



March 12, 2009

JEFFREY C. WILLIAMSON  
MANAGER, NETWORK DEVELOPMENT AND SUPPORT

SUBJECT: Audit Report – Business Rules for Modern Service Standards  
(Report Number EN-AR-09-002)

This report presents the results of our audit focusing on modern service standards (Project Number 08XG034EN000). Our objective was to assess the business rules<sup>1</sup> used to develop modern service standards for market-dominant mail products.<sup>2</sup> The U.S. Postal Service Office of Inspector General (OIG) initiated this audit, which is the first in a series of service standard and service measurement reviews. See [Appendix A](#) for additional information about this audit.

## **Conclusion**

The U.S. Postal Service complied with the statutory requirements for developing modern service standards for market-dominant mail products as established in the Postal Accountability Enhancement Act of 2006 (Postal Act of 2006).<sup>3</sup> The mailing industry generally supported the proposed service standards. Further, in accordance with the Postal Act of 2006, the Postal Service tested and took into account the actual level of service provided under previously established service standards. However, we noted several potential strategic and operational risks, including the Postal Service may have difficulty in meeting the newly established standards, which use operational capability rather than actual service performance.

## **Compliance with the Postal Act of 2006**

Management complied with the statutory requirements for developing modern service standards. Specifically, the Postal Service considered actual level of service, customer satisfaction, the needs of customers, mail volume and revenue projections, projected

---

<sup>1</sup> Business rules are the implementing criteria that determine the number of days-to-delivery between each of the approximately 851,000 origin-destination 3-digit ZIP Code pair combinations in the Postal Service network for each market-dominant mail class.

<sup>2</sup> Market-dominant products include First-Class Mail®, Standard Mail, Periodicals, and Package Service.

<sup>3</sup> The Postal Accountability and Enhancement Act of 2006 requires the Postal Service to consult with the Postal Regulatory Commission (PRC) on the establishment of a set of service standards for market-dominant products. Also, the Postal Service is to obtain approval from the PRC of its internal measurement systems for each market dominant product.

growth in the number of addresses, current and projected cost of servicing customers, changes in technology, demographics and population distribution, and other factors. See [Appendix B](#) for our detailed analysis of this topic.

### Potential Strategic and Operational Risks

Developing business rules for modern service standards presented several potential strategic and operational risks. One of the key risks was the potential that service performance might not meet operational capability. The Postal Act of 2006 required the Postal Service to take into account the actual level of service customers received under previously established service guidelines or service standards. Although the Postal Service tested and took into account the actual level of service, they developed the new service standards based on operational capability rather than actual service performance. Specifically, the Postal Service conducted PLANET® Code<sup>4</sup> testing of market-dominant mail products; however, according to management, the test results were not as high as expected. Management used the data to identify best practices in the network in order to drive improvement in the plants.<sup>5</sup> Accordingly, management established service standards (see [Appendix C](#) for Service Standards) with the expectation of improving performance, rather than lowering standards, for all market-dominant products except package services. See [Appendix B](#) for our detailed analysis of this topic and other strategic and operational risks.

### Other Matters

Stakeholders identified additional concerns about service standards and performance issues that were outside the scope of our review. We are reporting them to provide additional insight into stakeholder viewpoints on these topics. The concerns include the need for an overarching plan and timeline for service measurement, increased transparency, concerns about the sampling process, and an enhanced quality control and oversight process. We may review these issues in more depth in future audits.

### Management's Comments

Management agreed with our findings. Management's comments, in their entirety, are included in [Appendix G](#).

### Evaluation of Management's Comments

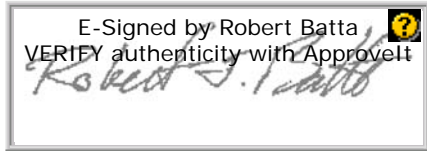
The OIG considers management's comments responsive to the finding in the report.

---

<sup>4</sup> The PLANET Code is a 12-digit barcode used to track the path of the mailpiece. The Postal Service's barcode sorting equipment reads the barcode and makes mail processing information available (such as when and where the mail was processed).

