



Results in Brief

OIG-20-04
October 31, 2019

Audit of WMATA's Rail Performance Monitoring System

Why We Did This Review

In September 2018, the Office of Inspector General (OIG), while visiting rail yards, was made aware of potential Rail Performance Monitoring (RPM) System performance issues. In response, OIG conducted an audit of the RPM system.

Organizations rely on information technology to support business operations. The Office of IT Systems & Software (ITSS) maintains the transit and business systems for Washington Metropolitan Area Transit Authority (WMATA). Specifically, ITSS is responsible for the development, configuration, implementation, upgrades, and operation of all WMATA applications to include RPM.

RPM is an inventory system which allows operators to perform rail yard and terminal management over a fleet of 1,260 rail cars in eight rail yards. RPM graphically displays yards and terminals, as well as, rail car locations, train identification, and operational status. RPM does not have the capability to physically move railcars within the rail yard. Rail car movement is conducted by train operators and coordinated by instructions provided by the rail tower operators.

The Office of Procurement and Materials (PRMT) is responsible for procuring goods and services for the IT Department. These services include contractors to maintain RPM.

The audit objective was to determine whether the RPM system was functioning as intended. In addition, we subsequently assessed contract administration controls supporting the RPM system.

What We Found

The OIG observed RPM had system glitches, such as occasional blank screens and momentary application freezing. These glitches were inconsequential to the overall functionality of the RPM system. These glitches had no impact on train movement as the RPM system does not have this functionality. Otherwise, OIG observed the RPM system was functioning as intended.

Additionally, the OIG found opportunities for WMATA to strengthen contract administration controls supporting the RPM system. PRMT did not have contract FQ15124 (contract) and individual task orders to acquire IT services were missing from the contract file. Despite these deficiencies, WMATA was still acquiring IT services. Further, as required by policy, PRMT had not formally designated a Contracting Officer's Technical Representative (COTR). These deficiencies occurred because of weaknesses and breakdowns in controls over contract retention, oversight and accountability.

Without the required contract documents and an assigned COTR; WMATA may have difficulty monitoring contract execution and providing contract term enforcement. For example, because of the control weaknesses, WMATA had no assurances that goods and services valued over \$19.2 million were delivered in accordance with contract terms and provisions. Further, monitoring of future deliverables valued at \$273 million may be in question.

Management's Response

PRMT management concurs with the recommendations in the report and will proactively use OIG's recommendations to address each of the identified areas. PRMT management is developing a new solicitation for a contract to replace this current contract with a potential award date of April 2020. The new contract will provide a designated contracting officer's technical representative for coverage of the program areas.

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ABBREVIATIONS AND ACRONYMS

ABBREVIATION	DESCRIPTION
CO	Contracting Officer
COR	Contracting Officer's Representative
COTR	Contracting Officer's Technical Representative
EVP IBO	Executive Vice President Internal Business Operations
IDIQ	Indefinite Delivery/Indefinite Quantity
ITSS	Office of IT Systems & Software
MATOC	Multiple Award Task Order Contract
PI	Policy Instruction
PPM	Procurement Policy Manual
PRMT	Office of Procurement and Materials
RPM	Rail Performance Monitoring

BACKGROUND

In 2003, the Office of Rail Transportation and ITSS developed an in-house application called the RPM system. The RPM system allows operators to perform rail yard and terminal management over a fleet of 1,260 rail cars in eight rail yards. The RPM system graphically displays yards and terminals, as well as, rail car locations, train identification, and operational status. The RPM system allows operators to manually modify rail car locations and train operator information within the system. The RPM system does not have the capability to physically move railcars within the rail yard. Rail car movement is conducted by train operators coordinated by instructions provided by the rail tower operators.

A PRMT official told the OIG they awarded the contract in 2016, in part, to obtain services for supporting the RPM system. The Request for Proposal provides that the contract was solicited as an Indefinite Delivery/Indefinite Quantity (IDIQ)/Multiple Award Task Order Contract (MATOC).¹ The contract provides IT staff augmentation and IT services under seven task order groups. As of June 2019, PRMT awarded 80 purchase orders valued at \$19.2 million to acquire IT services. Out of the 80 purchase orders, two of them were used to hire two consultants to support the RPM system and other applications valued at \$533,000.

