Investment Policies and Procedures — Postal Support and Information Systems

Handbook F-66E December 2005
Transmittal Letter

A. Purpose. New Handbook F-66E, *Investment Policies and Procedures — Postal Support and Information Systems*, provides guidance concerning postal support and information systems investment projects that require Headquarters approval. The handbook includes procedures for documentation, review and approval, validation, compliance, and modification requirements to ensure that projects adhere to the Strategic Transformation Plan 2006–2010 strategy to reduce costs, including the commitment to enhance corporate financial responsibility and to continue to invest in equipment, technology, and facilities.

B. Explanation. This handbook is one of six modules published separately on the Postal Service Intranet.


C. Distribution.

2. Under “Essential Links” in the left-hand column, click on References.
4. Click on Hbks.

D. Comments and Questions. Address comments or questions regarding this handbook to:

CAPITAL AND PROGRAM EVALUATION
US POSTAL SERVICE
475 L’ENFANT PLAZA SW ROOM 8541
WASHINGTON DC  20260-5231
E. Effective Date. This publication is effective December 2005.

Lynn Malcolm
Vice President, Controller
Finance
## Contents

### 1 Overview

1-1 About This Handbook ......................................................... 1
1-2 Purpose ........................................................................... 1
1-3 Types of Investments .......................................................... 2
  1-3.1 General ........................................................................... 2
  1-3.2 Capital Investments ....................................................... 2
    1-3.2.1 Real Property Investments ......................................... 2
    1-3.2.2 Automated Data Processing Equipment and Systems ....... 2
    1-3.2.3 Administrative Support Equipment ............................. 3
  1-3.3 Expense Investments ....................................................... 3
    1-3.3.1 Lease and Rental Agreements ...................................... 3
    1-3.3.2 Research and Development Projects ......................... 3
    1-3.3.3 New Products and Services ....................................... 4
  1-3.4 Major Operating Expense Investments ............................... 4
1-4 Project Documentation .......................................................... 5
1-5 Review and Approval Process ................................................. 5
1-6 Compliance Procedures ....................................................... 6
1-7 DAR Modifications .............................................................. 6

### 2 Decision Analysis Report

2-1 About This Chapter .............................................................. 9
2-2 Purpose of a Decision Analysis Report .................................... 9
2-3 Responsibility .................................................................... 9
  2-3.1 Sponsor ......................................................................... 9
  2-3.2 Preparer ........................................................................ 9
  2-3.3 Reviewer ....................................................................... 10
  2-3.4 Approving Officials ....................................................... 10
2-4 DAR Planning Activities ....................................................... 10
2-5 Format ............................................................................ 11
2-6 DAR Components .............................................................. 11
  2-6.1 Cover Page ................................................................... 11
  2-6.2 Signature Page .............................................................. 11
  2-6.3 Table of Contents .......................................................... 12
  2-6.4 Executive Summary or Introduction ................................. 12
  2-6.5 Background ................................................................. 12
  2-6.6 System Description ....................................................... 13
  2-6.7 System Benefits ............................................................ 13

December 2005
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-6.8 Alternatives</td>
<td>14</td>
</tr>
<tr>
<td>2-6.9 Justification</td>
<td>14</td>
</tr>
<tr>
<td>2-6.10 Developmental Plans — R&amp;D Projects Only</td>
<td>14</td>
</tr>
<tr>
<td>2-6.11 Future Plans — R&amp;D Projects Only</td>
<td>15</td>
</tr>
<tr>
<td>2-6.12 Procurement and Deployment Plan</td>
<td>15</td>
</tr>
<tr>
<td>2-6.13 Economics</td>
<td>15</td>
</tr>
<tr>
<td>2-6.14 Risk Assessment</td>
<td>16</td>
</tr>
<tr>
<td>2-6.15 Performance Metrics</td>
<td>16</td>
</tr>
<tr>
<td>2-6.16 Financial Summary</td>
<td>16</td>
</tr>
<tr>
<td>2-6.17 Recommendation</td>
<td>17</td>
</tr>
<tr>
<td>2-6.18 Exhibits</td>
<td>17</td>
</tr>
<tr>
<td>2-6.18.1 Cash Flow Analysis</td>
<td>17</td>
</tr>
<tr>
<td>2-6.18.2 Cash Flow Line–Item Descriptions</td>
<td>18</td>
</tr>
<tr>
<td>2-6.18.3 List of Sites</td>
<td>18</td>
</tr>
<tr>
<td>2-6.18.4 Major Assumptions</td>
<td>18</td>
</tr>
<tr>
<td>2-6.18.5 Project Schedule</td>
<td>18</td>
</tr>
<tr>
<td>2-6.18.6 Net Present Value Analysis</td>
<td>18</td>
</tr>
<tr>
<td>2-7 Sample DARs</td>
<td>18</td>
</tr>
</tbody>
</table>