<sup>5</sup> We obtained actual performance results from PLANET Code seed testing for First-Class, Periodicals, and Standard Mail. Computerized Online Notification For Inbound Reply Mail was used to test Package Services.

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Michael A. Magalski, Director, Network Optimization, or me at (703) 248-2100.



Robert J. Batta  
Deputy Assistant Inspector General  
for Mission Operations

Attachments

cc: Patrick R. Donahoe  
William P. Galligan, Jr.  
Anthony M. Pajunas  
Shibani S. Gambhir  
Katherine S. Banks

## APPENDIX A: ADDITIONAL INFORMATION

### BACKGROUND

In 2003, the President's Commission on the U.S. Postal Service recommended that the PRC<sup>6</sup> review proposed service standard changes and provide an opinion of the changes.

The Postal Act of 2006 required the Postal Service to establish modern service standards for its market-dominant products and to consider eight factors in establishing the service standards, including consultation with the PRC. A key element in complying with the requirement was the development of business rules for establishing modern service standards. The business rules define how the mail should move through the network. The Postal Act of 2006 outlines four objectives:

- Enhance the value of postal services to both senders and recipients.
- Preserve regular and effective access to postal services in all communities, including those in rural areas or where post offices are not self-sustaining.
- Reasonably assure Postal Service customers delivery reliability, speed, and frequency consistent with reasonable rates and best business practices.
- Provide a system of objective external performance measurements for each market-dominant product as a basis for measuring Postal Service performance.

The Postal Service used a combination of outreach methods to meet the statutory requirements. Those methods included consultations with the Mailers Technical Advisory Committee (MTAC) and the PRC and use of Customer Satisfaction Measurement (CSM)<sup>7</sup> surveys.

In late February 2007, the Postal Service formed an MTAC workgroup to develop recommendations for service standards and potential measurement systems by mid-September 2007. The MTAC workgroup was subdivided into four subgroups:

- First-Class Mail
- Periodicals
- Standard Mail® (including Bound Printed Matter flats)

---

<sup>6</sup> The PRC is an independent agency that has exercised regulatory oversight over the Postal Service since the Postal Reorganization Act of 1970 created it. Initially, that oversight consisted primarily of conducting public, on-the-record hearings concerning proposed rate, mail classification, or major service changes and recommending that the Postal Service Governors make decisions for action.

<sup>7</sup> The CSM process provides an ongoing assessment of customer experience with Postal Service products and services and is focused on overall customer satisfaction. CSM provides reliable and actionable information to managers by identifying opportunities for improvement.

- Package Services (including Parcel Post®, Media Mail, Library Mail, Bound Printed Matter parcels, and Standard Mail parcels)

The subgroups worked independently to develop market-dominant product-specific recommendations. The workgroup developed recommendations on modern service standards and potential measurement systems and provided their recommendations to the Postal Service in September 2007.

In March 2007, the Postal Service initiated a series of informational briefings with the PRC and the MTAC workgroup to address service standard issues. Members of the Postal Service Executive Committee met regularly with the PRC staff to discuss preliminary work performed by the Postal Service in developing modern service standards, measurement systems, methods for reporting data, and customer outreach.<sup>8</sup>

The Postal Service also conducts periodic CSM surveys to determine customer expectations of service. For instance, in April and May 2007, the Postal Service solicited feedback on expectations regarding service standards and delivery times from residential and small business customers. The Postal Service mailed the survey to approximately 25,000 residential customers and 11,000 business customers; the response rates were 26 and 23 percent, respectively. The survey asked customers for their opinions on overall Postal Service performance and their expectations regarding delivery for:

- First-Class Mail and Parcel Post
- Periodicals (monthly and weekly magazines and national, out-of-town, and local newspapers delivered by mail)
- Advertising mail and flyers
- Library Rate Mail
- Media Mail
- Bound Printed Matter

Management stated that the survey results were not a deciding factor in creating the modern service standards; however, they used the feedback to determine whether the modern service standards aligned with customer expectations. Postal Service officials stated they briefed the PRC on the CSM results on August 21, 2007.

