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Item No. 12.1.3

Halifax Regional Council
November 13, 2007

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:

Dan English, Chief Administrative Officer

Geri Kaiser, Deputy Chief Administrative Officer - Corporate Services and Strategy

DATE: November 6, 2007

SUBJECT: **Withdrawal from Information & Communication Technologies (ICT) Reserve Q321**

ORIGIN

This report originates from staff. A reserve withdrawal is required to fund unforseen improvements to the voice repeater system to complete Metro Transit's Vehicle Tracking and Communications project.

RECOMMENDATION

It is recommended that:

1. Council authorize an increase of $145,799 (including net HST) to Capital Account CHA00160 (Vehicle Tracking and Communications) to fund the replacement of Metro Transit's voice radio repeater system and select mobile radios and bus antennas with funding to be provided from the Information and Communications Technologies (ICT) Reserve (Q321) as outlined in the Budget Implications section of this report.

2. Council authorize a withdrawal of $145,799(including net HST) from reserve account Q321, Information and Communications Technology Reserve.

3. Nova Communications be awarded the contract as the sole source to provide the equipment and labour as detailed in the discussion section of this report, at a total cost of $145,799 (including net HST).

BACKGROUND

The Information & Communication Technologies (ICT) Reserve (Q321) Business Case was approved by Regional Council in May 2006. The reserve was developed to provide a mechanism to capture savings generated by information or communication technology improvements and updates. Funds are to be used to support future maintenance, upgrade, and replacement requirements of information or communication systems.

The "Application of Funds" section of the ICT Reserve Business Case clearly lists the eligible uses for this reserve as:

1) Future Information and Communications Technology infrastructure projects that are consistent with HRM's ICT strategies. ICT infrastructure projects encompass enterprise data networks, radio, wireless broadband, telephone, and fibre optic cable. Priority would be given to projects that reduce current operating costs;
2) Radio maintenance expenditures that exceed annual budgetary allocations;
3) Radio user equipment replacement programs;
4) Occasional specialized services intended to optimize system configurations and minimize operating costs, such as network, telecommunications or billing consultants (excluding software application development consultants).

An ineligible expense would be new equipment expenditures due to expanded requirements or enterprise software applications.

The voice repeater system is a critical component of Metro Transit's Vehicle Tracking and Communications (VT&C) project. Phase 1 of the VT&C project provides Go-Time for 20 Link buses and AVL for 300 operations vehicles. Phase 2 provides Go-Time for conventional buses. Phase 1 was awarded to Aliant in January of 2006 in the amount of $1,804,589; Phase 2 was awarded to Aliant in July 2007 in the amount of $1,800,000. The original scope of both phases of the VT&C system was predicated on re-use of the existing equipment, including on-bus mobile radios and antennas, and on re-use of the central site repeaters, tower, antenna, and filtering equipment. There are no remaining project funds available to pay for the unforeseen voice repeater system changes identified below.

DISCUSSION

Metro Transit is in the process of upgrading its Go-Time system. The Go-Time system provides departure information to travellers and allows Transit to manage the operation of the bus fleet. Testing during the implementation of this new Go-Time system has revealed deficiencies in the existing voice radio system. It has been Transit's intention to continue using their existing voice radio system infrastructure that allows control staff to speak to operators, however, performance impacting deficiencies have been identified that necessitate corrective measures be implemented to assure predictable and reliable operation of the voice radio system. The corrective measures entail the procurement of new repeaters and antenna system components and replacement of bus antennas. These enhancements will support Transit's operations for the next 10 to 15 years.

Portions of the existing fixed antenna system are over 20 years old and are in need of replacement due to deterioration from weather; and filtering equipment cannot be efficiently configured to accommodate a previously licenced but unused frequency.

Although the bus antennas are approximately 12 years old, they do not perform efficiently at the licenced but previously unused frequency. The new Go-Time system will take advantage of this previously unused frequency to allow two controllers to independently and simultaneously manage the fleet. Due to the increasing fleet size, it has become necessary for Transit to staff two controller positions at peak times to manage the fleet. Also, due to the extended distance routes and the use of fibre glass roof buses that degrade the performance of the antennas, it has become necessary to optimize the voice system coverage for safety and operations.

Nova Communications has been an integral supplier to the Vehicle Tracking & Communications project. The use of Nova Communications as a sole source to address these issues assures compatibility between each of the 4 voice system components: voice mobile radios, mobile radio interface electronics, repeater infrastructure, and dispatch consoles. The use of a third party supplier (other than Nova) to install these infrastructure upgrades would potentially introduce difficulties in trouble shooting and maintaining the assured compatibility of all system components.

The equipment required to rectify the voice communications issues includes: one fixed antenna, cable, connectors, multicoupling (to allow multiple repeaters to be connected a single antenna), five repeaters, one hundred sixty bus antennas, and the labour to commission these changes.

Details of the proposed expenditure are provided below:

- 5 Repeaters $48,500
- Multicoupling $14,000
- Antenna, cable, connectors, racks $8,790
- Miscellaneous radio repairs $3,937
- 160 Bus antennas $24,000
- 20 voice mobile radios and accessories $25,338
- Design, coverage predictions $9,600
- Installation, commissioning $6,800

Note: Costs exclude net HST.

BUDGET IMPLICATIONS

Following is a summary of the changes to Capital Account CHA00160 (Vehicle Tracking and Communications):

Cumulative Unspent Budget:	$ 162,732
Plus: Funding from Reserve Q321:	$ 145,799
Less: Award of Contract to Nova Communications:	- $ 145,799
Balance of Account:	$ 162,732

Therefore, there is no net change to Capital Account CHA00160.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating budget, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation. This report does not comply with HRM's Approved Capital Budget and therefore, if approved, will increase the 2007/08 Approved Capital Budget and unbudgeted withdrawals from reserves.

ALTERNATIVES

There are no recommended alternatives

ATTACHMENTS

N/A

A copy of this report can be obtained online at http://www.halifax.ca/council/agendasc/cagenda.html then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

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