



PO Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Item No. 11.1.1

**Halifax Regional Council
November 10, 2009**

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:

A handwritten signature in cursive script, appearing to read "Dan English".

Dan English, Chief Administrative Officer

A handwritten signature in cursive script, appearing to read "Wayne Anstey".

Wayne Anstey, Deputy Chief Administrative Officer - Operations

DATE: October 19, 2009

SUBJECT: **Award - Purchase of Revenue Collection System and Backup
Communication Systems for Metro Transit Ragged Lake Transit Centre,
Sole Source**

ORIGIN

The approved 2009/10 Capital Budget
Award of RFP No. 08-360, Design Build - Ragged Lake Transit Centre (RLTC), approved by HRC
on March 10, 2009, agenda item 10.1.1.

RECOMMENDATION

It is recommended that Halifax Regional Council:

- 1) In accordance with the Sole Source Policy (Administrative Order 35, Section 8(11), award the Sole Source Purchase of voice radio repeater systems and antenna equipment in the amount of \$159,469.04 (net HST included) to Nova Communications with funding from Capital Account CMX01229 - Ragged Lake Transit Centre FFE per the Budget Implications Section of this report.
- 2) In accordance with the Sole Source Policy (Administrative Order 35, Section 8(11), award the Sole Source Purchase of revenue collection systems in the amount of \$232,922.11 (net HST included) to Garival with funding from Capital Account CMX01229 - Ragged Lake Transit Centre FFE per the Budget Implications Section of this report.

BACKGROUND

Council awarded the improvements to the voice repeater system to Nova Communications on November 13, 2007 as part of the completion of the Vehicle Tracking and Communications project. 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.

On August 1, 2006, Council awarded RFP #05-074, Fare Collection System - Metro Transit to Garival Inc. to provide the fare boxes in all of the fleet as well as the collection receivers for the fare boxes. Since this date every new bus has been outfitted with a Garival system.

DISCUSSION

The new Ragged Lake Transit Centre (RLTC) communication room will be constructed as a backup to the existing Burnside Transit Centre. The backup system at RLTC will allow Metro Transit the ability to shut down the Burnside system to perform the annual maintenance which will extend the life of the communication system. The architecture of the system must be identical, 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. Currently, Metro Transit is not able to complete annual maintenance on the communication system as buses are deployed 365 days a year.

The Revenue Room for all fares collected through Metro Transit will be centralized at the new Ragged Lake Transit Centre. To ensure seamless transfer of fares collected at both facilities to the Revenue Room, each facility requires to have the same collection equipment. Additional receivers, housing, frames, and electronic keys are required to ensure the system runs smoothly as receivers are transported between facilities.

BUDGET IMPLICATIONS

Based on the quoted sole source price from Nova Communications, of \$159,469.04 including net HST, and the quoted sole source price from Garival for \$232,922.11 including net HST, funding is available in Capital Account CMX01229 - Ragged Lake Transit Centre FFE. The budget availability has been confirmed by Financial Services.

Award - Purchase of Revenue Collection System and Backup Communication Systems for Metro Transit Ragged Lake Transit Centre, Sole Source

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Budget Summary: Capital Account CMX01229 - Ragged Lake Transit Centre FFE

Cumulative Unspent Budget	\$ 2,018,999.25
Less: Sole Source Purchase - Nova Com.	\$ 159,469.04
Less: Sole Source Purchase - Garival	\$ 232,922.11
Balance	\$ 1,626,608.10

The Voice Radio Repeater Systems (Nova Communications) was estimated at \$160,000.

The Revenue Collection System (Garival) was estimated at \$247,750.

The complete FFE project was estimated in the Approved 2009/10 Capital Budget at \$2.2M.

The balance of funds will be used for ongoing implementation of Furniture, Fixtures, and Equipment for the new Ragged Lake Transit Centre.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

There are no recommended alternatives.

ATTACHMENTS

Attachment A - Sole Source Policy, Administrative Order 35, Section 8 (11)

Attachment B - Quote from Nova Communications

Attachment C - Quote from Garival Inc.

