



Telecom Notice of Consultation CRTC 2023-156

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Public record: 1011-NOC2023-0156

Call for comments – Enabling direct 9-1-1 and 9-8-8 calls from multi-line telephone systems

Deadline for submission of interventions: 22 June 2023

Deadline for submission of replies: 7 July 2023

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

Summary

Every day, Canadians stay or work in hotels, office buildings, hospitals, or other locations where a multi-line telephone system (MLTS) is used. With an MLTS, calls within the system can be made easily, but to reach an outside line may require the additional step of dialing a prefix, such as 8 or 9. Thus, when someone needs to make a 9-1-1 emergency call from an MLTS, they may not be able to dial 9-1-1 directly. This can cause confusion, uncertainty and delay. Furthermore, when an emergency call is made from an MLTS, crucial information that is normally transmitted along with a 9-1-1 call, such as the caller's location and number, may not be sent.

This situation poses a risk of serious consequences and is a public safety concern for Canadians. Therefore, the Commission is initiating a proceeding to determine what steps it can take to address those issues and related matters.

As a result of this proceeding, the Commission may impose obligations on providers of any telecommunications services that involve an MLTS, including Canadian carriers and resellers. The Commission may also implement rules that would impact any organization that uses an MLTS.

Thus, the Commission encourages Canadians, industry stakeholders including telecommunications carriers and resellers, and anyone who may be affected by this proceeding to actively participate, so that they can have input into rules with which they may have to comply.

Introduction

1. A multi-line telephone system (MLTS) is a telephone central exchange system often used by organizations that require a large number of telephone lines. It enables users within an organisation to share the same telephone number, to call outside lines, and

also to call each other. Most Canadians have made telephone calls over an MLTS, whether from a hotel or hospital, or an office or school.

2. When someone in need of emergency services makes a 9-1-1 call from an MLTS, they face a variety of issues. The public service answering point (PSAP) that receives the call also faces issues. These are due mainly to two factors.
3. First, to make a call outside the organization, an MLTS generally requires the caller to dial a prefix, such as 8 or 9, before dialing the external phone number. This includes 9-1-1 calls. In an emergency situation, the need for a prefix can cause confusion. Is a prefix needed? If so, what is the prefix? That sort of uncertainty can cause delay when help is urgently needed, and can have serious consequences for public safety.
4. Second, in most cases an MLTS does not send crucial 9-1-1 call information, including the caller's telephone number and location, along with the emergency call. When a person dials 9-1-1 from their home telephone or cellphone, their physical location and telephone number are typically sent along with the call to the PSAP that will dispatch help. This does not always happen with a 9-1-1 call from an MLTS.
5. Specifically, MLTSs can impact 9-1-1 service in the following ways:
 - denying or delaying connection to 9-1-1 service due to user error or confusion;
 - delaying response due to incorrect routing of a call to the wrong PSAP; or
 - providing incorrect or no location data, which can affect the routing of calls and the quality of location data available to 9-1-1 call-takers when they dispatch emergency responders.
6. Furthermore, it is anticipated that, when the recently mandated 9-8-8 service for emergency mental health care and suicide prevention is implemented, users of that service will face similar issues.

Background

7. Because the functions of an MLTS are generally limited to the switching of telecommunications services, standalone MLTS technology is considered an exempt transmission apparatus per paragraph 2(1)(a) of the *Telecommunications Act* (the Act). As a result, the Commission does not have direct authority to regulate MLTS hardware or software, and must anchor its authority to the services that are provided through the use of those technologies.

8. In Telecom Decision [2022-265](#), the Commission set out determinations, based on a consensus report from industry experts,¹ to raise awareness such that people working or staying in buildings that are equipped with an MLTS would be able to dial 9-1-1 directly and obtain a timely emergency response. These included (i) publishing a list of best practices on the Commission's website; (ii) directing telecommunications services providers (TSPs) to inform MLTS owners/operators of the best practices through direct messaging and by updating their service agreements; and (iii) encouraging stakeholders to implement the best practices.
9. In the same decision, the Commission stated its view that, because of the significant number of people who reside or work where an MLTS is deployed, simply encouraging the adoption of MLTS best practices may not be sufficient to meet the Commission's objectives (i) to increase the safety of Canadians by giving them the best access to emergency services through world-class telecommunications networks; and (ii) to use standards-based solutions that allow for flexibility and to strive for national consistency in their application.²
10. The Commission therefore indicated its intention to launch a proceeding to gather and assess the views of Canadians and industry stakeholders, including carriers and resellers, on further steps the Commission can take to address MLTS issues in the Canadian 9-1-1 environment.³

