



Telecom Notice of Consultation CRTC 2021-404

PDF version

Reference: 8633-T264-202103704

Ottawa, 9 December 2021

Public record: 1011-NOC2021-0404

Call for comments – Hosted call handling solutions for public safety answering points on the next-generation 9-1-1 network

Deadline for submission of interventions: 24 February 2022

Deadline for submission of replies: 11 March 2022

[\[Submit an intervention or view related documents\]](#)

The current next-generation 9-1-1 (NG9-1-1) framework does not permit NG9-1-1 networks to be connected to demarcation points at sites other than public safety answering points (PSAPs). Therefore, the Commission is initiating a proceeding to examine whether hosted call handling solutions for PSAPs should be introduced in the NG9-1-1 framework, and in what manner.

As a result of this proceeding, the Commission may impose obligations on some or all telecommunications service providers, including NG9-1-1 network providers, regardless of whether they choose to actively participate in the proceeding.

Background

1. On 4 June 2021, the Commission received an application filed by the Province of New Brunswick (the application). In the application, the Province requested that the Commission clarify the policy established for the delivery of next-generation 9-1-1 (NG9-1-1) calls by incumbent¹ local exchange carriers (ILECs). Specifically, the Province sought clarification on whether ILECs may connect their NG9-1-1 networks² to demarcation points determined by the relevant 9-1-1 governing authorities³, and whether these demarcation points need not be located at public safety answering point (PSAP) premises. In its application, the Province also signaled its intent to adopt a hosted model

¹ In the application, the Province referred to ILECs as “independent local exchange carriers”. For the purpose of this notice, the term “incumbent local exchange carriers” will be used.

² In Telecom Regulatory Policy 2017-182, the Commission identified ILECs as the NG9-1-1 network providers, making them responsible for the construction, operation, and maintenance of the NG9-1-1 networks.

³ 9-1-1 governing authorities are the regional, municipal, provincial, or territorial government entities responsible for the establishment and management of local 9-1-1 services, including PSAPs and first responders.

for call handling solutions (CHS)⁴ for its PSAPs, which would require NG9-1-1 traffic to be delivered to two data centres where the CHS would be housed.

2. The majority of parties who intervened in the application supported the Province's request for clarification and its intent to adopt hosted CHS. Others raised concerns in relation to cost, security, privacy and geographical considerations, and proposed other call handling models, all of which the Commission considers out of scope given the nature of the application.

Current NG9-1-1 framework

3. In Telecom Regulatory Policy 2017-182, the Commission determined that ILECs would be responsible for building, operating, and maintaining the NG9-1-1 networks, the costs of which would form the basis of the NG9-1-1 tariffs. Accordingly, the Commission directed ILECs to connect their NG9-1-1 networks to the primary PSAPs in their operating territories. In relation to this directive, the Commission established the following definitions:
 - a. In Telecom Regulatory Policy 2017-182, the Commission defined the boundaries of the NG9-1-1 network as beginning at and including the points of interconnection between the originating networks and the NG9-1-1 networks, and ending at the demarcation points between the NG9-1-1 networks and the primary PSAPs. The Commission varied the defined boundaries following an application by the Province in Telecom Decision 2018-188 whereby the NG9-1-1 network was extended to include secondary PSAPs.
 - b. In Telecom Regulatory Policy 2017-182, the Commission defined a primary PSAP as a PSAP to which 9-1-1 calls are routed directly as the first point of contact, adding that in most cases, the primary PSAP then contacts the appropriate agency to dispatch emergency responders, but that in some cases where local authorities determine that specialized expertise is required to handle the 9-1-1 call, such as emergency medical services, 9-1-1 calls are then transferred to a secondary PSAP.
 - c. In Telecom Decision 2018-188, the Commission defined a secondary PSAP as a PSAP to which NG9-1-1 calls are transferred from a primary PSAP and which is directly interconnected to an NG9-1-1 network allowing for the receipt and display of NG9-1-1 call data.
4. Further, in Telecom Regulatory Policy 2016-165, the Commission defined the demarcation point between the 9-1-1 network and PSAP facilities as a physical boundary where the network infrastructure or hardware of the 9-1-1 service provider connects to that of the

⁴ A call handling solution deals with the receiving and processing of incoming communications traffic. Hosted solutions are managed and maintained on behalf of the PSAP by another party, such as a commercial vendor, 9-1-1 network provider, or another PSAP. For the purpose of this notice of consultation, "traffic" includes voice calls and, once NG9-1-1 is deployed, emergency requests sent by text message.