3 DAR Backup Documentation ............................................. 47

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-1 About This Chapter</td>
<td>47</td>
</tr>
<tr>
<td>3-2 Purpose</td>
<td>47</td>
</tr>
<tr>
<td>3-3 Format</td>
<td>47</td>
</tr>
<tr>
<td>3-4 Required Components</td>
<td>48</td>
</tr>
<tr>
<td>3-4.1 Cash Flow Analysis</td>
<td>48</td>
</tr>
<tr>
<td>3-4.2 Other Backup Documentation</td>
<td>49</td>
</tr>
<tr>
<td>3-4.2.1 Assumptions</td>
<td>49</td>
</tr>
<tr>
<td>3-4.2.2 Budget Impact</td>
<td>50</td>
</tr>
<tr>
<td>3-4.2.3 Functional and Field Reviews</td>
<td>50</td>
</tr>
<tr>
<td>3-4.2.4 Other</td>
<td>50</td>
</tr>
</tbody>
</table>

4 Review and Approval Process .......................................... 55

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-1 About This Chapter</td>
<td>55</td>
</tr>
<tr>
<td>4-2 Purpose</td>
<td>55</td>
</tr>
<tr>
<td>4-3 Review Steps</td>
<td>55</td>
</tr>
<tr>
<td>4-3.1 Functional Review</td>
<td>56</td>
</tr>
<tr>
<td>4-3.2 Functional Concurrence</td>
<td>56</td>
</tr>
<tr>
<td>4-3.3 Approval of Sponsoring Vice President</td>
<td>56</td>
</tr>
<tr>
<td>4-3.4 Validation Completed</td>
<td>56</td>
</tr>
<tr>
<td>4-3.5 Vice President Review and Final Approval</td>
<td>57</td>
</tr>
<tr>
<td>4-3.6 CIC Review and Approval</td>
<td>57</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>------------------</td>
<td>------</td>
</tr>
<tr>
<td>4-3.7</td>
<td>57</td>
</tr>
<tr>
<td>Postmaster General Review and Approval</td>
<td></td>
</tr>
<tr>
<td>4-3.8</td>
<td>57</td>
</tr>
<tr>
<td>Capital Projects Committee Review</td>
<td></td>
</tr>
<tr>
<td>4-3.9</td>
<td>57</td>
</tr>
<tr>
<td>Board of Governors</td>
<td></td>
</tr>
<tr>
<td>4-4</td>
<td>58</td>
</tr>
<tr>
<td>Document Retention</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>61</td>
</tr>
<tr>
<td>Validation</td>
<td></td>
</tr>
<tr>
<td>5-1</td>
<td>61</td>
</tr>
<tr>
<td>About This Chapter</td>
<td></td>
</tr>
<tr>
<td>5-2</td>
<td>61</td>
</tr>
<tr>
<td>Purpose</td>
<td></td>
</tr>
<tr>
<td>5-3</td>
<td>62</td>
</tr>
<tr>
<td>Responsibility</td>
<td></td>
</tr>
<tr>
<td>5-4</td>
<td>62</td>
</tr>
<tr>
<td>Time Frame</td>
<td></td>
</tr>
<tr>
<td>5-5</td>
<td>62</td>
</tr>
<tr>
<td>Procedures</td>
<td></td>
</tr>
<tr>
<td>5-6</td>
<td>62</td>
</tr>
</tbody>
</table>
| Validation
| Documentation   |
| 6                | 67   |
| DAR Compliance Reports |
| 6-1              | 67   |
| About This Chapter |
| 6-2              | 67   |
| Purpose          |
| 6-3              | 67   |
| Responsibility   |
| 6-4              | 68   |
| Time Frame       |
| 6-5              | 68   |
| Document Retention |
| 7                | 69   |
| DAR Modification Request |
| 7-1              | 69   |
| About This Chapter |
| 7-2              | 69   |
| Purpose          |
| 7-3              | 70   |
| Definitions      |
| 7-4              | 70   |
| Responsibility   |
| 7-5              | 70   |
| Time Frame       |
| 7-6              | 70   |
| Required Components |
| 7-6.1            | 70   |
| Cover Page       |
| 7-6.2            | 71   |
| Signature Sheet  |
| 7-6.3            | 71   |
| Background       |
| 7-6.4            | 71   |
| Problem Definition and Justification |
| 7-6.5            | 71   |
| Financial Summary |
| 7-6.6            | 72   |
| Recommendation   |
| 7-6.7            | 72   |
| Exhibits         |
| 7-6.8            | 72   |
| Backup Documentation |
| 7-7              | 72   |
| Validation       |
| 7-8              | 72   |
| Review and Approval |
| 7-9              | 72   |
| Document Retention |
This page intentionally left blank
Exhibits

