

December 22, 2005

### CHARLES E. BRAVO SENIOR VICE PRESIDENT, INTELLIGENT MAIL AND ADDRESS QUALITY

#### SUBJECT: Audit Report – Intelligent Mail Data Acquisition System (Report Number DA-AR-06-001)

This report presents the results of our self-initiated audit of the development of the Intelligent Mail Data Acquisition System (IMDAS), Mobile Data Collection Device Replacement (Project Number 05WG006DA000).

# **Background**

Intelligent Mail refers to the capture and sharing of information about each mailpiece throughout its processing, allowing end-to-end visibility. IMDAS is the cornerstone program designed to transform the mailflow infrastructure. With IMDAS, Intelligent Mail Devices (IMDs) will replace aging mobile data collection devices (MDCDs) used by delivery operations to support the Delivery Confirmation and Signature Confirmation programs. IMDs should also be able to read signatures and Postal Service barcodes and labels. Capturing information about mail as it moves through the distribution network supports new product offerings, internal improvements, and revenue protection. In November 2004, the Postal Service approved an investment of \$351 million to develop and deploy 300,214<sup>1</sup> IMDs.

MDCDs are now at the end of their useful lives, and their failure rate has increased over the past few years. The Postal Service approved a contract with the present supplier<sup>2</sup> for \$14.6 million to maintain MDCD components for an extended period through December 2005.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> A delivery order contract with Motorola for \$294 million was approved on November 30, 2004.

<sup>&</sup>lt;sup>2</sup> A contract modification with Lockheed Martin that extended the period of performance (6 months) from September 2005 to February 2006 was approved on December 27, 2004.

<sup>&</sup>lt;sup>3</sup> A contract option to reduce the extended period of performance to December 2005 (4 months) was exercised on March 18, 2005. The cost of this contract revision has not been finalized.

IMDAS deployment plans have been delayed from April to November 2005 because of problems with completing the Critical Design Review and preparing for First Article Tests (FAT). The Postal Service now plans to complete deployment by July 2006.

## **Objectives, Scope, and Methodology**

The announced audit objectives were to determine whether IMDAS can provide a consistent and reliable technology for tracking and capturing service measurement information and can replace the current MDCDs without interruption of service and potential cost inefficiencies. At management's request, we revised our objectives to focus on unit requirements and price and evaluate the cost implications of the extended maintenance contract.

We reviewed and evaluated the justification and support for the quantity and price of IMD units contracted for purchase. We also reviewed route information for the periods April 2004 and March 2005 from data sources such as the Address Management System, Delivery Confirmation Asset Management System (DCAMS), Universal Delivery Statistics File, and Payroll – Rural Route Master File. Further, we reviewed the number of rural and city routes by area and district, and route information obtained from the Office of Inspector General (OIG) Computer Assisted Assessment Team. In addition, we evaluated the support and cost implications for the extended maintenance contract with Lockheed Martin considering schedule delays.

We further reviewed the IMDAS Decision Analysis Report (DAR) and IMDAS contract files. We interviewed the IMDAS program manager, implementation manager, contracting officer, and other members of the IMDAS project team from Intelligent Mail and Address Quality, Engineering – Delivery and Retail, Engineering – Technical Acquisition Management, and Engineering – Automation Category Management Center. Finally, we attended the IMDAS critical design review meeting in February 2005 and monthly technical review meetings, and we participated in weekly teleconferences on program status.

We conducted this audit from February through December 2005 in accordance with generally accepted government auditing standards and included such tests of internal controls as were considered necessary under the circumstances. We did not test the validity of the underlying system data used. We discussed our observations and conclusions with management officials and included their comments where appropriate.

# Prior Audit Coverage

We did not identify any prior audits or reviews related to this review.

# <u>Results</u>

Overall, the Postal Service's initial requirement for IMD units is reasonable because of a conservative purchase approach and a strategy for additional purchases. In addition, a competitive vendor solution and shared order strategy allow for cost-effective unit prices and discounts. Although unit requirements and the process used to negotiate price were logical, we are concerned about the risk of higher maintenance costs if deployment is delayed further.

### IMD Unit Requirements and Price

As shown below, the initial unit purchase was 12 percent below the current MDCD quantity, indicating that program management was conservative with its initial buy. This conservative approach is demonstrated through lower purchase requirements despite continual growth of possible deliveries and routes. (See Appendix A.)