PSAP. While this definition was established in the context of Enhanced 9-1-1, the Commission determined that the definition applies equally to NG9-1-1.

Commission's analysis and determinations

5. The Commission is of the view that the Province's proposal to have the NG9-1-1 network connect to a demarcation point at a site other than a PSAP is inconsistent with the existing NG9-1-1 framework and is therefore not currently permissible.
6. With respect to the matter of the adoption of hosted CHS on the NG9-1-1 network, the Commission is of the view that the current NG9-1-1 framework did not contemplate hosted CHS and therefore does not currently support it. However, the Commission acknowledges the potential benefits of hosted CHS for PSAPs in relation to cost, procurement, maintenance and management, all of which may facilitate PSAP transition to NG9-1-1.

Issues to be examined

7. The Commission hereby initiates a proceeding into which the record of the Province's application will be transferred, to examine whether hosted CHS should be introduced in the NG9-1-1 framework, and in what manner. This proceeding will enable NG9-1-1 stakeholders⁵ as well as any other interested persons to provide their views on matters related to Commission-established definitions, interconnection requirements, costs, segregation and mixing of traffic, and reporting and monitoring, as well as requirements in terms of reliability, resiliency, security, and privacy.

Call for comments

8. The Commission invites comments on the issues identified above within the scope of this proceeding. Specific questions are outlined below. The Commission requests that each party set out its responses separately to each issue it chooses to address, but in one document, indicating which issue it is addressing at the beginning of each response. Parties with similar views are encouraged to file a joint submission.
9. As a result of this proceeding, the Commission may impose obligations on some or all telecommunications service providers, including NG9-1-1 network providers, regardless of whether they choose to actively participate in this proceeding.
10. Until such time that the Commission issues a determination as a result of this proceeding, there is no change to the deadlines contained in Telecom Decision 2021-199. Parties should take this into account when commenting on the matter.
11. The record of the Province's application will be incorporated into the record of this proceeding so that parties may provide comments.

⁵ NG9-1-1 stakeholders include NG9-1-1 network providers, local and provincial governments, originating network providers, PSAPs, and vendors.

12. The Commission requests that interveners address the following questions. All responses, whether in the affirmative or negative, must include appropriate supporting evidence and rationale.

Definition and designation of demarcation points

Q1. In Telecom Regulatory Policy 2016-165, the Commission defined the demarcation point between the 9-1-1 network and PSAP facilities as a physical boundary where the network infrastructure or hardware of the 9-1-1 service provider connects to that of the PSAP. Should the definition for demarcation points established by the Commission be modified to support hosted CHS in NG9-1-1, and if so, how?

Q2. Should the definitions of primary and secondary PSAPs established by the Commission in Telecom Regulatory Policy 2017-182 and Telecom Decision 2018-188 be modified to support hosted CHS in NG9-1-1, and if so, how?

Q3. Is it reasonable and appropriate for demarcation points to be (i) determined by the relevant 9-1-1 governing authorities, and (ii) captured as part of the NG9-1-1 agreements between the NG9-1-1 providers and the 9-1-1 governing authorities?

Q4. In the event that (i) an NG9-1-1 network provider already incurred costs as a result of connecting their NG9-1-1 network to a PSAP, and (ii) agreements between an NG9-1-1 network provider and 9-1-1 authorities result in NG9-1-1 being connected to a demarcation point at a site other than a PSAP, should the NG9-1-1 network provider be able to recover the costs associated with having connected their NG9-1-1 network at the PSAP? If so, how? If not, why?

Interconnection conditions and agreements

Q5. In Telecom Decision 2019-353, as a condition of service pursuant to section 24 of the *Telecommunications Act*, the Commission directed NG9-1-1 network providers to include certain compatibility, reliability, resiliency, and security-related requirements in their NG9-1-1 service agreements with 9-1-1 authorities, and to take reasonable measures to ensure that only i3-compliant PSAPs that are compliant with these conditions are connected to the NG9-1-1 networks.