Exhibit 1-1
Information Technology Investment Management Process .................................................. 7

Exhibit 2–1
Required DAR Components by Type of Project ................................................................. 19

Exhibit 2–2
Project Schedule Milestones ............................................................................................... 20

Exhibit 2–3
Sample DAR — Postal Support and Information Systems Project ....................................... 22

Exhibit 3–1
Required Backup Components ............................................................................................ 51

Exhibit 3–2
DAR Concurrence Distribution .......................................................................................... 52

Exhibit 3–3
Decision Analysis Review / DAR Concurrence Sheet Sample ........................................... 54

Exhibit 4–1
Headquarters Review and Approval Process ........................................................................ 59

Exhibit 5–1
Validation Process for Postal Support – Systems Projects .................................................. 63

Exhibit 5–2
Sample Validation Memo and Executive Summary ............................................................. 64
This page intentionally left blank
1 Overview

1-1 About This Handbook

This handbook describes the investment process for investments in postal support and information systems projects that require Headquarters approval.

The vice president and controller of Finance must approve exceptions to these policies and procedures. The sponsor must document requests for exceptions and approvals.

Note that related projects having a common objective must be presented as a single plan. Projects may not be split to avoid the next level of management approval.

1-2 Purpose

This handbook is intended to serve as a guide to the requirements for the following:

a. Initiating postal support and information systems investments.
b. Preparing the required documentation.
c. Reviewing, validating, and approving investments at the Headquarters level.
d. Tracking the compliance of the investment with the approved plan, and requesting modifications if necessary.

The purpose of these policies and procedures is to ensure that postal support and information systems investments support the strategic objectives of the Postal Service, make the best use of available resources, and establish management accountability for investment decisions. These policies and procedures cannot, however, substitute for prudent business sense.

1-3 Types of Investments

Postal support and information systems investments are infrastructure purchases that require Headquarters approval (see Delegations of Approval Authority chart issued by Finance). Note that the terms investments, programs, and projects are used interchangeably throughout this publication. The principal categories of postal support and information systems investments follow.

1-3.1 General

An investment is an expenditure designed to provide the systems and/or equipment or to fund initiatives or strategies required to meet Postal Service goals. Generally accepted accounting principles and Postal Service corporate policy determine whether an expenditure is considered a capital or expense investment. Routine operating expenses associated with the day-to-day business of the organization are not investments.

1-3.2 Capital Investments

Capital investments are investments in real property or personal property that are charged to an asset account. For a list of specific items that are capitalized for equipment and systems projects, see subchapters 4-4 and 4-5 of Handbook F-66, General Investment Policies and Procedures.

1-3.2.1 Real Property Investments

Real property investments are investments in land or buildings, including new construction, repairs and alterations, and improvements to leased facilities (leasehold improvements). These types of investments may be required to provide space in support of new equipment or systems investments. Such real property investments are treated as capital expenditures when either of the following conditions is met:

a. The project provides new land or buildings, regardless of cost.
b. The project costs $5,000 or more and provides at least one of the following:
   (1) Useful features not previously available.
   (2) Increased space.
   (3) Significant extension of useful life.

Projects that do not meet these requirements are expensed. This includes capital-type projects costing less than $5,000 and routine maintenance and repair projects.

1-3.2.2 Automated Data Processing Equipment and Systems

Automated Data Processing (ADP) equipment and systems investments include hardware (e.g., personal and mainframe computers); peripheral devices (e.g., printers, scanners, and cameras); software and software development (includes one-time and recurring licensing fees); local and wide
area networks; process and data control systems (e.g., logic control, routers, and switches); data interchange, security, and warehousing/storage systems; and systems maintenance (including parts and labor, both postal and contract). For more detailed discussion of ADP Equipment and Systems, go to the Information Technology Integrated Solutions Methodology (ISM) Web site at http://ism.usps.gov/pls/ismprodnp/page.