In December 2007, the updated USPS *Strategic Transformation Plan 2006-2010*<sup>9</sup> stated that service improvement areas concentrate on two broad areas of market-dominant products. These areas are the quality and consistency of service provided at all customer contact points and the speed and reliability of end-to-end mail delivery across all product lines.

---

<sup>8</sup> The Postal Service held meetings with PRC to discuss service standards on March 8, June 20, July 23, and August 30, 2007.

<sup>9</sup> USPS *Strategic Transformation Plan 2006-2010*, updated December 2007.

## OBJECTIVE, SCOPE, AND METHODOLOGY

Our objective was to assess the business rules used to develop modern service standards for market-dominant mail products. To accomplish the objective, we interviewed Postal Service managers; conducted a review of MTAC, PRC, and Postal Service informational briefings; and analyzed PLANET Code data from tests conducted by the Postal Service. Also, we reviewed the Postal Act of 2006, which required the Postal Service to consider eight factors in establishing the service standards. In addition, we reviewed management's explanation of business rules used to develop modern service standards, outlined in a December 2007 issue of the *Federal Register*.

We obtained results from the following Postal Service resources: PLANET Code seeding, CSM surveys, and service standards computer modeling. We did not test the controls over these outreach resources. However, we checked the reasonableness of results by confirming our analyses and results with Postal Service managers.

We conducted this performance audit from June 2008 through March 2009 in accordance with generally accepted government auditing standards and included such tests of internal controls as we considered necessary under the circumstances. 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 the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. We discussed our observations and conclusions with management on January 22, 2009, and included their comments where appropriate.

## SCOPE LIMITATION

The PRC requires the Postal Service to review service standards for both contiguous and noncontiguous states and U.S. territories. Because of time constraints, we reviewed the business rules only for the contiguous states.

Additionally, we accepted the PLANET Code testing results provided by management without verifying the accuracy or completeness of the results.

## PRIOR AUDIT COVERAGE

The OIG has not completed any prior audits on business rules used to develop modern service standards for market-dominant mail products.

The Government Accountability Office (GAO) has not issued any reports on business rules for modern service standards; however, the GAO issued a report titled, *U.S. Postal Service: Delivery Performance Standards, Measurement, and Reporting Need Improvement* (GAO-06-733, issued July 2006). The GAO found the Postal Service had not updated delivery standards to reflect changes in how it prepares and delivers mail in years. They recommended the Postal Service take action to modernize its delivery standards; implement delivery performance measures for major types of mail by providing clear commitment and more effective collaboration; and improve the transparency of delivery performance standards, measures, and results.

## APPENDIX B: DETAILED ANALYSIS

### Compliance with the Postal Act of 2006

We concluded the Postal Service complied with the statutory requirements for developing modern service standards for market-dominant mail products as established in the Postal Act of 2006. However, we noted several strategic and operational risks.

The Postal Act of 2006 required the Postal Service, in consultation with the PRC, to establish modern service standards. The law directed the Postal Service to take eight factors into account when establishing the new service standards. See [Appendix D](#) for the statutory requirements established by Congress.

To meet the statutory requirements associated with customer satisfaction and needs, the Postal Service used a combination of outreach methods. Those methods included consultations with the MTAC workgroup and the PRC; other stakeholders provided a number of concerns, comments, and suggestions related to developing the standards.

We noted that the Postal Service, when developing the standards, incorporated several comments and suggestions offered by the PRC and stakeholders. For example, the Postal Service included standards for noncontiguous states and territories and committed to conducting annual internal reviews. Management also formed an MTAC workgroup to address a number of issues that required additional collaboration with the mailing industry, such as critical entry times, in-home delivery dates, and seasonality of service and performance measurement.