User Type	Current MDCD Quantity	Proposed IMD Quantity
City and Rural Routes	234,477	234,477
Clerks (Post Office Boxes, Firms, etc.)	38,698	38,698
Highway Contract Routes	8,330	8,330
Collection and Parcel Routes	12,476	12,476
Processing Plants	1,299	819
Other	2,703	2,703
On-Site Spares	44,896	2,711
TOTAL QUANTITY	342,879	300,214

Most notable is the reduction in unit requirements for on-site spares. According to the DAR, the reduction in spares is because the Postal Service anticipates a much lower failure rate for the new units than that which is being experienced with the replaced units. In addition, rather than providing on-site spares at almost every facility, spares will be prepositioned at the district level and distributed as needed.

In addition, while validating the unit need for the various categories of user types, we noted the following:

• The end user, Delivery Operations, wanted one-for-one replacement of units dedicated to city and rural routes, which represent 78 percent of the purchase. We initially questioned including the approximately 17,000 auxiliary routes in this group. We were also concerned about various data sources giving different route totals. However, these concerns were offset by Delivery Operations' perceived need for more units, the overall reductions in spares, and the expected growth in routes.

- Information from the DAR was insufficient to validate three line items representing 18 percent of the purchase – Collection and Parcel Routes, clerks, and other user types. Although program management spreadsheets contained summary numbers collected from DCAMS, the time period used for these categories was longer than the history maintained by the system. Nevertheless, we believe any risk of overbuying for these categories is offset by the reduced number of spares needed and the continual growth of deliveries and routes.
- The DAR backup information supported highway contract routes and processing plant categories representing 3 percent of the purchase.

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In assessing the consequences for underbuying IMDAS units, we determined

Although the Postal Service may strengthen documentation for unit requirements for future purchases, the overall unit requirements are conservative, and the acquisition strategy allows future purchases to occur at similar unit costs. Therefore, we are not making recommendations at this time.

## **Delayed Deployment Risks**

Although IMD unit requirements were reasonable, we noted some risk of higher maintenance costs because of delayed deployment. In particular, the IMDAS program allows 3 months<sup>4</sup> for unanticipated deployment delays. However, if delays extend beyond the 3-month period, the Postal Service will have to further extend its maintenance contract for the old devices. The current maintenance contract with Lockheed Martin averages \$2.4 million per month.

We are concerned that recent unanticipated challenges, such as In-Plant FAT delays occurring because the vendor was not ready, and the July 2005 failure of the

<sup>&</sup>lt;sup>4</sup> October to December 2005.

Engineering FAT, may delay the deployment schedule beyond 3 months. Delays could also increase other program costs, such as:

- Expenses for storing computer equipment.
- The subcontractor's costs for site preparation and equipment installation.
- The program owner's administrative expenses.

Program management and the vendor are developing a recovery plan.

#### **Recommendation**

We recommend the senior vice president, Intelligent Mail and Address Quality:

1. Ensure the recovery plan minimizes delays in the deployment schedule and negotiate consideration with Motorola if the current maintenance contract requires further extension.

### Management's Comments

Management agreed with the recommendation and stated they have commenced actions addressing the findings. This includes taking specific steps to ensure delivery of a quality product while minimizing delays in the recovery plan. Management asserts these steps will ensure the Postal Service receives appropriate compensation for delays in the program. Management stated they advised the supplier that consideration will be due and negotiated when the supplier demonstrates a stable schedule that is moving towards deployment. Management further stated the supplier has acknowledged that consideration will be necessary in revising the delivery schedule via contract modification. Management's comments, in their entirety, are included in Appendix B of this report.

#### **Evaluation of Management's Comments**

Management's comments are responsive to the recommendation. Management's actions taken or planned should correct the issues identified in the findings.

The Office of Inspector General (OIG) considers the recommendation significant, and therefore, requires OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. This recommendation should not be closed in the follow-up tracking system until the OIG provides written confirmation that the recommendation can be closed.

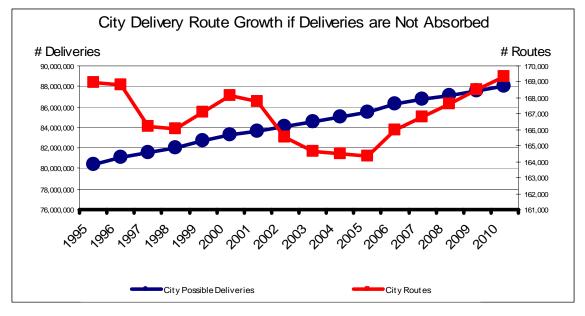
We appreciate the cooperation and courtesies provided by your staff. If you have any questions, or need additional information, please contact Miguel Castillo, Director, Engineering, or me at (703) 248-2300.