1-3.2.3 Administrative Support Equipment

Administrative support equipment includes office equipment, such as copiers, multifunction peripheral devices, and facsimile machines.

1-3.3 Expense Investments

An expense (or non-capital) investment is a one-time operating expense associated with the initiation of a project or program. Expense investments may include lease and rental agreements, research and development projects, new products and services, and major operating expense investments. Expense investments are frequently included in projects in which there are significant capital investments (e.g., depot spare parts are generally considered a non-capital investment associated with a capital expenditure for equipment projects). Routine operating expenses associated with the day-to-day business of the organization are not considered to be investments.

Note: For purposes of project approval, related capital and non-capital expense investments must be included in the same proposal.

1-3.3.1 Lease and Rental Agreements

A project involving the lease or rental of real property or equipment — whether the lease agreement is the complete project or a component of the project — must include all the attendant costs (including renewal options, renovations, start-up costs, maintenance, and utilities). Although lease and rental agreements are considered an expense investment, any related capital expenses (e.g., leasehold improvements, as defined in section 1-4.1.1.1 of Handbook F-66, General Investment Policies and Procedures) must be included where appropriate. Note that lease costs are shown as operating variances in the project cash flow. Lease and rental agreements are discussed in detail in chapter 6 of Handbook F-66.

1-3.3.2 Research and Development Projects

Research and development (R&D) efforts may precede project inception and deployment planning for postal support and information systems programs. R&D is defined as follows:

a. Research is the critical investigation aimed at discovering knowledge that will prove useful in developing a new project, service, or technique, or in bringing about a significant improvement to an existing process or program.
b. **Development** is the translation of research findings into a plan or design for a new product or process, or a significant improvement to an existing product or process. It includes the conceptual formulation, design, and testing of project alternatives; construction and evaluation of prototypes; and operation of pilot sites.

c. Development and implementation of a proof of concept to identify issues and requirements for potential full implementation.

d. Development and implementation of a pilot system to identify issues and requirements for potential full implementation.

As a general rule, R&D costs are expensed. However, capitalization is allowed if the equipment meets the requirements in section 1-4.1.2.1 of Handbook F-66 and the equipment or systems are retained and used as an asset. Approval authority thresholds for R&D projects are in the Delegations of Approval Authority chart (see exhibit 2-1 of Handbook F-66). As is the case for all projects, R&D projects must be presented for approval at the appropriate level before beginning any work or expending any funds.

### 1-3.3.3 New Products and Services

Proposed new products and services, including enhancements to core business products, may be capital or expense investments, or a combination of both, and involve development or enhancement of supporting equipment and systems. These types of investments are defined as follows:

a. **New products and services** are developed primarily by the marketing function to complement products and services that the Postal Service currently provides.

b. **Enhancements to core business products** involve expansions or additions to products and services that the Postal Service currently provides (e.g., domestic and international expedited products and services, retail products and services, stamps, and advertising mail).

For a more detailed discussion of the financial review and analysis requirements for new products and services proposals, see Handbook F-66D, *Investment Policies and Procedures — Business Initiatives, Alliances, Real Estate Development, and Major Operating Expense Investments*. If you need help determining whether a proposed initiative is a new product or service or an enhancement to an existing product or service, then contact the manager of Business Evaluation, who will reach concurrence with the chief marketing officer.

### 1-3.4 Major Operating Expense Investments

When an expense investment is required to implement a business initiative or corporate alliance, the investment may meet the criteria for a major operating expense investment (MOEI). A MOEI is a one-time expense investment associated with an initiative, project, or program that the Executive Committee has identified as a key Postal Service objective. A MOEI also includes ongoing operating expenses that may be associated with the
initiative, as well as any capital expenditures that do not exceed the $5 million threshold for capital Decision Analysis Reports (DARs).

When the total of all these new expenditures (capital and expense) reach $7.5 million or more, the investment is classified as a MOEI and a non-capital DAR is required in addition to the information provided in the business plan. Where a DAR is required, the appropriate investment process must be followed. The sponsor may consult the manager of Capital and Program Evaluation (CAPE) regarding questions as to whether the initiative or alliance may be a MOEI.

