



# Department of Administrative Services

## Multi-Agency Radio Communication System (MARCS) Audit

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**Audit Period: July 1, 2010 through June 30, 2011**



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## Executive Summary

### Background

The Department of Administrative Services (DAS) administers the Multi-Agency Radio Communication System (MARCS). MARCS is an 800 MHz radio and data network that utilizes state-of-the-art technology to provide statewide interoperability in digital clarity to its subscribers throughout Ohio and a 10 mile radius outside of Ohio. The MARCS system provides statewide, secure, reliable wireless communication for public safety and first responders. Currently the network consists of 209 towers and over 47,500 voice units and over 1,800 mobile data units serving more than 1,200 public safety/public service agencies statewide. This includes local, state and federal entities.

During the audit, OIA identified opportunities for DAS to strengthen internal controls and improve business operations. A summary, along with detailed observations, have been provided. OIA would like to thank DAS staff and management for their cooperation and time in support of this audit.

This report is solely intended for the information and use of agency management and the State Audit Committee. It is not intended for anyone other than these specified parties.



## Scope and Objectives

OIA staff was engaged to perform assurance work related to MARCS. This work was completed between May 26, 2011 and September 8, 2011. The scope of this audit included the following areas:

- MARCS Inventory
- MARCS Billing
- MARCS Site/Tower Leasing

The following summarizes the objectives of the review along with a conclusion on the effectiveness of management’s internal controls.

Objective	Conclusion <sup>1</sup>
Evaluate the design of DAS’ controls over the MARCS inventory process.	Well Controlled with Improvements Needed
Evaluate the design and effectiveness of DAS’ controls over the MARCS billing process.	Improvements Needed – See Observation 1
Evaluate the design and effectiveness of DAS’ controls over the MARCS site/tower lease billing and payment processes.	Improvements Needed – See Observation 2

<sup>1</sup> Refer to Appendix A for classification of audit objective conclusions.



## Summary of Observations

The Summary of Observations includes only those risks which were deemed high or moderate. Low risk observations were discussed with individual agency management and are not part of this report. However, the low risk observations were considered as part of the audit objective conclusions on the previous page.

No.	Observation	Risk <sup>2</sup>
1.	<b>Radio Usage Reconciliation</b> – Although MARCS periodically monitors radio activity and addresses discrepancies, there is no comprehensive reconciliation of radios in use to those billed. Two of 25 active radios tested were excluded from billing. Testing also revealed several instances where a formal user agreement did not exist.	<b>Moderate</b>
2.	<b>Financial Records</b> – Non-cash exchange agreements were identified for five of 15 tower sites tested. These non-cash transactions were not recorded in the agency financial records. Testing also revealed one sub-leasing agreement of 15 tower sites tested; however, MARCS does not collect fees from the sub-lessor as stipulated in the primary lease. Additionally, policies and procedures regarding the tracking and reporting of non-cash transactions as well as the collection of sub-lessor revenues have not been formalized.	<b>Moderate</b>

Due to the limited nature of our audit, we have not fully assessed the cost-benefit relationship of implementing the observations and recommendations suggested above. However, these observations reflect our continuing desire to assist your department in achieving improvements in internal controls, compliance, and operational efficiencies.

<sup>2</sup> Refer to Appendix A for classification of audit observations.



## Detailed Observations and Recommendations

### Observation 1- Radio Usage Reconciliation

Effective reconciliation activities greatly increase management’s ability to proactively identify and resolve issues that could result in misstatements in financial accounting and reporting records. Noting reconciling items, or the lack thereof, is paramount to the overall conclusion as to the accuracy of the listed transactions taken as a whole.

MARCS maintains a database in which the billable status and rates of MARCS users are recorded. On a quarterly basis, the business office initiates a billing process by preparing a list of users to be billed for the respective period and forwarding the list to DAS-OIT to be processed. Although MARCS periodically monitors radio activity and addresses discrepancies, there is no comprehensive reconciliation of radios in use to those billed. Two of 25 active radios tested were excluded from billing. Testing also revealed several instances where a formal user agreement did not exist.

Inadequate review of radio activity increases the risk of inaccurate billing and loss of revenue.

#### Recommendation

Develop policies and procedures to include reconciliation of radio usage to billings in an effort to ensure all fees collected from MARCS users are complete. In addition, execute agreements for all user accounts and ensure all existing agreements are current.

#### Action Plan

Management will develop a process for assuring that radio usage and associated billings are reconciled frequently to ensure all fees are collected. In addition, a reconciliation of user accounts to formal agreements will occur. Any document not located will be replaced with a newly executed formal agreement. Within 90 days, management will develop a process for assuring that radio usage, billings and formal user agreements are reconciled and that all associated fees are identified and invoiced appropriately.