- a. Taking into account the Commission's jurisdiction and existing legislation, do you agree that it is reasonable and appropriate for the Commission to establish mandatory interconnection conditions for entities providing hosted CHS to PSAPs to connect to the NG9-1-1 network?
- b. If you responded in the affirmative to question 5.a., what mandatory conditions in relation to geography (i.e. location of the hosted CHS provider's data centre relative to the PSAP and/or the NG9-1-1 network provider or cross-border traffic), reliability, resiliency, security, and privacy, should be met in order for an entity providing hosted CHS to PSAPs to connect to the NG9-1-1 network?
- c. If you responded in the affirmative to question 5.a., is it reasonable and appropriate for these conditions to be included in the NG9-1-1 service agreements between NG9-1-1 network providers and 9-1-1 governing authorities? If not, when and where should these mandatory conditions be captured?

Segregation and mixing of traffic

Q6. The NG9-1-1 framework does not currently contemplate the transiting of any traffic other than NG9-1-1 traffic over the NG9-1-1 network, nor does it contemplate NG9-1-1 traffic transiting over non-NG9-1-1-networks.

- a. Should non-NG9-1-1 traffic (i.e. administrative/non-emergency traffic) be allowed to transit over the NG9-1-1 network? If so, (i) how will the NG9-1-1 network providers ensure that any incremental costs for transiting this traffic are not included in the NG9-1-1 tariffs and/or paid for by the appropriate PSAPs or their 9-1-1 authorities, and (ii) what reliability and resiliency measures should be considered?
- b. Should NG9-1-1 traffic be allowed to transit over commercial lines (i.e. those between the PSAPs and the data centre housing hosted CHS)? If so, (i) how will reliability and resiliency be maintained, and (ii) what will the impact on NG9-1-1-related costs be?
- c. What impact would mixing of traffic (i.e. NG9-1-1 traffic on commercial lines or administrative/non-emergency traffic on the NG9-1-1 network) have on the promotion of calls?⁶

Q7. The Commission is contemplating establishing a three-digit abbreviated dialing code for mental health and suicide prevention services. What impact would allowing, or not allowing, administrative/non-emergency traffic on the NG9-1-1 network have on the interaction between the NG9-1-1 network and the three-digit abbreviated dialing code for mental health and suicide prevention services (for example, in the event that a call made by an individual in mental health crisis would need to be transferred to 9-1-1, or in the event that a call to 9-1-1 could be de-escalated to the mental health line)?

Reporting and monitoring

Q8. Should the Commission impose any reporting and monitoring requirements as a consequence of non-originating network providers, non NG9-1-1 network providers, and non-PSAP entities being connected to the NG9-1-1 network? Identify the information that ought to be reported, by whom, and the frequency of and/or trigger for reporting.

Procedure

13. The *Canadian Radio-television and Telecommunications Commission Rules of Practice and Procedure* (the Rules of Procedure) apply to this proceeding. The Rules of Procedure set out, among other things, the rules for the content, format, filing, and service of interventions, answers, replies, and requests for information; the procedure for filing confidential information and requesting its disclosure; and the conduct of public hearings. Accordingly, the procedure set out below must be read in conjunction with the Rules of

⁶ For the purpose of this proceeding, “promotion” refers to the act of transferring to the 9-1-1 network a non-emergency call received at a primary or secondary PSAP via a number other than 9-1-1.

Procedure and related documents, which can be found on the Commission's website at www.crtc.gc.ca, under "[Statutes and regulations](#)." The guidelines set out in Broadcasting and Telecom Information Bulletin 2010-959 provide information to help interested persons and parties understand the Rules of Procedure so that they can more effectively participate in Commission proceedings.

14. The Commission invites interventions that address the issues and questions set out above. The Commission will accept interventions that it receives on or before **24 February 2022**. Interventions must be filed in accordance with section 26 of the Rules of Procedure. Only parties that have filed interventions may file a reply to matters raised during the intervention phase. The deadline for the filing of replies is **11 March 2022**.
15. Parties are permitted to coordinate, organize, and file, in a single submission, interventions by other interested persons who share their position. Information on how to file this type of submission, known as a joint supporting intervention, as well as a [template](#) for the accompanying cover letter to be filed by parties, can be found in Telecom Information Bulletin 2011-693.
16. The Commission encourages interested persons and parties to monitor the record of this proceeding, available on the Commission's website at www.crtc.gc.ca, for additional information that they may find useful when preparing their submissions.
17. Submissions longer than five pages should include a summary. Each paragraph of all submissions should be numbered, and the line *****End of document***** should follow the last paragraph. This will help the Commission verify that the document has not been damaged during electronic transmission.
18. Pursuant to Broadcasting and Telecom Information Bulletin 2015-242, the Commission expects incorporated entities and associations, and encourages all Canadians, to file submissions for Commission proceedings in accessible formats (for example, text-based file formats that enable text to be enlarged or modified, or read by screen readers). To provide assistance in this regard, the Commission has posted on its website [guidelines](#) for preparing documents in accessible formats.
19. Submissions must be filed by sending them to the Secretary General of the Commission using **only one** of the following means:

