believed to be related to road construction activity in the area; and (ii) the failure of a # # serving the Brandon PSAP ; and (iii) a failure to automatically recognize these failures in a manner that would trigger routing to default call centres by originating network providers.

5. The # # failure had occurred on 21 July 2026—the day prior to the outage—and had impacted the redundancy protection serving the PSAP Because the primary transport path remained functional, the # # failure was not yet service-affecting but technicians initiated a replacement process. Technicians were dispatched on the morning of 22 July 2026 to fix the issue but unfortunately the fibre cut occurred at approximately 11:40 a.m., prior to completion of the replacement. The fibre cut removed the sole remaining transport path to the PSAP, resulting in a complete loss of 9-1-1 call delivery to Brandon.

6. Upon identification of the service impact, Bell's operations teams immediately initiated investigation and restoration procedures. One team focused on repairing the two transport issues (i.e., completing the # # replacement as well as investigating and repairing the fibre cut) while another team investigated why calls were not flowing to the default call centres. To address the latter issue, at approximately 2:30 p.m., Bell manually forced an error code to originating network providers (ONPs) to trigger their third party default call centre solutions. The automatic reroute mechanism had not triggered because # #. The routing logic involved, and the reason that no alternate route was selected, are described below. Service was fully restored to the Brandon PSAP at approximately 3:25 p.m. following the replacement of the failed # #. The underlying fibre cut was subsequently repaired at 21:50 p.m.

Filed in confidence with the CRTC

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3 *Telecommunications Act* (S.C. 1993, c. 38), https://laws-lois.justice.gc.ca/eng/acts/t-3.4/.

4 *Canadian Radio-television and Telecommunications Commission Rules of Practice and Procedure* (SOR/2010-277), https://laws-lois.justice.gc.ca/eng/regulations/SOR-2010-277/index.html.

5 Broadcasting and Telecom Information Bulletin CRTC 2010-961, *Procedures for filing confidential information and requesting its disclosure in Commission proceedings*, dated 23 December 2010, as amended in BTIB 2010-961-1, dated 26 October 2012.

7. During the incident, a total of 84 unique callers were affected across multiple originating carriers. Brandon PSAP has informed us that through their third-party vendor, # #, they were able to identify the wireless missed calls, associated call locations, and call-back numbers in real time, enabling prompt follow-up with all affected wireless callers. # #. Bell was advised by the Brandon PSAP that, to date, no critical incidents or adverse public safety outcomes have been reported in connection with the identified missed calls.

Architectural Context and Call routing

8. To provide context regarding this incident, it is helpful to outline the legacy Enhanced 9-1-1 (E9-1-1) network deployment in Manitoba. The Manitoba 9-1-1 network was originally designed and built under previous ownership prior to Bell's acquisition. Indeed, Manitoba was the first province in Canada to create and deliver a 3-digit emergency service in 1959 and launched E9-1-1 in for communities outside of Winnipeg in 1996.[6] Under that legacy deployment, the Brandon PSAP is served by a single # # at the # # which delivers calls over a transport ring interconnecting the # #, # #, and # # central offices by way of # # to the north and # # to the south.

9. In practical terms, this legacy connection relies on a ring arrangement. While that architecture includes protection mechanisms within the ring, such that a single break would normally be survivable, it does not provide the same level of geographic or facility diversity as the dual-tandem design that exists in other Bell regions. We note, however, that Manitoba PSAPs will be migrated to our NG9-1-1 network, which is anticipated to occur by the end of 2026 and, in any event, no later than March 2027, at which point they will benefit from the same redundancy as PSAPs elsewhere in Bell's territory. In addition, as further described below, we have implemented additional transport diversity as well as better anomalous call detection to help further mitigate the potential for such an outage to occur.

10. The 22 July 2026 failure is materially different from the failure that occurred on 28 April 2026. On 28 April 2026, a power failure meant that 9-1-1 calls were prevented from reaching the # # at all, and calls presented by way of # # were not automatically rerouted by originating network providers to their default call routing centre because the resulting legacy error condition was not recognized by the # # and therefore not conveyed to the # # and ONPs. This is depicted in Figure 1 below and further described in our 10 July 2026 Response to a Commission request for information:[7]

6 Government of Manitoba News Release, *Enhanced 9-1-1 Service for Rural Manitoba*, 26 March 1996, online: https://news.gov.mb.ca/news/index.html?item=22451&posted=1996-03-26.

7 See Bell Canada(CRTC)9Jun26-1 28 April 2026 Service Outage.

Figure 1: 28 April 2026NG 9-1-1 to Legacy through LSRG with a failure to route through 1st choice and receipt of error unrecognized by LSRG through 2nd routing choice given power failure at # #

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11. On 22 July 2026, by contrast, the calls were delivered successfully to the correct selective router: the # # received, accepted, and processed each call. The failure arose downstream of that switch, on the transport path # #. What the two incidents have in common is that, in each case, an automatic reroute did not occur because a legacy error condition was not recognized. The underlying error scenarios, however, were different, and are addressed separately below.

