March 30, 2006

ELLIS A. BURGOYNE VICE PRESIDENT, DELIVERY AND RETAIL

ROBERT L. OTTO VICE PRESIDENT, CHIEF TECHNOLOGY OFFICER

SUBJECT: Audit Report – Data Input Validation for the Facilities Database (Report Number IS-AR-06-006)

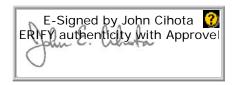
This report presents the results of our audit of data input validation for the Facilities Database (FDB) (Project Number 05BG016IS000). U.S. Postal Service management requested the U.S. Postal Service Office of Inspector General (OIG) to determine if the data supplied to the FDB are timely, complete, and validated for accuracy. This audit is the first in a series of audits we plan to conduct regarding the data quality in systems that provide information to the FDB.

Our audit of the Products and Services module of the FDB confirmed that Postal Service management has made enhancements over the past year that should improve the quality of system data. However, management could make further improvements by addressing issues related to this module to ensure they maintain timely, complete, and accurate data within the FDB. This audit concentrated on review of the inputs to the Products and Services module, and we did not review processes associated with other input sources to the FDB.

We made three recommendations to management to improve the quality of data maintained in the FDB. Management agreed with our recommendations and is in the process of developing a management instruction documenting Postal Service requirements for maintaining and validating information within the FDB. Management is also developing a method of monitoring and enforcing employee compliance with these requirements. In addition, management has agreed to update the *Facilities Database System User Guide*. Management's comments and our evaluation of these comments are included in the report.

The OIG considers recommendation 2 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 the recommendation can be closed.

We appreciate the cooperation and courtesies provided by your staff during the audit. If you have any questions or need additional information, please contact Gary Rippie, director, Information Systems, or me at (703) 248-2300.



John E. Cihota Deputy Assistant Inspector General for Financial Operations

Attachments

cc: Richard J. Strasser, Jr. Harold E. Stark

George W. Wright
Frederick J. Hintenach
Steven R. Phelps

INTRODUCTION

Background

Prior to the creation of the Facilities Database (FDB), the U.S. Postal Service maintained numerous databases that contained information and demographics about facilities and services. Many of these databases were inconsistently maintained and contained inaccurate information. In addition, most of these databases were built to address narrow functional interests and were of minimal use to other organizational units within the Postal Service.

To address this situation, the Postal Service initiated an effort to develop a corporate-wide facilities database that would fully meet the needs of the Postal Service and its customers. That development effort and the system database associated with it are referred to as the FDB.

The FDB interface, Web Box Activity Tracking System (WebBATS), Address Management System (AMS), and Facilities Management System for Windows (FMSWIN) are the four applications that currently upload selected data to the FDB. With this data, the FDB serves as a valuable asset to the Postal Service that is intended to function as the single source of detailed information about all Postal Service facilities.

The Postal Service maintains a Products and Services module in the FDB for facilities that offer retail products and services to the public. This module provides information regarding the types of services that are available at the facility, days and times a service is offered, and special holiday and tax season hours. Postal Service employees update and validate data maintained in this module using the FDB web application.

The Postal Service is currently working toward improving the FDB by redeveloping maintenance modules and the data certification processes to ensure conformity and maximum data integrity across the system.

Objective, Scope, and Methodology

The objective of this audit was to determine if the data supplied to the FDB are timely, complete, and validated for accuracy. Specifically, in order to determine if field managers were supplying timely and complete data for their assigned facilities, we reviewed data fields in the Products

and Services module for completeness and timely validation. We did not review data fields associated with inputs from the WebBATS, AMS, or FMSWIN.

To determine if field managers were appropriately validating data for their assigned facilities, we analyzed validation dates within the Products and Services module for compliance with Postal Service requirements. In addition, we conducted tests to determine if the data within the Products and Services module were complete and reasonable.

In order to determine why some offices were not in compliance with FDB validation requirements, we interviewed and observed Postal Service facility managers updating and validating the FDB at 12 judgmentally selected field offices.¹

We interviewed Postal Service managers and employees in the delivery and retail and information technology areas to understand the function and design of the FDB. We also reviewed system documentation and management requirements for maintenance of the database.