AUDIT OBJECTIVE AND RESULTS

Audit Objective

The audit objective was to determine whether the RPM system was functioning as intended. In addition, we subsequently assessed contract administration controls supporting the RPM system.

Audit Results

During OIG rail yard observations, RPM had system glitches, such as occasional blank screens and momentary application freezing. The OIG observed these glitches were inconsequential to the overall functionality of the RPM system. The RPM system does not have the functionality to move trains, as such, these glitches had no impact on train movement. Despite these glitches, OIG observed the RPM system was functioning as intended. OIG is not making a recommendation in this area.

OIG attempted to review the contract and orders associated with the RPM system and other systems. PRMT and ITSS officials were unable to produce the overarching contract. The Procurement Manager assigned in 2017 referring to contract FQ15124 said “there is no conformed contract...” In addition, individual task orders to acquire IT services were missing from the contract file.² Despite these deficiencies, WMATA was still acquiring IT services.

¹The PPM section 24 - Definitions provides an Indefinite-Quantity Contract is “[a] type of contract that provides for the delivery of indefinite quantities, within written stated limits, of supplies or services to be furnished during a fixed period, with deliveries to be scheduled by placing orders with the contractor. The contract may require the Authority to order and the contractor to furnish at least a stated minimum of supplies or services.”

²The PPM section 24 - Definitions provides a Task Order Contract is “[a]n indefinite-delivery contract for a service(s) that does not procure or specify a firm quantity of services (other than a minimum or maximum quantity) and that provides for the performance of tasks during the period of the contract.”

In addition, PRMT did not formally designate a COTR for the IDIQ/MATOC. PRMT had issued 80 purchase orders under the IDIQ/MATOC without the benefit having a COTR assigned. For example, as of June 2019, PRMT had issued the following:

- 54 purchase orders for IT Maintenance and Materials Management Services, valued at \$15.1 million which expired on April 30, 2019.
- 12 purchase orders for Enterprise Architecture and Business Process Reengineering Services, valued at \$1.8 million will expire on April 30, 2020.

What Is Required

The *Procurement Policy Manual* (PPM), dated August 2017, section 2-16 provides “Contract Administrators must assemble all relevant written records for all procurements. These requirements are addressed in greater detail in Policy Instruction (P/I) 8.7/2 and Chapters 8 through 13. The records will be collected into a single file and placed into the Authority’s record keeping system.” However, P/I 8.7/2 was discontinued and the language from the P/I was not updated in the PPM.

The 2012 PPM Supplement titled *Contracting Officer's Technical Representative (COTR) Guide, Part 1 - COTR Selection and Designation*, states that COTRs should be selected for awarded contracts when any one or more of the following applies:

- Technical oversight is needed for a contract;
- To perform inspection functions;
- Testing approval is required;
- Continuous monitoring of the contractor's performance and deliverables is required;
- To perform functions related to payment approval; and
- Subject matter expertise.

Generally, during the solicitation phase, the Program Office will recommend an individual as a COTR to the Contracting Officer (CO) for appointment. The CO appoints and delegates the COTR prior to contract award by written letter. The COTR letter is also sent to the vendor selected.

Why This Occurred

There were several control weaknesses which led to the lack of a conformed contract and formally-assigned COTR.

- Recordkeeping controls were not in place to ensure retention of the contract file including the contract and associated contract documentation.
- Policy controls were not in place as P/I 8.7/2 was discontinued and the language from the P/I was not updated in the PPM.

OIG could not determine why COTR coverage was not designated as the initial CO assigned to the IDIQ/MATOC had retired. The current CO stated “a COTR was not designated due to the complexity of the contract resulting in over 50 awarded vendors. It would be too massive for one person to manage, which is one of the reasons we are recompeting this solicitation in the next month.”

Why This Is Important

Without the required contract documents and an assigned COTR; WMATA may have difficulty in monitoring contract execution and providing contract term enforcement. WMATA is hampered in assuring that goods and services valued at \$19.2 million were provided in accordance with contract terms and provisions. Further, monitoring of future deliverables valued at \$273 million may be difficult unless PRMT assembles a conformed contract and formally assigns a COTR.