Attachment D - Council Report, August 1, 2006, RFP #05-074, Fare Collection System - Metro Transit

Attachment E - Council Report, November 13, 2007, Withdrawal from Information & Communication Technologies (ICT) Reserve Q321

**Award - Purchase of Revenue Collection System and Backup Communication Systems for
Metro Transit Ragged Lake Transit Centre, Sole Source
Council Report**

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November 10, 2009

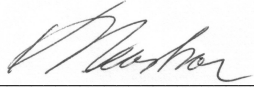
A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Darren Young, Project Manager, Facility Development - Buildings, 490-4903

Report Approved by: 
Terry Gallagher, Manager Facility Development IAM, 476-4067

Report Approved by: 
Phillip Townsend, Director Infrastructure & Asset Management, 490-7166

Report Approved by: 
Cathie O'Toole, Director of Finance, 490-6308

Report Approved by: 
Ken Reashor, Acting Director, Transportation & Public Works, 490-6637

Procurement Approval by: 
Anne Feist, Operations Manager, Procurement, 490-4200

**Administrative Order 35
Procurement Policy Section 8 (11)
Sole Source/Single Source Purchases**

(11) Sole Source/Single Source Purchases: The terms and conditions of a sole source/single source purchase shall be negotiated. A sole source/single source purchase occurs:

- (a) To ensure compatibility with existing products, facilities or service, to recognize exclusive rights, such as exclusive licences, copyright and patent rights, or to maintain specialized products that must be maintained by the manufacturer or its representative.
- (b) Where, for technical reasons, there is an absence of competition and the goods or services can be supplied by a particular supplier and no alternative or substitute exists.
- (c) For the procurement of goods or services the supply of which is controlled by a supplier that is a statutory monopoly.
- (d) For the purchase of goods on a commodity market.
- (e) For work to be performed on or about a leased building or portions thereof that may be performed only by the lessor.
- (f) For work to be performed on a property by a contractor according to the provisions of a warranty or guarantee held in respect of the property or the original work.
- (g) For the procurement of a prototype of a first good or service to be developed in the course of and for a particular contract for research, experiment, study or original development, but not for any subsequent purchases.
- (h) For the procurement of a good or service for testing or trial use.
- (i) For the purchase of goods under exceptionally advantageous circumstances such as bankruptcy or receivership, but not for routine purchases.
- (j) For the procurement of original works of art.
- (k) For the procurement of goods intended for resale to the public.
- (l) Where the Municipality has a rental contract with a purchase option and such purchase option could be beneficial to the Municipality.
- (m) Notwithstanding anything in this policy, where a purchase is determined by Council to be fair and reasonable and is made from a nonprofit corporation supported by the Municipality, such a purchase may be made as a single source purchase.
- (n) Where items are offered by sale by tender, auction or negotiation such purchase will be deemed to be a single source purchase and the CAO may authorize the submission of a bid or the conduct of negotiations where the CAO determines the purchase to be clearly in the best interest of Halifax Regional Municipality.
- (o) Where goods or consulting services regarding matters of a confidential or privileged nature are to be purchased and the disclosure of such matters through an open tendering process could reasonably be expected to compromise government confidentiality, cause economic disruption or otherwise by contrary to the public interest. Purchases of this nature must be approved by the CAO
- (p) Where compliance with an open tendering process may interfere with the Municipality's ability to maintain security or order or to protect human, animal or plant life or health.



Radio Dispatch Communications System

Project Scoping Document

**Satellite Transit Garage
Ragged Lake
Industrial Park**

**Infrastructure & Asset Management
Facility Development – Buildings
PO Box 1749, Halifax, Nova Scotia
B3J 3A5**

**October 13, 2009
Version 1.0**



1 Introduction

Nova Communications is pleased to present a Project Scoping Document for Metro Transit's Satellite Garage Dispatch Communication Systems to be located in the Ragged Lake Industrial Park.

This Communication System is an extension of the Radio Dispatch Communication System that presently is operating today at Metro Transit's 200 Ilsley Avenue Radio Dispatch Communication Centre.

Metro Transit is providing public transportation service in most of the HRM area. They operate two terminals in the Burnside Industrial park utilizing a fleet of some 320 buses in addition to special buses equipped for handicapped people.

To provide passenger and driver security, allow for route scheduling or handle non-scheduled events Metro Transit is employing a computerized radio voice system with limited data and video recording system in each bus.

Buses are dispatched from the central dispatch & operation control office in Burnside. Automatic Vehicle Location (AVL) is used to track operating buses and maintain an electronic schedule "Estimated Time of Arrival" (ETA) posted on the web page for public access.