We conducted this audit from August 2005 through March 2006 in accordance with generally accepted government auditing standards and included such tests of internal controls as we considered necessary under the circumstances. We discussed our observations and conclusions with management officials and included their comments where appropriate. We used manual and automated techniques to analyze computer-processed data. Based on the results of these tests and assessments, we concluded the data were sufficiently reliable to meet the review objectives.

Prior Audit Coverage

We did not identify any prior audits or reviews related to the objective of this audit.

¹ We judgmentally selected four stations in each of the Gateway, Northland, and San Francisco Districts. We selected these offices based on their proximity to U.S. Postal Service Office of Inspector General (OIG) field offices and the validation date of the Products and Services module for the facility.

AUDIT RESULTS

Our audit of the Products and Services module of the FDB confirmed that Postal Service management has made enhancements over the past year that should improve the quality of system data. However, management could make further improvements by addressing issues related to this module to ensure they maintain timely, complete, and accurate data within the FDB.

Validation of the Products and Services Module

According to Postal Service requirements,² facility managers are to maintain FDB data at all times and review and validate their retail products and services information every 90 days. However, some facility managers did not maintain and timely validate the accuracy of information within the Products and Services module of the FDB. This occurred because some facility managers were not aware of the requirements for validating information in the FDB, and management has not enforced compliance with these requirements. In addition, the FDB user manual contains outdated and inaccurate information. As a consequence, information in the FDB used by internal and external customers was incomplete, not timely, and potentially inaccurate.

The OIG downloaded data from selected tables within the FDB on January 20, 2006. Using this data, we performed analyses on data elements within the Products and Services module for the 32,463 facilities that offered products and services to the public.³ From our analyses, we determined that management had not verified the information in the Products and Services module within the required 90-day period for over 33 percent of these facilities. In addition, we concluded they had not input information for at least five of the data elements in the Products and Services module for 61 percent of the 32,463 facilities. These results were stratified and are displayed in Appendix A.

This occurred because some facility managers were not aware of the requirements for validating retail products and services information every 90 days. Although a letter from

² These requirements were documented in a letter addressed to district managers dated September 27, 2005, and signed by the vice president. Delivery and Retail

signed by the vice president, Delivery and Retail.

³ Facilities that offer retail products and services to the public had the subtypes of MAIN_PO, STATION, BRANCH, FIN S, and FIN B within the FDB.

the vice president, Delivery and Retail, as well as documents inserted in 'point-of-purchase' kits, communicated the validation requirements to the field, all 12 of the facility managers⁴ we interviewed during our audit stated they were unaware of the requirements. Management also does not currently have a method of monitoring and enforcing compliance with these validation requirements.

In addition, the Facilities Database System User Guide contains inaccurate information regarding maintenance of the Products and Services module. For example, the guide instructs the employee to leave the Products and Services module without making any changes if they view the information and find that no updates are needed. However, employees should use a validation button contained in the module to acknowledge they validated the data for their assigned facility.

Postal Service's Corporate Call Management unit uses FDB data to direct customers to service locations. In addition, retail marketing spends millions of dollars annually on 'point-of-purchase' signage that is sent to retail operations based on data in the Products and Services FDB module. Consequently, timely review and validation of the products and services information is critical to ensuring data in the FDB are accurate and complete.

Recommendation

We recommend the vice president, Delivery and Retail, direct the manager, Customer Service Operations, to:

1. Develop a management instruction that documents Postal Service requirements for maintaining and validating information within the Facilities Database.

Management's Comments

Management agreed with the recommendation and is in the process of developing a management instruction that will document how often information in the FDB should be validated and who should be performing the validation. This action is scheduled for completion by May 30, 2006. Management's comments, in their entirety, are included in Appendix B of this report.

⁴ We judgmentally selected and interviewed four managers in each of the Gateway, Northland, and San Francisco Districts.

Recommendation

We recommend the vice president, Delivery and Retail, direct the manager, Customer Service Operations, to:

2. Develop and implement a method of monitoring and enforcing employee compliance with Postal Service requirements for maintaining and validating Facilities Database data.

Management's Comments

Management agreed with the recommendation and is in the process of adding input controls to the FDB modules that will not allow a user to validate a module until complete and valid information has been entered for the module. In addition, a data field will be added to each module designed to document whether information in each module is timely validated. Reports will be developed to monitor those facilities with modules that have not been validated in a timely manner. This action is scheduled for completion by May 30, 2006.