by completing the
[\[Intervention form\]](#)

or

by mail to
CRTC, Ottawa, Ontario K1A 0N2

or

by fax to
819-994-0218

20. Parties who send documents electronically must ensure that they will be able to prove, upon Commission request, that filing, or where required, service of a particular document was completed. Accordingly, parties must keep proof of the sending and receipt of each document for 180 days after the date on which the document is filed or served. The Commission advises parties who file or serve documents by electronic means to exercise caution when using email for the service of documents, as it may be difficult to establish that service has occurred.
21. In accordance with the Rules of Procedure, a document must be received by the Commission and all relevant parties by 5 p.m. Vancouver time (8 p.m. Ottawa time) on the date it is due. Parties are responsible for ensuring the timely delivery of their submissions and will not be notified if their submissions are received after the deadline. Late submissions, including those due to postal delays, will not be considered by the Commission and will not be made part of the public record.
22. The Commission will not formally acknowledge submissions. It will, however, fully consider all submissions, which will form part of the public record of the proceeding, provided that the procedure for filing set out above has been followed.

Important notice

23. All information that parties provide as part of this public process, except information designated confidential, whether sent by postal mail, facsimile, email, or through the Commission's website at www.crtc.gc.ca, becomes part of a publicly accessible file and will be posted on the Commission's website. This includes all personal information, such as full names, email addresses, postal/street addresses, and telephone and facsimile numbers.
24. The personal information that parties provide will be used and may be disclosed for the purpose for which the information was obtained or compiled by the Commission, or for a use consistent with that purpose.
25. Documents received electronically or otherwise will be posted on the Commission's website in their entirety exactly as received, including any personal information contained therein, in the official language and format in which they are received. Documents not received electronically will be available in PDF format.
26. The information that parties provide to the Commission as part of this public process is entered into an unsearchable database dedicated to this specific public process. This database is accessible only from the web page of this particular public process. As a result, a general search of the Commission's website with the help of either its search engine or a third-party search engine will not provide access to the information that was provided as part of this public process.

Availability of documents

27. Electronic versions of the interventions and other documents referred to in this notice are available on the Commission's website at www.crtc.gc.ca by using the public record number provided at the beginning of this notice or by visiting the "Consultations and hearings – Have your say!" section, then selecting "our applications and processes that are open for comment." Documents can then be accessed by clicking on the links in the "Subject" and "Related Documents" columns associated with this particular notice.
28. Documents are also available at the following address, upon request, during normal business hours.

Les Terrasses de la Chaudière
Central Building
1 Promenade du Portage
Gatineau, Québec
J8X 4B1
Tel.: 819-997-2429
Fax: 819-994-0218

Toll-free telephone: 1-877-249-2782
Toll-free TTY: 1-877-909-2782

Secretary General

Related documents

- *Establishment of new deadlines for Canada's transition to next-generation 9-1-1*, Telecom Decision CRTC 2021-199, 14 June 2021
- *CISC Emergency Services Working Group – Consensus report on matters related to compatibility, reliability, resiliency, and security for next-generation 9-1-1*, Telecom Decision CRTC 2019-353, 22 October 2019
- *New Brunswick 9-1-1 Bureau, on behalf of public safety answering point organizations – Application to review and vary Telecom Regulatory Policy 2017-182 regarding next-generation 9-1-1 services*, Telecom Decision CRTC 2018-188, 28 May 2018
- *Next-generation 9-1-1 – Modernizing 9-1-1 networks to meet the public safety needs of Canadians*, Telecom Regulatory Policy CRTC 2017-182, 1 June 2017
- *Matters related to the reliability and resiliency of the 9-1-1 networks*, Telecom Regulatory Policy CRTC 2016-165, 2 May 2016
- *Filing submissions for Commission proceedings in accessible formats*, Broadcasting and Telecom Information Bulletin CRTC 2015-242, 8 June 2015
- *Filing of joint supporting interventions*, Telecom Information Bulletin CRTC 2011-693, 8 November 2011
- *Guidelines on the CRTC Rules of Practice and Procedure*, Broadcasting and Telecom Information Bulletin CRTC 2010-959, 23 December 2010