Introduction of 9-8-8 service

11. In Telecom Regulatory Policy [2022-234](#), the Commission determined that it would be appropriate to introduce a three-digit code to provide access to mental health crisis and suicide prevention services, and that 9-8-8 would be the code used. TSPs are to implement the changes required for the introduction of 9-8-8 service either by 30 November 2023, or no more than six months after a 1-8XX number has been assigned for the routing of 9-8-8 calls, whichever is later. The Commission did not require all of the same functionality with respect to the 9-8-8 number that is required for 9-1-1. For example, the location of someone dialing 9-8-8 is not to be automatically forwarded to the person answering the call.
12. It is anticipated that when 9-8-8 becomes available, Canadians attempting to dial 9-8-8 will face many of the same issues that affect 9-1-1 calls made from an MLTS, as will the mental health and suicide prevention call centres answering those calls. Those issues include, but are not limited to, delayed or denied connections to the 9-8-8 service and incorrect routing to the appropriate call centre. For that reason, consideration of 9-8-8 services is within the scope of this proceeding.

¹ *Proposal to Best Manage Multi-line Telephone Systems (MLTS) in the Canadian Enhanced 9-1-1 (E9-1-1) or Next Generation 9-1-1 Environment* ([ESRE0074b](#))

² Telecom Decision 2022-265, paragraph 24

³ *Ibid.*, paragraph 25

The need to fill the regulatory gap

13. Given the importance of 9-1-1 and 9-8-8 services to the health and physical safety of Canadians, the Commission's primary goal in initiating a proceeding is to move beyond voluntary rules or encouragements, and towards legally enforceable rules. This is not a situation where the Commission can target helping most Canadians most of the time. Rather, the Commission must strive for a universal regime that makes it possible for every person in Canada to dial 9-1-1 or 9-8-8 directly, without having to dial a prefix, no matter what phone they are calling from.
14. The Commission acknowledges jurisdictional concerns that the Emergency Services Working Group of the CRTC Interconnection Steering Committee (ESWG) expressed in the previously mentioned report. For example, the ESWG noted that the Commission cannot set technical standards, or require the equipment to be configured in a certain way by the MLTS manufacturer.
15. However, the Commission does have the power to impose legally enforceable conditions of service on Canadian carriers under section 24 of the Act. Under section 24.1 of the Act, it can impose conditions, including those relating to access to emergency services, on the offering and provision of any telecommunications service by any person other than a Canadian carrier. The latter would include any reseller of telecommunications services, including institutions and businesses such as hotels and universities.⁴
16. Furthermore, the Commission has previously imposed conditions of service that make Canadian carriers, or anyone else providing telecommunications services, responsible for including certain obligations or protections in their contracts with customers who themselves may not be directly subject to the Commission's obligations.⁵ Such a condition could possibly assist where MLTS equipment that is not being used to offer or provide a telecommunications service is connected to the network of a Canadian carrier or reseller.

The proceeding

17. In light of the above, the Commission hereby initiates a proceeding in order to assess the extent to which, if at all, it should establish legally enforceable regulatory

⁴ The Commission explored the application of section 24.1 of the Act to different entities in Telecom Regulatory Policy [2019-354](#). While the Commission did not impose the obligation on such resellers to register with the Commission, it did state that such resellers would not be exempt from abiding by the Commission's regulations in general and those relating to consumer safeguards in particular.

⁵ See, for example, [Telecom Regulatory Policy 2017-11](#).

measures to address issues encountered in accessing 9-1-1 and 9-8-8 from an MLTS. These issues include, but are not limited to

- direct dialing;
- proper routing of calls; and
- the provision of location information suitable for dispatching emergency responders.

18. The proceeding will enable Canadians and industry stakeholders to provide their views on matters that include roles and responsibilities, MLTS service configurations, notification requirements, and applicable deadlines. Stakeholders include not only carriers and resellers of telecommunications services, PSAPs, and mental health and suicide prevention call centres, but also entities that provide telecommunications services involving MLTSs who may not normally see themselves as telecommunications service providers.

19. The ESWG has implemented a communications program informing many groups of this proceeding. Also, MLTS equipment manufacturers are reaching out to their customers, resellers and partners.

Call for comments

20. The Commission invites comments on the issues identified above within the scope of this proceeding. Specific questions are set out below. The Commission requests that each party set out its responses separately for each question that it chooses to address, but in one document, indicating which question it is addressing at the beginning of each response. Parties with similar views are encouraged to file a joint submission.