Video cameras monitor the inside and partially the outside of each bus. The video is recorded and stored for future reference.

2 Requirements

It is Nova Communications understanding that HRM Metro Transit requires a Radio Dispatch Communication System for their Transit Garage located in Ragged Lake Industrial Park.

This Radio Dispatch Communications System is to be the same as the Metro Transit's Ilsley Avenue Radio Dispatch Communications System, meaning if there is a disaster or a natural gas leak at their Ilsley Avenue location, the Ragged Lake System will mirror the Ilsley Avenue System. Dispatch operators will work with the same equipment with out any changes to their daily routine.

HRM Metro Transit has requested Nova Communications to supply a Radio Dispatch Communications System for their Ragged Lake Transit Garage.

A new Metro Transit terminal is being constructed at Ragged Lake, housing over one-hundred buses and requiring a complete duplicate of the dispatch office and radio equipment currently in Burnside Industrial Park.

When completed both dispatch offices shall be configured in a redundant configuration able to perform all dispatch function when one is not functioning.

Coverage from the Ragged Lake terminal will be somewhat limited compared to the existing coverage from Burnside due to different terrain (refer to coverage map).

3 Simplified Operations

Voice communication is accomplished using UHF channels. A cell modem connected to a small computer terminal in each bus exchanges data with the dispatch office. When the bus driver activates the "Panic" button it sends an emergency signal to the dispatcher identifying the bus and location. A Global Positioning System (GPS) is providing the data via cell modem to the dispatcher updating the AVL system.

When a bus driver requests voice communication he has to make a request to the dispatcher from his computer terminal. The dispatcher will open a voice channel and communicate with the driver."

4 Current Communications Infrastructure

All communications infrastructure is housed at the Metro Transit facility in Burnside consisting of dispatch office, radio room and communication tower nearby.

Dispatch Office (refer to 170-105-002 Rev.2)

The dispatch office consists of (3) Motorola dispatch consoles controlling (4) Motorola base stations via 600 ohms lines and (3) Motorola remotes controlling (2) TMR base stations. (3) Motorola computer aided dispatch (CAT) is used to display AVL data, messages and controlling the voice channel assignments. A server stores all relevant data and maintains a database. A voice recorder stores all voice communications between the bus driver and dispatcher.

Radio Room (refer to drawing 170-180-001 Rev.1 & 170-160-005 rev.2)

The radio room houses all radios (4) Motorola base stations, (1) Motorola repeater and (2) MTR base stations including accessories.

The radio room is connected to the dispatch office with a multi-pair telephone cable and a large special RF cable to the communication tower.

Communication Tower

The communication tower is providing the necessary antenna height to achieve the required coverage necessary to communicate on all bus routes. The antenna mounted on the tower is receiving and transmitting voice traffic between each bus and dispatch office.

3. Nova Communications Work Plan / Work Scope

The scopes are listed in timely and procurement requirements to achieve the completion date of May 2010.

1. Determine exact operational requirements and expectations from Metro Transit (Dispatch function, channel lock out & priorities).
2. Preliminary engineering to determine coverage from new site, tower height and location.
3. Apply to Industry Canada & HRM for tower erection permit
4. Preliminary system engineering to determine equipment configuration and generate BOM for procurement of long lead items. Provide cable schedule to Metro Transit/HRM to ensure all interconnect cables between dispatch office, radio room and communication tower are provided.
5. Determine software license issues for additional dispatch server
6. Preliminary Design Review (PDR) with Metro Transit to ensure project is within scope and expectation.
7. Apply to Industry Canada for radio license amendment.
8. Complete BOM and order material
9. Complete engineering documentation and test/commissioning procedures.
10. Critical Design Review (CDR) with Metro Transit to verify operational requirements are met.
11. Stage equipment load and FAT to verify operation
12. Install equipment and terminate cables
13. Obtain CSA electrical system certification
14. Commission system and verify proper functioning with Metro Transit
15. Acceptance by Metro Transit

4. Nova Communications Responsibilities

- Nova Communications shall appoint a Project Manager to oversee the project development and to work along side Metro Transit's Project Manager.
- Nova Communications is accepting full project responsibility (turn-key project) except as detailed below:
 - Radio System cabling (Nova to provide cable schedule, between dispatch, radio room and communication tower).
 - Nova will not be responsible to supply or install CAD network components including software and database. This will be the responsibility of HRM/Metro Transit IT department.
 - Nova will be responsible for hiring a subcontractor to do the mounting of the 8 Dipole Antennas and the running of the LDF5 -50A Cable.
 - Nova will commission system and verify proper functioning of the radio system for approval and acceptance by Metro Transit.