E-Signed by Colleen McAnte ERIFY authenticity with Approvel

Colleen McAntee Deputy Assistant Inspector General for Core Operations

Attachments

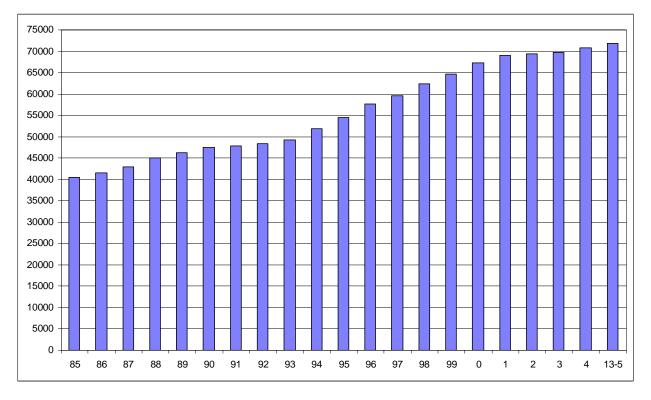
cc: Ellis A. Burgoyne Walter O'Tormey James W. Buie Aron M. Sanchez Steven R. Phelps



# APPENDIX A. MAIL DELIVERY GROWTH<sup>5</sup>

SOURCE: Delivery Operations Website, September 2005

<sup>&</sup>lt;sup>5</sup> Our intent is to show the changes in city routes over time as it relates to the growth in delivery points. Historically, factors such as delivery operations, mail volume changes and automation have allowed for the absorption of delivery point growth without equal growth in routes. However, the forecast for FY 2006-2010 shows a growth in routes if delivery points are not absorbed. The second chart also shows total rural routes growth over the last 20 years.



TOTAL RURAL ROUTES

SOURCE: Delivery Operations Website, September 2005

### APPENDIX B. MANAGEMENT'S COMMENTS

CHARLES E. BRAVO SENIOR VICE PRESIDENT INTELLIGENT MAIL AND ADDRESS QUALITY

POSTAL SERVICE

December 6, 2005

COLLEEN MCANTEE DEPUTY ASSISTANT INSPECTOR GENERAL FOR CORE OPERATIONS

SUBJECT: Draft Audit Report – Intelligent Mail Data Acquisition System (Report Number DA-AR-06-DRAFT)

This provides the management response to the above referenced draft audit report. The Postal Service thanks the audit team for their efforts and support of the program. The report contained one recommendation.

#### Recommendation

We recommend the Senior Vice President, Intelligent Mail and Address Quality:

 Ensure the recovery plan minimizes delays in the deployment schedule and negotiate consideration with Motorola if the current maintenance contract requires further extension.

#### Response:

The Senior Vice President, Intelligent Mail and Address Quality and the IMDAS team agree with this recommendation and have already commenced actions addressing the findings. The Postal Service and the IMDAS team recognize the importance of minimizing delays in the recovery plan. Our principal focus is on ensuring that a quality product is delivered to the field. The Postal Service has taken the following steps to increase the potential for a successful EFAT retest, to maximize the quality of the equipment, and to ensure that the Postal Service receives appropriate compensation for the delays in the program.

Ensuring deployment readiness

- The Postal Service continued informal assessment of the IMDAS system after failure of EFAT in July 2005. This informal assessment will continue in a limited fashion. Completion date: January 30, 2006
- Completed a technical design review to resolve known design issues to improve the quality of the System Design Document. Completion date: October 21, 2005

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- Motorola has reorganized their engineering program management office and instituted new quality metrics to improve their ability to predict when the system would be ready for deployment. Completion date: November 15, 2005
- Continue to hold twice weekly technical teleconferences to resolve any
  ongoing questions regarding the requirements, design, and technical
  implementation; hold weekly teleconferences between program offices to
  ensure prompt resolution of issues as they are identified; and continue site
  surveys to assure site readiness for deployment. These actions are ongoing.

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Charles E. Bravo Senior Vice President, Intelligent Mail and Address Quality

cc: Walter O'Tormey Keith Strange