21. As a result of this proceeding, the Commission may impose obligations on Canadian carriers and on any person offering or providing a telecommunications service that involves an MLTS, regardless of whether or not they choose to actively participate in this proceeding.

22. All responses, whether in the affirmative or negative, shall include appropriate supporting evidence and rationale.

Questions

Q1. Considering the best practices outlined in the appendix to Telecom Decision 2022-265 (also found in the appendix to this notice), as well as other potential best

practices, what legally enforceable obligations should the Commission impose to ensure the health and physical safety of Canadians when they use an MLTS?

Q2. With respect to each obligation you believe should be imposed, address the following questions:

- a. What are the benefits to Canadians of imposing the obligation?
- b. On whom should the Commission impose the obligation: Canadian carriers, any person offering and providing telecommunications service, or both? What challenges might service providers face in implementing the obligation?
- c. Should the obligation apply in the same way to 9-1-1 calls and 9-8-8 calls?
- d. When should the obligation apply: to the existing base of installed MLTSs or only to new MLTS installations as of a certain date? (Keep in mind the 9-8-8 service launch currently scheduled for November 2024.)

Q3. Based on the fact the Commission has the power to impose legally enforceable conditions of service on Canadian carriers and resellers under sections 24 and 24.1 of the Act:

- a. What should be the role of carriers and resellers in enforcing the new rules?
- b. Is there any other action the Commission can take, within the scope of its authority, to achieve its intended outcome of ensuring the health and physical safety of Canadians making emergency calls within an MLTS?

Policy direction and objectives

23. When examining the issues considered in this proceeding, the Commission must consider whether the outcomes will contribute to the policy objectives set out in section 7 of the Act, as well as whether its determinations are consistent with the 2023 Policy Direction.⁶

Procedure

24. 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 Procedure and related documents, which can be found

⁶ *Order Issuing a Direction to the CRTC on a Renewed Approach to Telecommunications Policy*, SOR/2023-23, 10 February 2023

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.

25. The Commission invites interventions that address the issues and questions set out above. The Commission will accept interventions that it receives on or before **22 June 2023**. 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 **7 July 2023**.
26. 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](#).
27. 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.
28. 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.
29. 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.
30. 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

31. 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.
32. 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.
33. 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

34. 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.
35. 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.
36. 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.

37. 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

38. Links to interventions, replies and answers filed for this proceeding, as well as other documents referred to in this notice, are available on the Commission's "[Consultations and hearings: have your say](#)" page.

39. Documents are available upon request during normal business hours by contacting:

Documentation Centre
Examinationroom@crtc.gc.ca
Tel.: 819-997-4389
Fax: 819-994-0218

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

Secretary General

Related documents

- *CISC Emergency Services Working Group – Consensus report ESRE0074b – Proposal to Manage Multi-line Telephone Systems in the Canadian Enhanced 9-1-1 or Next-Generation 9-1-1 Environment*, Telecom Decision CRTC 2022-265, 26 September 2022; as amended by Telecom Regulatory Policy CRTC 2022-265-1, 1 December 2022
- *Introduction of 9-8-8 as the three-digit abbreviated dialing code for mental health crisis and suicide prevention services and Northwestel Inc.'s application for modified implementation of ten-digit local dialing*, Telecom Regulatory Policy 2022-234, 31 August 2022
- *Review of the reseller registration obligation*, Telecom Regulatory Policy CRTC 2019-354, 24 October 2019
- *Application of regulatory obligations directly to non-carriers offering and providing telecommunications services*, Telecom Regulatory Policy CRTC 2017-

11, 17 January 201; as amended by Telecom Regulatory Policy CRTC 2017-11-1, 10 July 2017; and Telecom Regulatory Policy CRTC 2017-11-2, 17 July 2018

- *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.

Appendix to Telecom Decision CRTC 2023-156

Multi-line Telephone System Best Practices

The Emergency Services Working Group (ESWG) of the CRTC Interconnection Steering Committee has undertaken extensive research regarding the applicable laws and practices regarding multi-line telephone systems (MLTS) in Canada and the United States, and created a list of best practices regarding the use of MLTS for 9-1-1 services. Because Canada does not have legislation governing MLTS similar to that of the United States, the MLTS configuration practices that the list provides are very important for Canadian MLTS owners, operators, providers, and/or resellers. These best practices ensure that 9-1-1 calls are received locally with accurate location information. They result from the ESWG report, *Proposals to Best Manage Multi-line Telephone Systems (MLTS) in the Canadian Enhanced 9-1-1 (E9-1-1) Environment*,⁷ which was approved in Telecom Decision [2022-265](#), and were originally set out in the appendix to that decision.