5. Halifax Regional Municipality / Metro Transit Responsibilities

- Metro Transit shall appoint a Project Manager to oversee the project development and to work along side Nova Communication's Project Manager.
- Metro Transit will be responsible for supplying 110 volt power and UPS power into the new telecommunications shelter.
- Metro Transit will be responsible for running 24 pair cable from the Radio Dispatch room to the new telecommunications shelter.
- Metro Transit is to obtain permits for tower erection and amendment to radio license (Nova will provide assist in the process).
- Metro Transit will select the correct tower and provide tower loading analysis form structural engineers complying with CSA.
- Metro Transit is responsible for the erection of the tower.

6. Work plan and Timelines

Upon receiving a Purchase order, Nova Communications shall proceed by ordering the equipment required for the Ragged Lake Radio Dispatch Communications System.

Tentative Schedule

Week	Activity
1	Finalize Statement of Work Kickoff Meeting
1-8	Finalize Order and Secure Equipment
8	Assemble of Base Station Equipment
9-10	FAT Testing
11-15	Installation and Commissioning
16	Project Completion

7. Project Management

Nova Communications will appoint a Project Manager to oversee the project development and implementation of the project.

The Project Managers responsibilities will be to work directly along side Metro Transit's Project Manager.

Key Personnel

The Key Contacts for Nova Communications shall be:

- a) Klaus Baumgartner – VP of Engineering
- b) Nick Wadey – Project Manager
- c) Paul MacLean – Account Manager

The Key Contacts for HRM / Metro Transit's shall be:

- a) Darren Young – Project Manager
- b) Scott Smith - Senior Project Manager
- c) Phillip Herritt – Superintendent Transit Services

Or their approved designates.

9. Financial

9.1 Pricing

System engineering, integration & support and documentation
120 hours

FAT, installation & system commissioning
200 hours

Antenna & cable mounting (subcontractor)

Sub total services **\$41,800.00**

Qty 5 MTR3000 base station c/w 600 ohm

Qty 1 MTR3000 repeater

Qty 10 Multicoupling

Qty 1 Sinclair SISDS18 – 8 Dipole Antenna

Qty 2 MC3000 Digital Desksets

Qty 2 Command Plus Dispatch Consoles

Qty 1 130 Feet LDF5 Antenna Cable

Qty 4 Motorola Desk Microphones

Qty 4 Equipment and Accessories

Qty 5 Dual Stage Isolators

Qty 15 GPS Garage Antenna System

Qty 1 TMR Base Station

Qty 1 TMR Base Antenna

Qty 1 Misc Hardware

Sub total hardware **\$112,382.13**

TOTAL: **\$154,182.13**

9.2 Payment Terms

Progress Payments:

- Invoices will be issued upon the following millstones and subject to HST as applicable.

- 10% Upon Contract Signing
- 50% Material Received
- 30% Installation completed
- 10% Commissioning Sign Off

Nova Communications (Nova) - Contract Terms & Conditions

Scope - Nova Communications shall be responsible for supply, delivery, installation, testing, commissioning and acceptance of the proposed system as described in the attached proposal documentation.

Industry Canada Licensing - This system may require the use of frequencies licensed from Industry Canada. Unless specified otherwise in the proposal, the Customer will be responsible for the documentation and costs associated with any such frequencies.

Interruption Of Service - Nova does not assume and shall have no liability under this agreement for failure to provide or for delay in implementing or providing maintenance for the equipment due directly or indirectly to causes beyond the control and without the fault or negligence of Nova, including, but not restricted to acts of God, acts of public enemy, act of Canada, any Province, Territory of Canada, or any political subdivision of the foregoing, acts of the Customer, its agents, employees, or subcontractors, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather conditions, or defaults or Nova subcontractors due to any such causes.

Coverage and Operation – Nova disclaims liability for range, coverage, availability or operation of any communications system. Additionally, Nova does not warrant the uninterrupted working of any transmission services or equipment of any telecommunications or telephone company, carrier or system whose services or equipment are utilized by Customer or Nova.