Figure 2: 22 July 2026, NG9-1-1 to Legacy through LSRG and delivery to # # through 1st choice, and unrecognized error between # # and PSAP

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12. As further context, it is helpful to describe how a 9-1-1 call reaches the Brandon PSAP under the legacy architecture, and the routing choices available if delivery fails. Calls destined for Manitoba PSAPs outside the City of Winnipeg are presented by the ONP to Bell's # #, which selects among three routing choices in sequence: (i) as the first choice, delivery through the # #, which

serves the Brandon PSAP; (ii) as the second choice, delivery through # #; and (iii) as the third choice, return of the call to the ONP for delivery either to that provider's own default 9-1-1 call routing centre or, for legacy wireline traffic, by way of Centrex-based PSTN routing to the PSAP.

13. Neither the second nor the third routing choice was triggered on 22 July 2026. The # # delivered each call to the correct # # (i.e. the # # at # # —and that switch accepted the call and handed it off for delivery. Because the # # had itself succeeded in handing the call off, the # # thought, given its legacy nature, that the call was delivered and did not receive an error in a format that it could convey back to the LSRG as a delivery failure. The # # therefore had no indication that an alternate route was required, and neither the second choice # # nor the third choice (the ONP's default 9-1-1 call routing centre or Centrex-based PSTN routing) was invoked. For the same reason, Bell's NG9-1-1 core services platform did not receive an # #. This is a failure to recognize an error code, as on 28 April 2026, but arising from a different error scenario: in April the calls could not reach the # #, whereas in July the calls reached it successfully and the error was downstream.

14. The constraints described above are characteristic of equipment of the # # generation and its limited ability to interact with IP technology. The # # is a # # of considerable vintage, as context we provide below a picture of the maintenance terminal used to access it:



15. Platforms of this era exchange a limited and largely fixed set of error conditions, and offer little scope for the automated fault detection, error-code translation, and programmable routing logic that are standard in an IP-based environment. Automating the recognition and propagation of a downstream delivery failure of the kind experienced on 22 July 2026 is, accordingly, difficult to achieve reliably in such a legacy system. Bell, like other providers, is undergoing a massive initiative to withdraw all such legacy systems from its networks including in this case by migrating our legacy 9-1-1 network to NG9-1-1.

16. As these limitations are inherent to the legacy platform, they will not persist. In fact, we note that since its launch in March 2022, our NG9-1-1 platform has experienced zero outage events and zero affected 9-1-1 calls. **Both the legacy error codes described above and the**

will be removed from the Manitoba 9-1-1 call path once the province's PSAPs have completed their migration to NG9-1-1. Although Bell has been ready to onboard providers and PSAPs onto its NG9-1-1 network since March 2022, we recognize that it is a complicated process for all stakeholders involved and that many PSAPs, including Manitoba PSAPs, are still in the process of migrating their services onto the NG9-1-1 network. **We anticipate the transition to NG9-1-1 to be completed for Manitoba PSAPs by the end of this year and, in any event, no later than March 2027.** In a fully NG9-1-1 environment, call delivery is signalled end to end over an all-IP path using standard SIP messaging, and delivery failures are recognized and acted upon automatically by way of policy-based routing rules. The error-recognition gap that prevented an automatic reroute on 22 July 2026 due to legacy limitations, and the analogous gap encountered on 28 April 2026, therefore cannot arise once migration is complete. Both of these errors have been fixed as further described below.

17. **Short-Term Mitigation**. In addition to the NG9-1-1 migration path described above, Bell has implemented immediate short-term measures to mitigate the risk of a recurrence pending migration.

- **Additional Transport Diversity:** We have added two additional routes out of the # # to improve resiliency while the NG911 transition continues. The outage occurred in the first place because we had two failures occurring at the same time – on the primary route and the redundant route. To address this problem, Bell has installed two additional diverse routes for a total of four (one primary and three redundant) routes.
- **Improved legacy error code mapping:** Adapted # # and # # to enable the detection of downstream errors as had occurred on 22 July 2026.
- **Automated Reroute Enhancements:** Effective 5 August 2026, Bell completed its implementation of an automated mitigation process to safeguard Manitoba 9-1-1 call delivery against future transport or platform failures. This enhancement utilizes active automated monitoring to instantly detect anomalous, short-duration calls . Upon detecting a suspected delivery failure, the platform automatically triggers an immediate, protective reroute of all subsequent 9-1-1 traffic destined for the affected PSAP to default call routing solutions. This automated reroute is intended to ensure continuous emergency call handling while operational teams issue stakeholder alerts, investigate the underlying network or platform issue, and perform validation testing prior to safely restoring normal routing.

18. Bell's 9-1-1 team will continue to engage directly with the Brandon PSAP and the Government of Manitoba to provide a detailed walk-through of this report, including the information submitted in confidence, so that the authorities with a genuine operational need may ask questions and follow up as appropriate. Bell was in contact with the Government of Manitoba and Brandon PSAP from the early stages of the incident and remains committed to transparent, ongoing communication regarding both the short-term mitigation measures and the NG9-1-1 migration path. Bell reiterates that it takes its responsibility as steward of 9-1-1 infrastructure serving Manitoba with the utmost seriousness and is committed to ensuring the reliability, resilience, and continuous improvement of emergency calling services for all Manitobans.

Yours truly,

[Original signed by P. Gauvin]

Filed in confidence with the CRTC

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