Risk	Remediation Owner	Estimated Completion Date
<b>Moderate</b>	MARCS Program Manager	December 31, 2011



## Observation 2- Financial Records

Financial records should completely and accurately reflect the operations of an entity. To accomplish this, management should ensure all transactions are recorded in the financial records.

Non-cash exchange agreements were identified for five of 15 tower sites tested. Examples include: the exchange of MARCS tower space for services and the exchange of MARCS tower space for non-MARCS tower space. In addition, one non-cash exchange agreement was identified of 25 active radios tested. These non-cash transactions were not recorded in the agency financial records. Testing also revealed one sub-leasing agreement of 15 tower sites tested; however, MARCS does not collect fees from the sub-lessor as stipulated in the primary lease. Additionally, policies and procedures regarding the tracking and reporting of non-cash transactions as well as the collection of sub-lessor revenues have not been formalized.

A lack of established policies and procedures regarding recording and reporting of non-cash transactions could result in inaccurate financial reporting and increase the risk of undetected fraudulent activity.

### Recommendation

Evaluate current lease and radio usage agreements, including those which have terms for non-cash exchanges, and ensure the financial impacts of the agreements have been properly recorded in the financial records. Also, consider evaluating the sub-lease clause in the primary agreement to determine its relevance. Communicate with OBM Financial Reporting to ensure proper accounting and reporting of financial activity.

### Action Plan

DAS will coordinate the financial reporting of non-exchange agreements with the Office of Budget and Management. In addition, management will review sub-lease revenue collections requirements. The agency will either implement action to collect as a standard accounts receivable item or the primary lease agreement will be modified. Within 90 days, management will develop a process for reporting non-exchange agreements in accordance with State of Ohio reporting standards. Also within 90 days, management will inventory and review primary lease agreements with sublease clauses to determine if revisions are necessary and/or to initiate billing actions.

Risk	Remediation Owner	Estimated Completion Date
Moderate	MARCS Program Manager	December 31, 2011



## Appendix A – Classification of Audit Objective Conclusions and Observations

### Classification of Audit Objective Conclusions

Conclusion	Description of Factors
<b>Major Improvements Needed</b>	Weaknesses are present that could potentially compromise achievement of its overall purpose. The impact of weaknesses on management of risks is widespread due to the number or nature of the weaknesses.
<b>Improvements Needed</b>	Weaknesses are present that compromise achievement of one or more control objectives but do not prevent the process from achieving its overall purpose. While important weaknesses exist, their impact is not widespread.
<b>Well-Controlled with Improvements Needed</b>	The processes have design or operating effectiveness deficiencies but do not compromise achievement of important control objectives.
<b>Well-Controlled</b>	The processes are appropriately designed and/or are operating effectively to manage risks. Control issues may exist, but are minor.

### Classification of Audit Observations

Rating	Description of Factors	Reporting Level
<b>High</b>	Observation has broad (state or agency wide) impact and possible or existing material exposure requiring immediate agency attention and remediation.	State Audit Committee, Senior Management, Department Management
<b>Moderate</b>	Observation has moderate impact to the agency. Exposure may be significant to unit within an agency, but not to the agency as a whole. Compensating controls may exist but are not operating as designed. Requires near-term agency attention.	State Audit Committee, Senior Management, Department Management
<b>Low</b>	Observation poses relatively minor exposure to an agency under review. Represents a process improvement opportunity.	Department Management, Senior Management (Optional), State Audit Committee (Not reported)





## Appendix B – Audit Follow-up Procedures

OIA will periodically follow-up on management's plans to remediate high and moderate risk audit observations. Follow-up activities may generally be broken down into three categories:

- Detailed** Detailed follow-up is usually more time-consuming and can include substantial audit customer involvement. Verifying and testing procedures implemented as well as substantiating records are examples. The more critical audit observations usually require detailed follow-up.
  
- Limited** Limited follow-up typically involves more audit customer interaction. This may include actually verifying procedures or transactions and, in most cases, cannot be accomplished through memos or telephone conversations with the audit customer but requires onsite observation or testing.
  
- Informal** This is the most basic form of follow-up and may be satisfied by review of the audit customer's procedures or an informal telephone conversation. Memo correspondence may also be used. This is usually applicable to the less critical observations.

Low risk audit observations will not result in an OIA audit follow-up, although these observations will be factored into the continuous risk assessment process for future OIA engagements.