

THE REGIONAL MUNICIPALITY OF YORK
POLICE SERVICES BOARD

REPORT OF THE CHIEF OF POLICE

24 SEPTEMBER 2008

Purchase of Radios

RECOMMENDATION

1. That the Board authorize the purchase of up to 63 Motorola XTL 2500 mobile radios, and up to 78 Motorola Astro Digital XTS 2500 portable radios, along with ancillary equipment, from Motorola Canada Inc. at a value not to exceed \$419,171.00 including all applicable taxes; and
2. That the Chief be authorized to execute the contract with Motorola Canada Inc., subject to approval of the Region's Legal Services as to form and content.

SYNOPSIS

York Regional Police's current inventory of Spectra mobile radios and MTS2000 portable radios was purchased between 1993 and 2000. During that period, 240 Motorola Spectra mobile radios and MTS2000 portable radios were purchased for use in York Regional Police vehicles and to equip officers on foot patrol and other duties. More recently, York Regional Police has purchased newer models of mobile and portable radios which will continue to be used for the foreseeable future. Police officers are required by York Regional Police Procedure LE-002 and Section 6(1) of the Police Services Act, Adequacy Standards Regulation to be equipped with two way radio communications equipment prior to going on patrol. Many of these radios are operated 24 hours a day, 365 days a year and often under very challenging conditions. They have begun to deteriorate and have exceeded their expected service life. In addition, both models of radio are no longer supported by Motorola and it is increasingly difficult to obtain replacement parts. For these reasons, it is necessary to replace them with new units. Only Motorola products can be used with the Motorola Smartnet II Simulcast Trunking Radio System operated by York Regional Police.

FINANCIAL IMPLICATIONS

Funds in the amount of \$401,400.00 for radio equipment exist in the 2008 Operating and Capital Budgets for this purchase.

The number of units being replaced has increased from budgeted quantities due to the decreased cost of portable and mobile radios. The last purchase of the new type of radios was in 2007 and, since that time, the cost per unit has decreased by 9.9 percent. The proposed purchase of radio equipment for 2008 is planned as follows:

Radio Type	Number of Units	Unit Price (incl. P.S.T. + G.S.T.)	Total Cost
Mobile XLT Model 2500	63	\$3,353.75	\$211,286
Portable	72	\$2,582.22	\$185,926
Portable (encrypted)	6	\$3,660.90	\$21,965
Total	141		\$419,171

The cost of this purchase is \$400,624, net of the GST rebate, therefore, falling within the approved budget.

BACKGROUND

Since 1993, York Regional Police has operated a Smartnet II Simulcast Trunking Radio System manufactured by Motorola. The Motorola Smartnet II Simulcast Trunking Radio System is a proprietary, software controlled system which will be supported by Motorola until 2014 and it is expected to remain in operation until that time. In order to be fully compatible with our current Smartnet II Simulcast Trunking Radio System, both mobile and portable radios must be supplied by Motorola.

The voice radio system is the most critical communication system required for the delivery of service to the public. Although most call dispatching now takes place over the data radio system, voice radio is the essential communication medium relied upon during emergent operational incidents. In particular, police officers are totally reliant on this system in situations such as suspect apprehension pursuits, high risk vehicle stops, foot pursuits and any task in which officers must be deployed on foot. For the purposes of ensuring officers safety in high risk violent situations the Emergency Response Unit and Canine Unit have been equipped with portable radios that have an encryption capability. The voice radio system is often an officer's only means of summoning assistance or reporting upon a critical situation where time is of the essence.

York Regional Police has purchased system compatible high quality radio equipment built specifically for public safety applications from Motorola since 1993. A large number of the original radios purchased between 1993 and 2000 continue to be in use today. Of the original 240 Spectra mobile radios purchased, 182 remain in service, of which 77 per cent were manufactured in 1993. One hundred and thirty-nine MTS2000 portable radios purchased between 1993 and 2000 also remain in service.

In 2004, Motorola ceased to provide support or parts for the Spectra mobile radio and the production of the MTS2000 portable radio ceased in 2005. Other than batteries and some cables, Motorola no longer stocks parts for the MTS2000. Despite the lack of support and available parts, York Regional Police has successfully maintained these unsupported mobile and portable radios in serviceable condition by cannibalizing other radios for parts. This practice, which has ensured that full value has been realized from the initial purchase, cannot be continued indefinitely and therefore new replacement radios must be purchased.

The current Motorola Smartnet II Trunking Radio System, of which there are many in use by public safety organizations around the world, will itself reach end of life in 2014. The propriety analog technology upon which it is based is now outdated and is already being replaced primarily by digital Internet Protocol (IP) systems based upon the new P25 Radio Systems standards developed jointly by the Association of Public Safety Safety Communications Officials International (APCO), the National Association of State Telecommunications Directors (NASTD), the United States National Communication System (NCS) and the Telecommunications Industry Association (TIA).

The P25 Radio System Standard is an open standard designed to ensure that different vendor's equipment is capable of interoperating on a P25 core system designed in compliance with the standard. The adoption of the P25 Standard will ensure that public safety organizations, including York Regional Police, will not be tied to any single vendor in the future. To ensure that the greatest value is realized from further investment in radios to be used on the existing system it is important that new radios are both backwards compatible with the existing propriety Motorola Smartnet II System and compliant with the new P25 Standard.

In order to achieve these aims, it is recommended that the Spectra mobile radios be replaced with Motorola XTL 2500 mobile radio and that the Motorola MTS2000 portable radio be replaced with the Motorola Astro Digital XTS 2500. Both radios are fully backwards compatible with the Motorola Smartnet II Simulcast Trunking Radio System and are also compatible with the new P25 Standard. Reliable portable and mobile radio communication is critical for both officer safety and the effective delivery of service to the public. This purchase will ensure that the oldest radios are replaced and that a sufficient stock is available to replace radios that fail.

Armand P. La Barge, O.O.M.
Chief of Police

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