In addition, we noted there were stakeholder concerns and comments that were not acted on by the Postal Service for various economic or operational reasons, including standards for caller service, forwarded mail, change-of-address mail, and “tail-of-the-mail.” In response to concerns raised about “tail-of-the-mail,” the Postal Service stated:

Under these new standards, the Postal Service expects that the number of pieces reaching destinations after the prescribed service standard will be reduced. However, there will always be a small number of pieces that are not delivered within their service standard. Rather than establish additional benchmarks for mail not meeting its standard [*i.e.*, “tail-of-the-mail”], the Postal Service prefers that its service standards reflect one goal for all mail within a market-dominant product designation, and that the degree to which mail is late be measured and reported to the PRC.<sup>10</sup>

We also found the Postal Service used a systematic process for developing the modern service standards. Specifically, the Postal Service began developing service standards for market-dominant products by examining the existing standards applicable to the

---

<sup>10</sup> *Federal Register*, Postal Service, 39 CFR Parts 121 and 122, *Modern Service Standards for Market-Dominant Products, Final Rule*, dated December 19, 2007.



matrix of nearly 851,000 origin-destination 3-digit ZIP Code pairs in the Postal Service network for each mail product. As it reviewed the survey data and other information regarding customer preferences, the Postal Service:

- Performed computer modeling to determine how best to match its current mail processing and transportation network capabilities with customer expectations.
- Organized an internal cross-functional team to define and map standardized mail processing and transportation flows for all market-dominant mail products. The resulting flows were benchmarked against existing network capabilities by using internal mail processing and transportation data systems to ensure accuracy.
- Developed computer programs to calculate the resulting days-to-delivery for the approximately 851,000 3-digit ZIP Code origin-destination pairs, separately for each product (see [Appendix E](#) for Service Standards Mail Flow). Numerous versions of the model were run to test different business rules, and the alternative outputs were analyzed. As refined potential outcomes were developed, they became the subject of consultations with the PRC.

The creation of new business rules was a key step in the modernization of service standards. The business rules define how the mail will move through the network, and where appropriate, they also recognize the deferability of Standard Mail. The new service standards maintain the policy of requiring the same service level for each mail class, irrespective of mailpiece shape. Also, the modern service standards reflect some of the logistical challenges associated with providing service to, from, and within the states of Alaska and Hawaii, as well as the territories of Guam, Puerto Rico, and the U.S. Virgin Islands.

### **Strategic and Operational Risks**

Management said they are committed to establishing realistic service standards that customers can count on to be consistently achieved. During our assessment of the modern service standard business rules, we noted two key risks: service performance potentially not meeting operational capability, and the possibility of ineffective stakeholder relationships.

The Postal Act of 2006 required that when developing modern service standards, the Postal Service must take into account the actual level of service customers received under previously established service guidelines or service standards. We noted that the Postal Service took the actual level of service into account, but based the new standards on operational capability rather than the actual level of performance.

Specifically, the Postal Service performed random PLANET Code seeding tests in mail processing facilities from March 26 through May 11, 2007, to obtain accurate and realistic performance data for segments of the network's market-dominant mail. As an

example, Table 1 shows the PLANET Code testing results for First-Class Mail (contiguous U.S. only).<sup>11</sup>

Redacted

\*Note: CONUS - Continental U.S., the 48 contiguous states  
D-T-D - average days to deliver  
DBCS - Delivery BarCode Sorter (sorts letter mail based on the barcode into delivery sequence).

Management stated the test was not intended to be statistically valid. The purposes of the test were to understand cycle times for various products for which management did not have performance data and to identify best practices in the network. When management received the results of the seeding tests, they showed longer-than-expected cycle times for some mail classes. Management used the data to create standardized operating procedures to improve plant performance. Management felt the business rules published on December 19, 2007, were reasonable and credible. A review of fiscal year 2009 service performance data will establish whether realistic service standards have been developed.

An additional strategic risk is stakeholder relationships. Congress, PRC, MTAC and other stakeholders (such as major mailers and the public) may have concerns if service standard day ranges are not aligned with stakeholders' expectations. Our review showed that management addressed the risk of ineffective stakeholder relationships by conducting CSM surveys to determine whether the new service standards were aligned with customer expectations.

---

<sup>11</sup> Standard Mail and Periodicals were not routinely tested.

### **APPENDIX C: SERVICE STANDARDS CHANGE**

The Postal Service established its final regulations on market-dominant products. The proposed modern service standards reflect consideration of relevant statutory requirements.

Established service standards include both end-to-end and destination entry standards.<sup>12</sup>

The following table summarizes the service standard day ranges resulting from the application of business rules to market-dominant mail products.

