

Washington Metropolitan Area Transit Authority
Board Action/Information Summary

<input checked="" type="radio"/> Action <input type="radio"/> Information	MEAD Number: 100470	Resolution: <input type="radio"/> Yes <input checked="" type="radio"/> No
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TITLE:

Comprehensive Radio Communications System (CRCS)

PURPOSE:

To obtain Board approval to modify contract FI5583 - Comprehensive Radio Communications System - base contract to: a. reimburse Motorola for the costs for engineering, material and labor costs for the installation and testing of a new underground section of distributed antenna system for an amount not to exceed \$2,500,000.00; and b. delete the requirement for all refurbishment work on the Rail Communications Control Panels for the 1000-, 2000-, 3000-, 4000-, and 5000-series rail cars for a credit of \$981,306.35. This action has a net not to exceed amount of \$1,518,693.65

DESCRIPTION:

This action supports the following two strategic goals:

- 1) Create a safer organization by strengthening Metro`s safety and security response.
- 2) Maintain and enhance Metro`s image by enhancing communication with customers, employees, Union leadership, Board, media and other stakeholders.

Action A.

In December 2000, Metro awarded a contract to Motorola for the implementation of a new Comprehensive Radio Communications System that would provide specific radio coverage performance for above ground and below ground radio communications throughout the Metro area of operation supporting Metro`s goal of creating a safer organization. While the above ground communications system installed by Motorola met the required performance specifications, the below ground subsystem failed to meet the specific coverage requirements. Motorola attributed the insufficient radio coverage to the condition of the existing radiating cable.

Metro made adjustments to the existing below ground radiating cable, and as a

result, the below ground radio coverage met the specific requirements in all areas except the tunnel sections between Gallery Place and Navy Yard Metrorail stations, and L`Enfant Plaza station and the tunnel portal near the 14th Street bridge. Motorola asserted that the radiating cable was undersized in these locations and proposed to replace the cable with the expectation of being reimbursed if the replacement of the cable resulted in the specific coverage requirements being met. The cable was replaced, the radio coverage requirements were met, and Metro has agreed to reimburse Motorola for the design, material procurement, installation, adjustment, and testing of the radiating cable. The cost is estimated to not exceed \$2,500,000.

Action B.

The base CRCS contract, included the following tasks:

- a. Refurbish a total of 1000 existing rail Communications Control Panels (CCP) installed in the 1000-, 2000-, 3000-, 4000-, and 5000-series rail cars
- b. Supply 1,000 Motorola ASTRO SPECTRA mobile radios and associated accessories.
- c. Install, integrate and test 956 refurbished CCP panels and ASTRO SPECTRA mobile radios and accessories in existing rail cars and integrate and test refurbished panels with existing rail communications systems.

Detailed inspections of the communications control panels revealed the level of effort to refurbish the CCP`s was going to be much higher than anticipated in the contract. Metro decided to have Motorola design, manufacture, and install new panels. Motorola and its subcontractor developed a prototype design that was found to be unsatisfactory.

Discussions with Motorola made it clear that it was going to be more costly to obtain a satisfactory CCP through the Comprehensive Radio Communications contract than through a separate contract dedicated specifically to the replacement of the CCP`s. In support of the goal to use every resource wisely, Metro informed Motorola of its intent to delete all work related to the refurbishment of the existing rail CCP`s and requested the contractor provide a proposal for the deletion of the scope of work. Motorola submitted a proposal with a net credit value of \$981,306.35.

The resulting net value for both modification actions is \$1,518,693.65.

FUNDING IMPACT:

Program:	FY10 Capital Improvement Program
Project:	Communications System Upgrade
Project Manager:	Nicolas Dimitracopoulos
Department/Office:	Transit Infrastructure and Engineering Services/Engineering Services
Budget:	\$10,292,307.65
This Action:	\$ 1,518,693.65
Prior Approval:	\$10,041,700.65
Remaining Budget:	\$ 250,607.00
Remarks:	PE_RCOM
Operating Budget Impact:	There are no operating budget impacts

RECOMMENDATION:

Approval to modify the Comprehensive Radio Communications System base contract to: a. Reimburse Motorola for the costs for engineering, material and labor costs for the implementation and testing of a new distributed antenna system in CRCS Segment 18 for an amount not to exceed \$2,500,000; and b. Delete the requirement for all refurbishment work on the Rail Communications Control Panels for the 1000-, 2000-, 3000-, 4000-, and 5000- series rail cars for a credit of \$981,306.35. This action has a net not to exceed amount of \$1,518,693.65