

Non-Competitive Contract with Comtech Solacom Technologies Inc. for the Provision of Software and Hardware, Installation and Configuration of Guardian Next Generation 9-1-1 and Related Maintenance Services

Date: July 7, 2026

To: General Government Committee

From: Chief, Toronto Paramedic Services, and Chief Procurement Officer

Wards: All

SUMMARY

The purpose of this report is to request authority to negotiate and enter into an agreement with Comtech Solacom Technologies Inc. (Solacom) for the provision of software, hardware, installation and configuration of Guardian Next Generation 9-1-1 (NG9-1-1) call taking console system and related maintenance services in the amount of \$3,754,157 net of all applicable taxes and charges (\$3,820,230 net of HST recoveries) for a period of one (1) year from the date of award with the option to renew for four (4) additional one (1)-year periods. Toronto Paramedic Services' Central Ambulance Communication Centre (CACC) uses Guardian NG9-1-1 as the main telecommunications console that integrates telephone lines, various radio channels and internal intercom system.

Toronto Paramedic Services (TPS) acquired and implemented Solacom Technologies' solution competitively through Request for Proposal Doc2218877112 in 2021 to deploy a Next Generation 9-1-1 (NG9-1-1) emergency communications platform. The solution was implemented to meet NG9-1-1 standards and enhance public emergency communication services in an increasingly wireless and mobile environment.

In light of rapid technological advancements and the evolving landscape of cyber threats, it is imperative for TPS to enhance the cybersecurity of the Guardian NG9-1-1 system to minimize potential external threats. As public safety infrastructure becomes increasingly digital and interconnected, the risk of sophisticated cyberattacks such as ransomware, data breaches, and denial of service incidents has grown substantially. The Guardian NG9-1-1 system is a mission-critical platform, responsible for the seamless delivery of emergency calls, and response to life-threatening emergencies.

Given the proprietary architecture of the Solacom call handling system, third-party cybersecurity applications cannot be safely deployed due to the risk of incompatibility,

disruption of essential functions (such as audio transmission), and the complexity of configuration and testing. The vendor restricts integration to ensure operational integrity, making Solacom the only viable provider for this solution. Furthermore, this procurement will facilitate a State of Good Repair (SOGR) upgrade of Solacom's backend infrastructure, scheduled for the coming year, which is essential for maintaining resilience against potential threats. By strengthening cybersecurity, TPS will proactively mitigate operational downtime, safeguard sensitive data, ensure compliance with regulatory standards, and maintain uninterrupted service for all stakeholders.

In addition, the CACC handles emergency and non-emergency paramedic calls in Toronto, supported by a Backup Ambulance Communications Centre (BACC) that activates during disruptions to maintain operations. The current BACC lacks adequate workspace, prompting a planned relocation and expansion to increase its capacity from 27 to 40 workstations. Only Solacom Guardian consoles are compatible with the proprietary Solacom Guardian system, and the expansion will require Guardian NG9-1-1 consoles to ensure operational efficiency and to meet CACC standards.

Non-competitive procurements may be undertaken where both the proposed procurement and supplier can be justified in good faith based on an exception set out in City of Toronto Municipal Code, Chapter 195, Procurement. This procurement will be proceeding under the exception related to compatibility where Comtech Solacom Technologies Inc., and the City have determined in good faith that both the proposed procurement and the selected supplier, along with the terms and conditions of the contract, are beneficial to the City (Chapter 195, Procurement, Section E).

City Council approval is required in accordance with the requirements of Municipal Code Chapter 195, Procurement, where the current request exceeds the Chief Procurement Officer's authority of the cumulative five year commitment limit under Article 7, Section 195-7.3(D) of the Procurement By-law or exceeds the threshold of \$500,000 net of Harmonized Sales Tax allowed under staff authority as per the Toronto Municipal Code, Chapter 71, Financial Control, Section 71-11(A).

RECOMMENDATIONS

The Chief, Toronto Paramedic Services, and the Chief Procurement Officer recommend that:

1. City Council authorize the Chief, Toronto Paramedic Services, to negotiate and enter into an agreement with Solacom Technologies Inc., for the provision of software, hardware, installation and configuration of Guardian Next Generation 9-1-1 call taking console system and related maintenance services in the amount of \$3,754,157 net of all applicable taxes and charges (\$3,820,230 net of HST recoveries) for a period of one (1) year from the date of award with the option to renew for four (4) additional one (1) year periods, on terms and conditions satisfactory to the Chief, Toronto Paramedic Services, and in a form satisfactory to the City Solicitor.

FINANCIAL IMPACT

The total potential cost of this contract, including all option years identified in this report and a 30% contingency allowance, is \$3,820,230 net of HST recoveries, as detailed in Table 1, which provides a breakdown of costs by contract year and between capital and operating funding sources.

Funding has been included in Toronto Paramedic Services 2026-2035 Capital Budget and Plan under CAM081-02/CAM070-01 and in the 2026 Operating Budget under B33100 – GL 5050302/5050301. Should all option years be exercised, additional gross operating funding of approximately \$240,000 will be required in 2028, with minor incremental operating funding adjustments anticipated through 2031. The associated costs will be fully funded by the Central Ambulance Communications Centre (CACC) agreement with the Province and therefore will have no net operating budget impact to the City. Required gross budget adjustments will be included for consideration through future Operating Budget submissions.