**Table 2: Service Standards for Contiguous U.S.**

<b>Mail Class</b>	<b>Previous</b>	<b>End-to-End</b>	<b>Entry at Destination Delivery Unit<sup>13</sup></b>
<b>First-Class</b>	1-3	1-3	N/A
<b>Periodicals</b>	1-7	1-9	1
<b>Package Service</b>	2-9	2-8	1
<b>Standard Mail</b>	3-10	3-10	2

---

<sup>12</sup> End-to-end service standard day ranges measure service from origin to destination for mail originating and destinating within the 48 contiguous states and the District of Columbia. The “destination entry standard (days)” refers to mail (Periodicals, Standard Mail, and package services) entered at or near a destination Postal Service facility.

<sup>13</sup> Mail dropped at a destination delivery unit by mailers allows the Postal Service to avoid both transportation and processing costs. The savings from these avoided costs are passed along as discounts to mailers and consolidators.

## APPENDIX D: STATUTORY REQUIREMENTS

The Postal Act of 2006, Subsection 3691-C, directs the Postal Service, in consultation with the PRC, to take the following eight factors into account when establishing modern service standards.

- (1) The actual level of service that customers receive under any service guidelines the Postal Service previously established.
- (2) The degree of customer satisfaction with Postal Service performance in the acceptance, processing, and delivery of mail.
- (3) The needs of Postal Service customers, including those with physical impairments.
- (4) Mail volume and revenues projected for future years.
- (5) The projected growth in the number of addresses the Postal Service will serve in future years.
- (6) The current and projected cost of serving Postal Service customers.
- (7) The effect of changes in technology, demographics, and population distribution on the efficient and reliable operation of the postal delivery system.
- (8) The policies of Title 39, U.S.C., as amended by the Postal Act of 2006, and such other factors as the Postal Service determines appropriate.

Our review showed that management considered and incorporated these statutory requirements when developing the modern service standards. The Actual Level of Service was used to identify best practices in the network and operational capability was used to develop the new modern service standards.

**APPENDIX E: SERVICE STANDARDS MAIL FLOW**

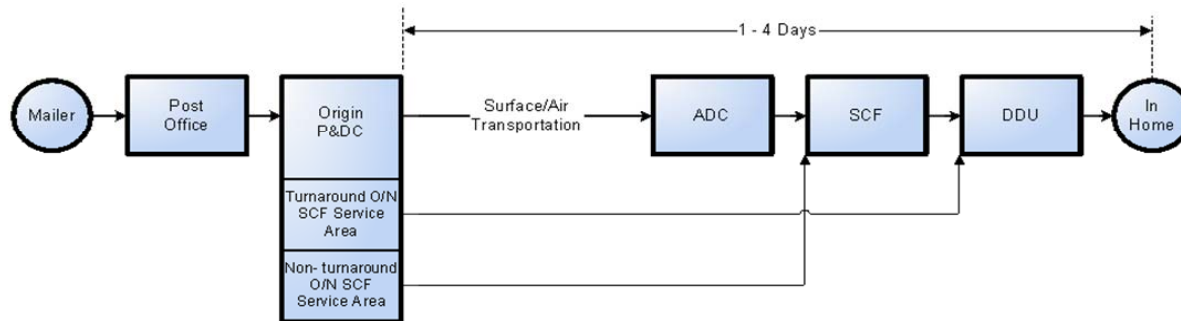
**FIRST-CLASS MAIL**

[Note: Acronyms are defined at the end of the appendix.]



