



## Telecom Circular CRTC 2008-2

Ottawa, 28 July 2008

### Information bulletin

#### **Emergency service obligations of nomadic local VoIP service providers related to determining the location of a 9-1-1 caller**

1. The purpose of this Information bulletin is to summarize the emergency service obligations of nomadic local voice over Internet Protocol (VoIP) service providers related to determining the location of a 9-1-1 caller.

#### **Background**

2. There are two types of 9-1-1 service: basic and enhanced. Basic 9-1-1 service operates by routing 9-1-1 calls to a specialized emergency call-answer centre – known as a Public Safety Answering Point (PSAP) – that has been designated to respond to 9-1-1 calls for a specific geographic area. An agent at the PSAP, after determining the nature of the emergency, connects the 9-1-1 caller to the required emergency services agency (police, fire, and/or ambulance). While the PSAP agent typically sees the caller's telephone number, he or she does not have the caller's location information. It is therefore imperative for basic 9-1-1 service that the caller communicate his or her location to the PSAP agent.
3. Enhanced 9-1-1 (E9-1-1) service provides all the capabilities of basic 9-1-1 service as well as certain additional features, such as Automatic Location Information (ALI). ALI ensures, among other things, that the PSAP agent automatically obtains the 9-1-1 caller's location information.
4. Nomadic local VoIP service is provided over the Internet and, therefore, a subscriber can get access to telephone services from any location by using a high-speed Internet connection. Consequently, nomadic local VoIP service providers are not able to automatically detect whether a subscriber is using its service from the address the subscriber has provided (the registered service address) or from some other location. As such, if a subscriber relocates and does not update his or her registered service address, a nomadic local VoIP service provider using this address will not be providing the correct location information about the subscriber making the 9-1-1 call.
5. In Telecom Decision 2005-21, the Commission noted that no comprehensive solution yet existed that would ensure the delivery of accurate ALI for 9-1-1 calls placed using nomadic local VoIP service. As a result, the Commission directed Canadian carriers supporting nomadic local VoIP services to implement an interim solution that would provide a level of 9-1-1 service, in areas where 9-1-1 service is available, that is functionally comparable to basic 9-1-1 service. The Commission also directed Canadian carriers, as a condition of providing telecommunications services to nomadic local VoIP service providers, to include in their service contracts or other arrangements with these service providers the requirement that the latter also abide by the direction to implement an interim solution.

6. The interim solution that the Commission considered would provide benefits similar to basic 9-1-1 service for nomadic local VoIP service was described by the Commission at paragraph 60 of Telecom Decision 2005-21 as one that "routes 9-1-1 calls directly to a third-party call centre. There, agents answer the call, *verbally determine the nature of the emergency and the location of the caller*, and transfer the call to the appropriate PSAP or emergency services agency." [Emphasis added].<sup>1</sup>

### **Emergency service obligations related to determining the location of a 9-1-1 caller**

7. Telecom Decision 2005-21 established that in order for nomadic local VoIP service providers to provide 9-1-1 service that is functionally equivalent to basic 9-1-1 service, the primary means by which a 9-1-1 caller's location is to be ascertained is by the third-party call centre verbally determining the caller's location. This is the only way to ensure that the location of the 9-1-1 caller is accurately established given the current limitations of nomadic local VoIP service.
8. It follows from the above that where a 9-1-1 call is disconnected before the 9-1-1 caller's location can be verbally determined, a third-party call centre operator must attempt to call the 9-1-1 caller back.
9. While a registered service address may be used to confirm a 9-1-1 caller's location, it should not be used as the exclusive means to establish a 9-1-1 caller's location unless it is not possible to verbally determine a 9-1-1 caller's location. Where a caller cannot communicate his or her location or where the call is disconnected and contact with the 9-1-1 caller cannot be re-established, it would be appropriate, at that point, to use the registered service address to establish a 9-1-1 caller's location.
10. In summary, the following main emergency service obligations flow from Telecom Decision 2005-21 in relation to determining the location of a 9-1-1 caller using nomadic local VoIP service:
  - a) the primary means of identifying the location of a 9-1-1 caller is by verbally determining the caller's location;
  - b) if a 9-1-1 call is disconnected before the operator can verbally determine a caller's location, the operator must attempt to call back in order to determine the caller's location; and
  - c) the registered service address should be used only when the 9-1-1 caller cannot communicate his or her location or when a 9-1-1 call is disconnected before the 9-1-1 caller's location can be determined, and the operator cannot re-establish contact with the caller.

Secretary General

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<sup>1</sup> This solution, including the requirement to verbally determine a 9-1-1 caller's location, was again described by the Commission in Telecom Decision 2007-44, at paragraph 10.

## Related documents

- *Routing of fixed/non-native and nomadic VoIP 9-1-1 calls to public safety answering points*, Telecom Decision CRTC 2007-44, 15 June 2007
- *Emergency service obligations for local VoIP service providers*, Telecom Decision CRTC 2005-21, 4 April 2005

*This document is available in alternative format upon request, and may also be examined in PDF format or in HTML at the following Internet site: <http://www.crtc.gc.ca>*