The following list of stakeholder-specific best practices will be updated as required.

For telecommunications service providers (TSPs)

1. The ESWG recognizes that some 9-1-1 network providers offer private switch-automatic location information (PS-ALI) or equivalent service solutions, including equivalent next generation 9-1-1 (NG9-1-1) service to manage customer name and address information, and encourages those entities that do so, to continue to do so.
2. TSPs and applicable resellers should provide services that enable MLTS providers, resellers, owners, and operators to access local 9-1-1 systems in alignment with all MLTS best practices.

For MLTS owners, operators, providers and/or resellers

1. Accessing 9-1-1 Services
 - 1.1. Dialing (without requiring any prefix or code) to 9-1-1 from any MLTS should be implemented as part of the provisioning of the service, where technically feasible.
 - 1.2. In cases where the MLTS dial plan uses a dialing prefix, or dialing prefixes, for regular calls (e.g., local, domestic long distance, and international long distance), the dial plan should be set up to reach 9-1-1 with or without the existing dialing prefix.

⁷ [Assessment report ESRE0074](#)

1.3. MLTS calls should be routed directly to the PSAP without being directed to a central internal answering position such as a security desk, receptionist, or operator.

2. Caller Location Information and 9-1-1 Call Routing

2.1. MLTS owners, operators, providers, and/or resellers should work with their TSPs to assign a unique automatic number identification (ANI) for identifying the location of each fixed endpoint or group of co-located devices used to contact 9-1-1. This could be accomplished through an automated or manual process leveraging the existing ANI/ALI procedures of the incumbent local exchange carrier (or NG9-1-1 equivalent).

2.2. MLTS owners, operators, providers, and/or resellers should work with their TSPs to ensure that sufficient location details are made available to public safety answering points (PSAPs) and the 9-1-1 system to assist in quickly ascertaining an accurate location and enable direct routing of 9-1-1 calls from fixed endpoints.

2.3. MLTS owners, operators, providers, and/or resellers should configure systems where possible to

2.3.1. provide an ANI assigned to an accurate location when the location of the caller is known, or

2.3.2. provide the default location associated to the local MLTS, or

2.3.3. default to the nomadic voice over Internet Protocol 9-1-1 call processing if the location is not fixed or cannot be determined.

2.4. The phone number provided to the PSAP should be dialable from outside the MLTS, allowing the PSAP to call the endpoint back if necessary.

3. Awareness and Notification

3.1. When someone connected to an MLTS dials 9-1-1, notifications should be issued to on-site or off-site personnel with the relevant information, including who called, when they called, and from where they called. Notification should occur in parallel and without interrupting or altering the call path to 9-1-1.

3.2. Notifications should be issued to on-site personnel trained in providing direction to first responders so that they get to the site of the emergency quickly.

4. MLTS Implementation

4.1. MLTS owners, operators, providers, and/or resellers should include end user educational materials explaining risks and benefits, so that they can ask

appropriate questions and make informed decisions on deployment. These include

- 4.1.1. the risks and benefits of provisioning accurate location information for use when 9-1-1 is dialled; and
 - 4.1.2. any risks associated with requirements for prefix dialing.
- 4.2. MLTS owners, operators, providers, and/or resellers should accurately program and test MLTS to deliver and display information required by the appropriate PSAP, including ANI and dispatchable location.
 - 4.3. MLTS owners, operators, providers, and/or resellers should install and maintain systems with the same level of 9-1-1 service that other users connected directly to the public switched telephone network (PSTN) receive. The following information should be included with the 9 1-1 call:
 - 4.3.1. an appropriate callback number to reach the calling party such as a direct inward dialing (DID) number or internal extension, or front desk, in the event a DID number or internal extension is not accessible;
 - 4.3.2. specific accurate location of the 9-1-1 caller; and
 - 4.3.3. additional information about the caller's location (such as building name or number, floor, section or room number) to better direct responders to the caller's specific location.
5. Plan for the Future
 - 5.1. The ESWG recommends that MLTS owners, operators, providers, and/or resellers begin planning for NG9-1-1 by discussing plans with their MLTS vendors to make additional data available to PSAPs. These discussions should take into consideration that the framework and timelines for additional data (provision, transmission, and access) in Canada are currently in the planning stages.