**First-Class Mail Flow**

**□ Origin Entry**



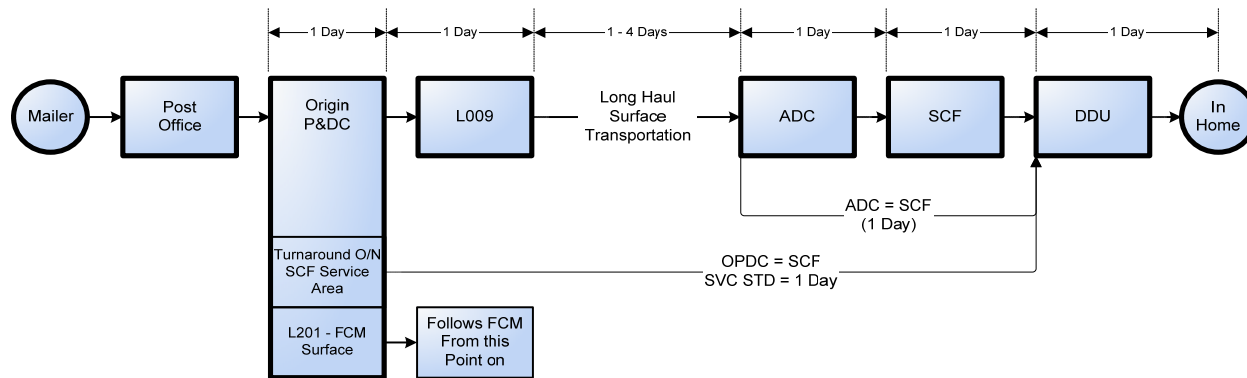
APPENDIX E: SERVICE STANDARDS MAIL FLOW (CONTINUED)

PERIODICALS MAIL

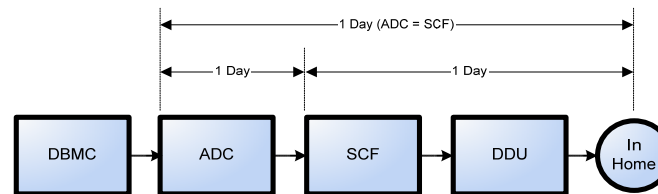


Periodicals Mail Flow

❑ Origin Entry



❑ Destination Entry



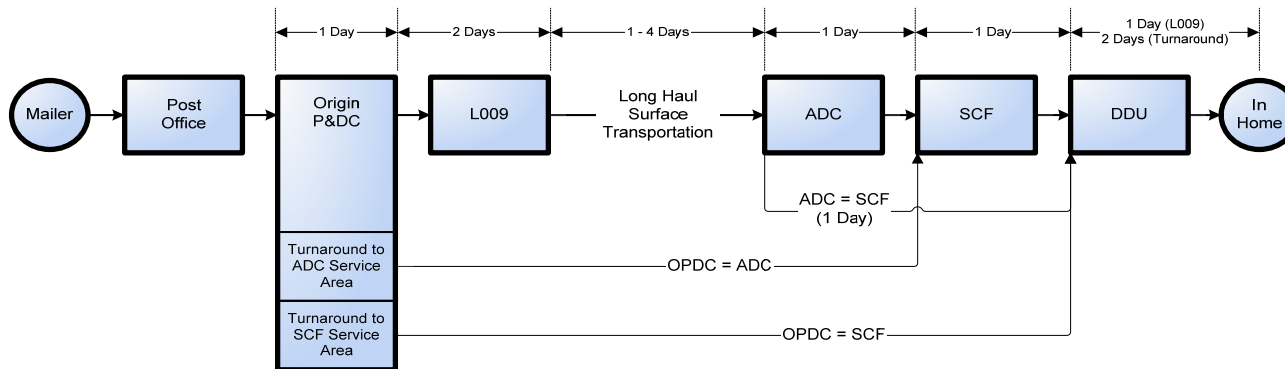
**APPENDIX E: SERVICE STANDARDS MAIL FLOW (CONTINUED)**