Limit of Liability - Nova's total liability for damages or indemnification related to this contract shall be limited to direct damages equal to the amount of the contract. The limitations from liability herein shall apply regardless of the basis of the claim, including, without limitation, any claim of fundamental breach of contract, and shall apply for the benefit of Nova and its officers, employees, agents and subcontractors.

System Delivery - The entire system shall be considered delivered, when all equipment has been installed, tested and accepted by an authorized Customer representative.

Laws and Regulations - This agreement and the rights and obligations of the parties under it are subject to the laws applicable in the Province of Nova Scotia and shall be subject to the exclusive jurisdiction of the courts of Nova Scotia.

Waiver - Failure or delay on the part of Nova or the Customer to exercise any right, power or privilege hereunder shall not operate as a waiver thereof.



DISTRIBUTEUR GENFARE

2105, Le Chatelier
 Laval, Québec H7L 5B3
 Tél.: (450) 686-3913
 Fax: (450) 686-4118

Attachment C

Quote			
Doc.#	Customer	Date	Page
11850	HALI	2009-10-22	1

Sold to
Halifax Regional Municipality RUSSELL P. WEBB PO Box 1749 Halifax, NS B3J 3A5

Ship to
HRM Transit Stores RUSSELL P. WEBB 200 Ilsley Avenue Dartmouth, NS B3B 1V1

Purchase Order no.	Terms	Ship Via	F.O.B.	Ref. #
	Net 30		Laval	11850
Quantity Ordered Shipped B.O.	Item	Description	Unit Price	Total
1	D00545-0002	MOBILE VAULT ASSY w/o CB ID	58 750.00 \$	58 750.00 \$
2	D00545-0018	MOBILE VAULT ASSY w/o RECEIVER	41 650.00 \$	83 300.00 \$
3	D24080-XXXX	MOBILE BIN DUAL PORT w/o ID	20 850.00 \$	62 550.00 \$
2	D03003-0001	RECEIVER FRAME	1 500.00 \$	3 000.00 \$
2	D03009-0002	RECEIVER COVER	5 875.00 \$	11 750.00 \$
3	C01855-0003	ELECTRONIC KEY ASSY	1 950.00 \$	5 850.00 \$

TVH / HST 13% 29 276.00 \$

TPS / GST #101948818RT TVQ / PST #1001405124	Subtotal	225 200.00 \$
	Freight	0.00 \$
	Tax	29 276.00 \$
	Total Amount	254 476.00 \$
	Amount Received	0.00 \$
	Balance	254 476.00 \$

10.1.5



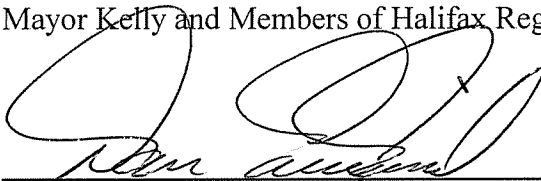
PO Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Attachment D

Halifax Regional Council
August 1, 2006

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:



Dan English, Chief Administrative Officer



Wayne Anstey, Deputy Chief Administrative Officer - Operations

DATE: July 7, 2006

SUBJECT: **RFP #05-074, Fare Collection System - Metro Transit**

ORIGIN

The Approved 2006/07 Capital Budget.

RECOMMENDATIONS

It is recommended that Regional Council approve the purchase of up to 225 fareboxes from RFP #05-074 plus necessary hardware from Garival Inc. for a total price of \$2,088,733 including net HST from Capital Account CHD00060, Farebox Replacement, with funding authorized as per the Budget Implications section of this report.

BACKGROUND

Metro Transit proposed in the 2004/05 business plan to replace the fare collection system used in the conventional transit fleet. The existing fare collection system is more than 30 years old and is beyond the end of its useful life. The fareboxes are also no longer manufactured and staff have exhausted all options and possibilities of acquiring units for expansion buses and replacement parts for servicing existing equipment.

A fare collection study was commission by Metro Transit and was completed in January 2005 by IBI Consultants. The study recommended a fare collection strategy to be adopted by Metro Transit which consisted of the acquisition of new non-registering fareboxes, transfer printers and smart cards. This strategy meets Metro Transit’s objectives of increased ridership, reduced fare evasion and fraud, reduced cash processing, accommodation of multi-fare/premium fare recognition, reduced bus operator / customer fare conflicts and the provision of flexible fare payment options.

