

Replacement of Telephone System Executive Summary

The purpose of this presentation is to update the P&D Committee on the program to replace the telephone system.

The replacement of WMATA Telephone System is essential for the following reasons:

- Existing telephone asset infrastructure is long past due its useful life. It is 25 years old.
- The existing Rolm 9004 located at JGB represents a single point of failure for the entire WMATA network.
- Maintenance is becoming difficult due to unavailability of original vendor supplied and supported parts.
- Security and operational concerns are important for the replacement of existing centralized telephone system.
- Presently any disruption at the main telephone switch located at JGB cripples much of the Telephone Communication Network throughout WMATA.

The new Telephone Replacement technologies being evaluated are as follows:

- Hybrid system, time division multiplexing and Voice over Internet Protocol (VoIP).
- The hybrid system is preferred for the following reasons:
 - Digital / IP System structure.
 - Can be used at Kiosks, offices, bus garages, metro supply facilities and metro rail yards.
 - Accomplishes distributed call processing, local calling autonomy, high reliability and provides full VoIP adaptability.
 - Supports dialing plan, growth in T-1 lines and is of a modular design, which will be easily maintained.
 - Cost effectiveness and is expandable for future needs.

Next Steps:

- Approval by the P&D Committee and forward to the Board for approval to advertise and award a contract to replace the telephone system
- The projected cost for the replacement of Telephone System is \$ 16.8M



Washington Metropolitan Area Transit Authority



WMATA Telephones Switch Replacement

Presented to the Board of Directors:

Planning & Development Committee

by

Office of Infrastructure Renewal

Programs

June 1, 2006



Discussion – WMATA Telephone Network

CANDIDATE APPROACHES EVALUATED:

- HYBRID SYSTEM
- TIME DIVISION MULTIPLEXING (TDM)
- VOICE OVER INTERNET PROTOCOL (VoIP)

Option	Redundancy	Outside Caller ID	Reduced Maint.	Carrier Transmission Dependency	IP	Analog
Hybrid	Yes	Yes	Yes	No	Yes	Yes
TDM	No	No	Yes	Yes	No	Yes
VoIP	Yes	Yes	Yes	No	Yes	No



Recommendation – WMATA Telephone Network

- The P&D committee concur and recommend to the Board to provide approval to initiate and award contract for the replacement of existing WMATA telephone system



(Board Copy)
Washington Metropolitan Area Transit Authority
METRO ELECTRONIC ACTION DOCUMENT

IDENTIFICATION			
MEAD ID:	99545	ACTION:	Initiate & Award
AWARD VALUE:	(Not yet awarded)	CONTRACT: (Proposed)	
FUND SOURCES: (View)		CONTRACTOR:	
LAST MODIFIED:	05/25/2006		

DESCRIPTION	
SUBJECT:	Initiate and award a competitive contract to replace the existing telephone system
PURPOSE:	Initiate and award a competitive contract to replace the existing telephone instruments and telephone switching components of WMATA's telephone network.

ORIGINATION					
INITIATOR			DEPARTMENTAL APPROVAL		
SHERRY SINTON on 05/16/2006			Not Approved Yet		
PHONE:	202-962-1795	OFFICE:	IRPG	DEPT:	PDEC

COORDINATION (ROUTING)		
OFFICE	NAME	ACTION/DATE
IRPG (4710)	COUCH, DAVID	Approved 05/19/2006
PRMT (7410)	JACKSON, LUCY	Approved w/ Comments 05/19/2006
(3311)	FEIL, STEVE	Re-assigned 05/25/2006
(3311)	FEIL, STEVE	Approved 05/26/2006
CFO1 (2110)	WOODRUFF, HARRY	Re-assigned 05/25/2006
(4110)	SALPEAS, PANAGIOTIS	Approved 05/26/2006
OPAS (3161)	HUGHES, JAMES	Approved 05/26/2006

FINAL APPROVALS	
OFFICE	NAME/ACTION
PLN_DEV_CMTE	PANAGIOTIS SALPEAS (Not Yet Approved)
OPER_CMTE	Approved for OPAS by JAMES HUGHES on 05/26/2006
PLN_DEV_CMTE	Approved for by PANAGIOTIS SALPEAS on 05/26/2006
BEMR	Emeka Moneme (Not Yet Approved)
GM	GMGR CEO (Not Yet Approved)
BOARD	BOARD WMATA (Not Yet Approved)



Washington Metropolitan Area Transit Authority
METRO ELECTRONIC ACTION DOCUMENT

NARRATIVE

The existing WMATA Telephone System (Rolm) is 25 years old. The equipment has become increasingly difficult to maintain since the original manufacturer no longer supports it and replacement parts are increasingly difficult to find. In addition, the current system has no redundancy and provides for a single point of failure for the entire WMATA telephone network.

The new telephone system will be a hybrid system with a distributed network and redundant features. The Hybrid system provides 99.9% reliability and has a minimal failure rate. The new system shall be a modular design with plug and play maintenance capability. In addition to the many features, it will be expandable and highly flexible for future WMATA needs

It will provide Voice over IP (VoIP) capability and function in a Local Area Network/Wide Area Network (LAN/WAN) environment over the majority of the system. The new system will support telephone services in all WMATA Bus Garages, Maintenance Facilities, Metrorail Stations, Yards and Field bases including the Maintenance Supply Facility and Carmen Turner Facility.

ALTERNATIVES:

Due to age and non-support by manufacturer, WMATA will be unable to continue operating the telephone system now in place. Therefore, there is no reasonable alternative to this procurement action.

IMPACT ON FUNDING:

Budget: Infrastructure Renewal Program,
 Fiscal 2007-2010
Project Title: ATC & Power Systems
 Replacement

Budget	<u>FY2007-2010</u>
Information:	
Line Item	\$24,426,000.00
Budget	
This Action	\$16,866,000.00
Prior	
Actions	\$350,000.00

Subtotal	\$17,216,000.00
Remaining Budget	\$7,210,000.00

AFFIRMATIVE ACTION REQUIREMENTS:

EEO: The contractor will be required to comply with Executive Order 11246

DBE: Pursuant to the WAMTA Board Resolution #2005-30, the DBE goal for this contract is 12.7%.

Recommendation

Initiate and award a competitive contract to replace the existing telephone instruments and telephone switching components of WMATA's telephone network.