**STANDARD MAIL**

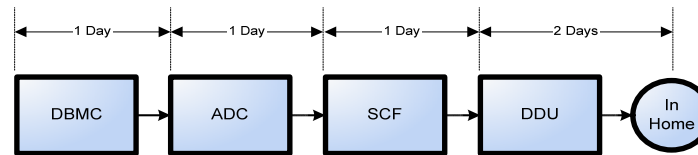


**Standard Mail Flow**

Origin Entry



Destination Entry

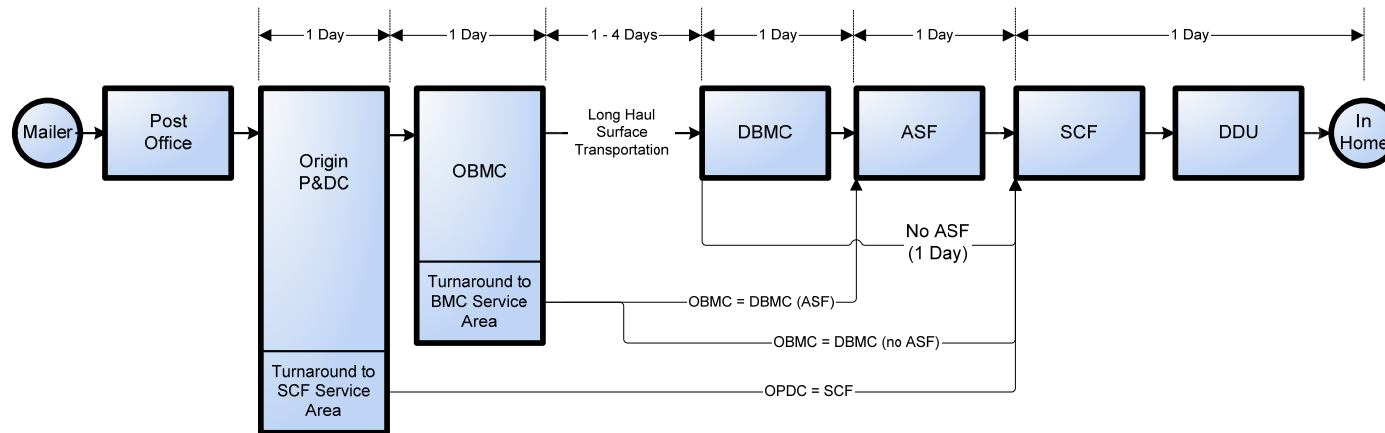


**APPENDIX E: SERVICE STANDARDS MAIL FLOW (CONTINUED)**  
**PACKAGE SERVICES**

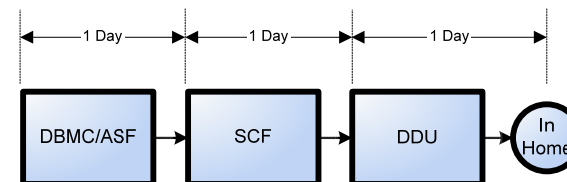


**Package Services Flow**

❑ Origin Entry



❑ Destination Entry





**APPENDIX F: ORIGIN/DESTINATION FACILITY ACRONYMS**

AADC - Automated Area Distribution Center

ADC - Area Distribution Center

BMC - Bulk Mail Center

BMC/ASF - Bulk Mail Center/Auxiliary Service Facility

CET - Critical Entry Time

DADC - Destination Area Distribution Center

DBMC/ASF - Destination Bulk Mail Center/Auxiliary Service Facility

DDU - Destination Delivery Unit

DSCF - Destination Sectional Center Facility

OBMC - Origin Bulk Mail Center

O/N - Overnight

OP&DC/F - Origin Processing and Distribution Center/Facility

P&DC - Processing and Distribution Center

SCF - Sectional Center Facility

**APPENDIX G: MANAGEMENT COMMENTS**

TONY PAJUNAS  
Vice President, Network Operations



March 3, 2009

Lucine Willis  
Director, Audit Operations  
1735 North Lynn Street  
Arlington, VA 22209-2020

SUBJECT: Draft Audit Report – Business Rules for Modern Service Standards  
(EN-AR-09-DRAFT)

Thank you for the opportunity to review and comment on the subject draft audit report.

The U. S. Postal Service agrees with the conclusion of the U. S. Postal Service of the Inspector General in the Draft Audit Report – Business Rules for Modern Service Standard. The conclusion states the U. S. Postal Service complied with the statutory requirements for developing modern service standards for market-dominant products as established in the Postal Accountability and Enhancement Act of 2006.

A handwritten signature in blue ink that reads "Tony Pajunas".

Tony Pajunas

cc: Mr. Galligan  
Mr. Williamson  
Ms. Gambhir  
Ms. Banks

475 L'ENHANT PLANA SW  
Washington, DC 20260-7100  
202-268-4948  
Fax: 202-268-5002  
WWW.USPS.COM