DISCUSSION

A request for proposal was issued on May 9, 2005 and closed on June 16, 2005 for the first two phases of the fare collection strategy: non-registering fareboxes and electronic transfer dispensers. At the November 1, 2005 Council Session, Regional Council approved the award of RFP #05-074, Fare Collection System to Garival Inc. and the purchase of 30 new fareboxes with an option to purchase an additional 20 farebox units as required. This report also identified a future commitment required to continue with the farebox replacement for the remainder of the transit fleet as well as acquiring electronic ticket dispensers and smart card technology.

Metro Transit is now in a position to continue with the farebox replacement for the remainder of the transit fleet and is recommending that Council approve the acquisition of up to 225 fareboxes, vault equipment and related hardware.

The following table presents a breakdown of costs and equipment:

Item	Quantity	Unit Cost (not incl. Net HST)	Total Cost (incl. net HST)
“Transview” non-registering farebox not including transfer dispensers	225	\$8,200	\$1,908,265
Receivers (#R00542-0007)	3	\$24,500	\$76,020
Electronic key	2	\$1,950	\$4,034
Installation (fareboxes and receivers)	--	--	\$71,495
Spare equipment	--	--	\$28,919
TOTAL			\$2,088,733

BUDGET IMPLICATIONS

Based on the total price of \$2,088,733 including net HST, funding is available from Capital Account CHD00060, Farebox Replacement. Staff has negotiated a discount of \$275 per farebox through the vendor from the original unit cost in RFP #05-074. The budget availability has been approved by Financial Services.

Budget Summary: **Capital Account No. CHD00060, Farebox Replacement**

Cumulative Unspent Budget	\$3,601,662
*Less: RFP #05-074	<u>\$2,088,733</u>
Remaining Unspent Budget	\$1,512,929

* The original capital budget for this project was \$1.78M as per the 2005/06 budget. RFP #05-074 resulted in cost estimates of approximately \$3.5 - \$4.0M which led to the additional funding commitment of \$2M in the 2006/07 budget.

The remainder of the budget will be used for the acquisition of transfer issuing machines as for the fare collection strategy.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

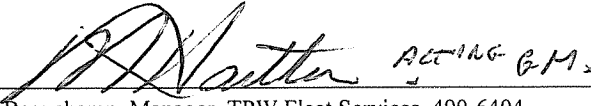
ALTERNATIVES

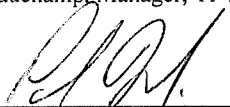
There are no recommended alternatives.

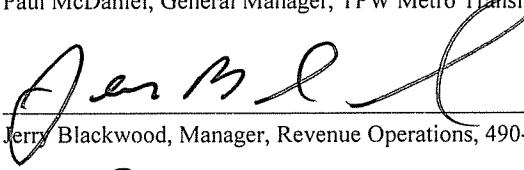
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Report Prepared by: Geoff Wright, P.Eng., A/ Manager Transit Planning & Development, TPW Metro Transit , 490-5138

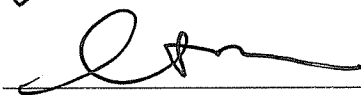
Report Approved by:

 *ACTING GM*
Paul Beauchamp, Manager, TPW Fleet Services, 490-6404



Paul McDaniel, General Manager, TPW Metro Transit, 490-6608


Jerry Blackwood, Manager, Revenue Operations, 490-6470

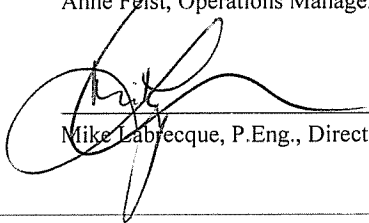
Financial Review by:


Catherine Sanderson, Senior Manager, Financial Services, 490-1562

Procurement Review by:


Anne Feist, Operations Manager Procurement, 490-4200

Report Approved by:


Mike Labrecque, P.Eng., Director, TPW, 490-4855



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Attachment E

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

Gerri 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 unforeseen 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
<i>Plus:</i> Funding from Reserve Q321:	\$ 145,799
<i>Less:</i> Award of Contract to Nova Communications:	- \$ <u>145,799</u>
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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