

City of Mississauga

# Corporate Report



11.5

Date: January 24, 2022

To: Chair and Members of General Committee

From: Jodi Robillos, Commissioner of Community Services

Originator's files:

Meeting date:  
February 23, 2022

## Subject

**Next Generation 9-1-1 (NG9-1-1) Information and Update**

## Recommendation

That the Corporate Report entitled "Next Generation 9-1-1 Information and Update" dated January 24, 2022 from the Commissioner of Community Services be received for information.

## Executive Summary

- Canadian 9-1-1 services have not kept up with technological developments and wireless communications.
- Next-generation 9-1-1 (NG9-1-1) is a new system that will replace the current 9-1-1 infrastructure to address the changing needs of emergency communications and service delivery.
- It will enable digital information, such as text, videos and photos, to be sent from the public to the 9-1-1 communication centre.
- Existing 9-1-1 systems must be completely prepared to provide NG9-1-1 voice services by March 1, 2022 with text service timelines to follow upon Canadian Radio-television and Telecommunications Commission (CRTC) review.
- The new system will also help dispatchers better locate people calling 9-1-1 from cellphones.
- MFES is actively working with CRTC's Emergency Services Working Group (ESWG) and have ensured that all new technologies being procured and implemented will be NG9-1-1 compliant including the New Computer Aided Dispatch (CAD) System.

## Background

Canadian 9-1-1 services have not kept up with technological developments and wireless communications. It will be incumbent on the Public Safety Answering Point (PSAP) to update its infrastructure in order to accommodate the new system.

The Canadian Radio-television and Telecommunications Commission (CRTC) governs the technology implementation and is the regulatory body for telecommunications service providers that supply the networks needed to direct and connect 9-1-1 calls to emergency call centres. They have mandated that networks must be ready to provide NG9-1-1 voice services by March 2022 followed by NG9-1-1 text messaging services.

## Comments

The changes are driven by legislation and regulations such as the CRTC NG-911 Regulations, Bill 75, and the 9-1-1 Everywhere in Ontario Act. The new proposed standards identify the rules and regulations by which Canadian 9-1-1 services must comply.

Next-generation 9-1-1 (NG9-1-1) is a new system that will replace the current 9-1-1 infrastructure to address the changing needs of emergency communications and service delivery. It will enable digital information, such as text, videos and photos, to be sent from the public to the 9-1-1 communication centre. Some of the advantages of this system will be:

- Mitigate the reliance on aging infrastructure, and to take advantage of new and innovating technologies such as sending of photos, videos and live streaming.
- It will increase the ability for interoperability between agencies.
- Increased reliability of providing accurate, automatic location data particularly if call is dropped.
- Improved response times by providing more accurate locational data. This will improve emergency responders' ability to locate incidents.
- Improved call handling and transferring between agencies minimizes call processing times.
- Improved situational awareness for responders – visuals of an emergency scene prior to arrival will assist in developing an action plan and determining resource needs.

The new system will also help dispatchers better locate people calling 9-1-1 from cellphones. The current system uses cell towers to approximate a caller's location to the nearest intersection (triangulation based on latitude and longitude from the cell phone location), which could be within a few hundred metres. But if a caller doesn't know where they are or is unable to speak, the response time and administration of critical care can be delayed.

CRTC's Emergency Services Working Group (ESWG) is developing the infrastructure. The group includes industry experts, equipment vendors, network providers, PSAPs, ECCs (Public

Safety Answering Points and Emergency Communications Centre), vehicle telematics companies (like OnStar), Emergency Response Agencies and other interested parties.

Peel Regional Police (PRP) are the primary Public Safety Answering Point (PSAP) and therefore MFES is dependent upon PRP having completed their upgrades to move to NG9-1-1 and then facilitate the decommissioning of the existing infrastructure.

Each of the agencies will ensure their technology and processes will be compatible with the standardized NG9-1-1 framework. MFES is actively working with CRTC's Emergency Services Working Group (ESWG) and have ensured that all new technologies being procured and implemented will be NG9-1-1 compliant including the New Computer Aided Dispatch (CAD) System.

The following are the key required compliance dates:

Item	Compliance Date
NG9-1-1 network providers are ready to provide NG9-1-1 voice capabilities	March 1, 2022
Implementation of real time text capabilities	Still TBD by the CRTC
Decommissioning of existing 9-1-1 network	March 2025

## Financial Impact

The total Capital cost for the project is \$571,313 of which MFES is responsible for \$302,219 (52.9%) which is the proportionate cost of the Joint Fire Communications Centre. No additional funds are requested as this is currently funded through the Computer Aided Dispatch (CAD) project PN 16257. Operating costs relating to software support, maintenance and warranties will be approximately \$185,000 annually to be included as part of the annual budget in Cost Center 23200.

## Conclusion

MFES is working with partner organizations, such as Peel Police, to identify the steps required to make the transition. This will be provide tremendous opportunities both for emergency service providers as well the public. These changes will assist in keeping pace with technology and ensure the continued safety of the community.



Jodi Robillos, Commissioner of Community Services

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