Table 1: Financial Impact Summary of Recommended Contract (Net of HST Recoveries):

	WBS Element/ Cost Centre - Cost Element	Cyber Security	BACC Site Expansion	SOG Hardware Refresh	Total
Initial Year Sept. 01 to Dec. 31, 2026	CAM081-02/ CAM070-01 – 5050302/301	\$118,096	\$288,622	\$433,666	\$840,384
Initial Year Jan. 01 to Aug. 31, 2027	CAM081-02/ CAM070-01 – 5050302/301	\$236,189	\$577,245	\$867,333	\$1,680,767
Option Year 1 Sept 01, 2027 to Aug 31, 2028	B31100/ 5050302/301	\$216,421	\$107,854	\$0.00	\$324,275
Option Year 2 Sept. 01, 2028, to Aug. 31, 2029	B31100/ 5050302/301	\$216,421	\$108,173	\$0.00	\$324,594
Option Year 3 Sept. 01, 2029, to Aug. 31, 2030	B31100/ 5050302/301	\$216,421	\$108,508	\$0.00	\$324,929
Option year 4 Sept. 01, 2030, to Aug. 31, 2031	B31100/ 5050302/301	\$216,421	\$108,860	\$0.00	\$325,281
Total		\$1,219,969	\$1,299,262	\$1,300,999	\$3,820,230

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

At its meeting on September 23, 2020, the City's Bid Committee authorized the award of a contract to Solacom Technologies Inc., for the Non-exclusive Supply of a

Non-Competitive Contract with Comtech Solacom Technologies Inc.

COMMENTS

Toronto Paramedic Services serves a population of over 3 million residents and receives more than 375,000 calls annually with an annual increase of approximately 2-5% each year. The initial emergency access point to the City of Toronto's Paramedic Services is through its Central Ambulance Communications Centre (CACC), supported by an off-site Backup Ambulance Communication Centre (BACC). The CACC provides a continuous, 24/7 emergency communications environment including a secondary answering point for 9-1-1 calls, ambulance and paramedic dispatching, inter-agency communication, hospital destination assignment and referral services via Health811 and the Toronto Community Crisis Service.

In 2021, Toronto Paramedic Services acquired and implemented Solacom Technologies' solution through a competitive Request for Proposal (RFP) process under Doc2218877112 resulting in the issuance of Purchase Order 6051974, to deploy a Next Generation 9-1-1 (NG9-1-1) emergency communications platform. The solution was implemented to meet NG9-1-1 standards and enhance public emergency communication services in an increasingly wireless and mobile environment. To mitigate operational downtime risks and maintain service continuity, this procurement will support advancement in the areas outlined below.

Cyber Security Enhancement

The Solacom's Guardian Next Generation 9-1-1 (NG9-1-1) technology solution was implemented by Toronto Paramedic Services in June 2022. The legacy 9-1-1 system was replaced with a modern emergency communications platform to comply with NG9-1-1 standards and enhance public emergency communication services in an increasingly wireless and mobile environment. Following the implementation phase, Toronto Cyber Security undertook a comprehensive review and recommended further system enhancements.

Due to the proprietary nature of the Comtech Solacom call handling system and its tightly controlled operating environment, alternate third-party cybersecurity applications cannot be deployed without significant risk. The configuration and testing required to integrate non-vendor solutions are complex and time-intensive, and improper implementation could disrupt core system functionality, including blocking audio paths. Given the mission critical role of the call handling system and the potential operational and legal impacts of failed call delivery, Comtech Solacom restricts the use of third-party applications, making it the only viable vendor for this solution.

SOGR Hardware Refresh:

The Guardian system was implemented in June 2022 and is subject to the vendor-recommended hardware lifecycle management program. To ensure uninterrupted system reliability, performance, security, and continued vendor support, the underlying hardware infrastructure requires a refresh every five years. Based on this lifecycle, the next hardware refresh is anticipated in June 2027 to maintain operational readiness and

support the ongoing delivery of critical emergency communication services. This specialized hardware refresh is only available from Solacom.

Backup Ambulance Communication Centre Site Expansion:

The Central Ambulance Communication Centre (CACC), which under normal circumstances serves as the main call centre for call receiving, dispatching, and processing of emergency and non-emergency calls for paramedic responses across the City of Toronto, is supported by a Backup Ambulance Communications Centre (BACC). In the event of a power outage or any disruption that impacts public safety and the normal operation of the CACC, the BACC is activated, and staff are deployed to the BACC to ensure that all functions typically carried out at the primary site continue safely.

The current BACC lacks adequate workspace, prompting a planned relocation and expansion to increase its capacity from 27 to 40 workstations. The Solacom Guardian system is proprietary and, therefore, only Solacom Guardian consoles are compatible. This expansion will require Guardian NG9-1-1 consoles to maintain operational efficiency, ensure dispatcher familiarity, and to meet CACC standards.

Adopting a console platform from a different manufacturer would require the complete replacement of current consoles to ensure ongoing technical compatibility and consistent operations throughout. Such a change would result in significant costs for staff retraining and system integration. By maintaining the Guardian NG9-1-1 consoles, the city avoids these additional costs and continues to benefit from previous investments in infrastructure and uninterrupted 9-1-1 operations.

The Fair Wage Office has reported that the recommended supplier, Comtech Solacom Technologies Inc. have indicated that they have reviewed and understand the City's Fair Wage Policy and Labour Trade requirements and have agreed to comply fully.

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SIGNATURE

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