Recommendation

3. Update the *Facilities Database System User Guide* to include instructions and requirements for validating and maintaining Facilities Database information.

Management's Comments

Management agreed with the recommendation.

Management is currently redesigning each FDB module.

After the redesign has been completed, management will update the user guide to include instructions for updating and validating each FDB module. This action is scheduled for completion by May 30, 2006.

Evaluation of Management's Comments

Management's comments are responsive to all the recommendations and the planned actions should correct the issues identified in the finding.

Recent Improvements to the Facilities Database

In March 2005, Postal Service management began an initiative to improve the quality of data in the FDB by making significant enhancements to the system and to the data-gathering processes:

- The Postal Service appointed area and district FDB coordinators for each facility. The intent of these appointments is to provide consistent messaging, ongoing training, and effective resolution to program issues.
- The Postal Service has created data selection "pulldown" menus for each input field. These menus give the user a choice of entries to make and help ensure facility managers enter consistent and quality data.
- The Postal Service has developed definitions for each input field for some modules. Prior to the creation of these definitions, some facility managers were uncertain as to the type of data they should enter into some of the input fields. Postal Service management plans to have definitions created for all FDB modules by the end of fiscal year 2006.
- The Postal Service has reduced the number of people with update and edit capabilities assigned to a facility to those with a business need. Prior to this enhancement, some employees had the ability to update information for a facility where they were not located.

These enhancements should improve the quality of the data within the FDB.

APPENDIX A

FACILITIES DATABASE PRODUCTS AND SERVICES MODULE ANALYSIS

Table 1: Validation of Products and Services Module

Days Since Validation of Products and Services Module	Number of Facilities	Percentage of Total Facilities ⁵
0-90	21,531	66.3
91-180	,	
	2,883	8.9
More than 180 days	7,068	21.8
Never verified	981	3.0
Total	32,463	100

Table 2: Completeness of Products and Services Module

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Number of Incomplete	Number of		
Service Fields	Facilities	Percentage of Total Facilities ⁵	
0	5,923	18.3	
1-4	6,700	20.6	
5-9	14,008	43.2	
10 or more	5,832	17.9	
Total	32,463	100	

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⁵ This number represents the facilities that offered products and services to the public as of January 20, 2006.

APPENDIX B. MANAGEMENT'S COMMENTS



March 24, 2006

DARRELL E. BENJAMIN, JR. ACTING DEPUTY ASSISTANT INSPECTOR GENERAL FOR FINANCIAL OPERATIONS

SUBJECT: Data Input for the Facilities Database (Report Number IS-AR-06-DRAFT)

After review of the Audit Report number IS-AR-06-DRAFT, Management is in agreement with the initial findings. Our responses and action plans are contained in the detailed discussion below.

Recommendation 1:

Develop a management instruction that documents Postal Service requirements for maintaining and validating information within the Facilities Database.

We agree. We are currently in the process of developing a management instruction that will document how often the information in the Facilities Database should be validated and who should be performing the validation.

Target Completion: May 30, 2006

Recommendation 2:

Develop and implement a method of monitoring and enforcing employee compliance with Postal Service requirements for maintaining and validating Facilities Database data.

We agree. We are currently in the process of adding input controls to the Facility Database modules. These controls will not allow a user to validate the module until complete and valid information has been entered into all the fields within the module. In addition, a data field will be added to each module in order to document whether the information in each module has been recently validated. Reports will also be developed to document those facilities that have not had one or more of their modules validated in a timely manner, and these reports will be sent to the Facilities Database coordinators for resolution.

Target Completion: May 30, 2006

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Recommendation 3:

Update the Facilities Database System User Guide to include instructions and requirements for validating and maintaining Facilities Database information.

Response:

We agree. We are in the process of redesigning and enhancing each of the Facilities Database modules. After we have concluded the redesign of all the modules, we plan to update the system user guide to include instructions for updating and validating each module. The guide will also include the required validation frequency of each module.

Target Completion: May 30, 2006

If you have any questions regarding our response, please contact Annette Raney, Acting Manager, Customer Service Support at (202) 268-4307.

Ellis A. Burgoyne
Vice President, Delivery and Retail

Robert L. Otto Vice President, Chief Technology Officer