Recommendations

We recommend the General Manager/Chief Executive Officer:

1. Develop and implement a new contract to replace or supersede the missing contract FQ15124. (EVP IBO)
2. Update and enforce the PPM language on recordkeeping and replace references to P/I 8.7/2. (EVP IBO)
3. Direct the PRMT to formally assign appropriate COTR coverage to contract FQ15124 or subsequent new contracts. (EVP IBO)

SUMMARY OF MANAGEMENT'S RESPONSE

PRMT management concurs with the recommendations in the report and will proactively use OIG's recommendations to address each of the identified areas. PRMT management is developing a new solicitation for a contract to replace this current contract with a potential award date of April 2020. The new contract will provide a designated contracting officer's technical representative for coverage of the program areas.

OBJECTIVE, SCOPE, AND METHODOLOGY

Appendix A

Objective

The audit objective was to determine whether the RPM system was functioning as intended. In addition, we subsequently assessed contract administration controls supporting the RPM system.

Scope

The scope of the audit extended to an evaluation and observation of the RPM system functions, RPM supporting operating processes, hardware and network functionality and IT costs. In addition, OIG reviewed the contract and supporting documentation used to facilitate RPM system maintenance, support, and services.

Methodology

To achieve our audit objective, the OIG:

- Conducted site visits to four rail yards to observe the functionality of the RPM application and hardware. (Alexandria Yard, Brentwood, Greenbelt, and New Carrollton)
- Conducted interviews with management and staff from ITSS, PRMT, and Office of Rail Transportation to understand the operations, processes, and challenges with the RPM system.
- Reviewed internal controls over the RPM system as well as contract administrative controls.
- Reviewed invoices (January 2018 to May 2019) for the two consultants tasked to administer and support the RPM system.
- Attempted to review the contract for the IDIQ/MATOC and orders associated with the RPM system and other systems. However, WMATA could not provide the contract.
- Used the PRMT's PPM as criteria to review and assess contract compliance.

We did not rely on computer generated data to accomplish our objective.

This audit was conducted from June 2019 through September 2019 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our finding and conclusions based on our audit objective.

MANAGEMENT'S RESPONSE

M E M O R A N D U M



SUBJECT: Audit of WMATA's Rail Performance Monitoring System

DATE: October 24, 2019

FROM: IBOP – John T. Kuo

THRU: GM/CEO – Paul J. Wiegand

TO: OIG – Geoffrey A. Cherrington

WMATA PRMT management has prepared the following response to the OIG draft report for the Audit of WMATA's Rail Performance Monitoring (RPM) System.

PRMT has reviewed the Results in Brief and has held preliminary discussions regarding OIG's findings and recommendation. In the following memorandum, WMATA PRMT has detailed its initial plans to address referenced areas and to strengthen contract administration controls supporting the RPM system.

PRMT is confident in its current programs and processes and welcomes the opportunity to improve and enhance its contract oversight function. PRMT concurs with the recommendations in the report and will proactively use OIG's recommendations to address each of the identified areas. PRMT has started taking steps toward completing the following corresponding actions.

- Develop and implement a new contract to replace or supersede the missing contract FQ15124.
- Update and enforce the PPM language on recordkeeping and replace references to P/I 8.7/2.
- Direct the PRMT to formally assign appropriate COTR coverage to contract FQ15124 or subsequent new contracts.

OIG Recommendations and Management Response:

1. Develop and implement a new contract to replace or supersede the missing contract FQ15124.

a. **PRMT accepts this recommendation.** The new solicitation for a contract to replace this current contract is currently underway and expected to be advertised by November 29, 2019, with a potential award date of April 2020.

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2. Update and enforce the PPM language on recordkeeping and replace references to P/I 8.7/2.

a. **PRMT accepts this recommendation.** The Policy Management Team has reviewed this section of the PPM and determined that the inclusion of P/I 8.7/2 was an error. It has been removed and this change will be reflected in an upcoming update of the PPM in December 2019.

3. Direct the PRMT to formally assign appropriate COTR coverage to contract FQ15124 or subsequent new contracts.

a. **PRMT accepts this recommendation.** Due to the voluminous nature of the current contract, assigning an individual COTR to each Task Order is not feasible currently. The subsequent new contract will provide a designated COTR for coverage of each of the three program areas: IT Systems and Software (ITSS), IT Infrastructure and Operations (ITIO), and IT Cybersecurity (ITCS).

cc: PRMT – T. Suzette Moore
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