1-4 Project Documentation

The sponsor, or requesting organization, prepares a DAR, Justification of Expenditure (JOE), or MOEI DAR, which recommends an investment and providing the approving authority with adequate information to make a prudent business decision. The level and type of investment will determine the appropriate approval process. For minimum requirements for DARs for major postal support and information systems projects, see chapter 2. For DAR backup documentation requirements, see chapter 3. For Minimum requirements for a JOE and MOEI, see Handbook F-66.

1-5 Review and Approval Process

The Headquarters review and approval process for major postal support and information systems investments begins with the initial briefing, in which the sponsor describes the current situation, the system description, benefits, savings methodology, and the projected timeline for approval. The participants include the functional areas listed in part 4-3.1. The process continues with the items described in chapter 4. In addition, Finance must validate these projects (see chapter 5).

Field sponsored projects must be reviewed and approved by the field and are subject to a financial assessment at the area level, review by the Area Capital Investment Committee (CIC), and approval by the area vice president before they are forwarded to Headquarters for review, validation, and final approval (see Handbook F-66C, Field Investment Policies and Procedures).

Recurring or ongoing capital investments in postal support and information systems infrastructure that may be used to maintain original system or equipment performance over the life of the program are not included in the original funding request. However, these recurring capital costs are subject to appropriate review and approval through the regular budget process.
1-6 Compliance Procedures

Sponsors use Compliance Reports to track postal support and information systems projects throughout the progress of the investment. The sponsor must prepare Compliance Reports quarterly from the time a project is approved until 18 months after final deployment (see chapter 6).

1-7 DAR Modifications

If the scope of an investment changes significantly after it has been approved, the sponsor must prepare a DAR Modification Request to request a change from the approved plan. The appropriate approving official must review, validate, and approve this request before action is taken that departs from the approved DAR (see chapter 7). For projects that do not require a DAR, modifications should be prepared for the appropriate approval official before any action is taken that departs from the approved plan.
Information Technology Investment Management Process

The following flowchart depicts the phased approach to identifying, developing, and managing Postal Service information technology (IT) investments:

1. **Select Phase**
   - Concept Definition and Architecture Verification Stage
   - IT Investment Proposal Stage
   - Business Case Development Stage
   - Acquisition Plan Development Stage
   - Project Initiation Stage

2. **Control Phase**
   - Project Definition Stage
   - System and Services Acquisitions Stage
   - System Design Stage
   - Development or Construction Stage
   - User System Acceptance Testing Stage
   - Deployment and Transition Stage

3. **Evaluate Phase**
   - Operations, Production, and Maintenance Stage
   - Post Deployment Stage
Within each phase, each stage contains the following common elements:

a. Purpose — Describes the stage’s objective.

b. Entrance Criteria — Describes the stage’s prerequisite requirements and thresholds.

c. Process — Describes the type of justification, planning, and review that will occur.

d. Results — Describes the actions occurring from the process.

e. Exit Criteria — Describes the actions required to proceed to the next stage or phase.

f. Next Steps — Describes the subsequent activities.

Completing one phase is necessary before beginning a subsequent phase. Each phase is overseen by a decision making body that ultimately approves or rejects a project’s advancement to the next stage. This process ensures that each project receives the appropriate level of managerial and technical review and that coordination and accountability exist. Requests for exceptions to the Information Technology Investment Management Plan (ITIMP) requirements must be identified and documented in a business case and be approved by the Chief Technology Officer Investment Review Board.
2 Decision Analysis Report

2-1 About This Chapter

This chapter presents the minimum requirements for DARs for postal support and information systems projects. The backup documentation requirements are discussed in chapter 3. Modifications to DARs are addressed in chapter 7.

2-2 Purpose of a Decision Analysis Report

The purpose of a DAR is to ensure that investments are properly documented and reviewed. A DAR must be prepared when the requiring organization requests an investment. The DAR defines the problem and details the need for the expenditure, providing sufficient detail to enable the reviewing and approving officials to make an informed decision.

2-3 Responsibility

2-3.1 Sponsor

The sponsor is the person in the functional area that is requesting the project. The sponsor is responsible for ensuring that the DAR and all required backup materials are prepared. The sponsor is also responsible for ensuring that the project is implemented in accordance with the final approved DAR.

2-3.2 Preparer

In general, the sponsor prepares the DAR for a postal support and information systems project. An analyst in a supporting Postal Service organization (e.g., Engineering) may also prepare the DAR on behalf of the sponsor.
2-3.3 Reviewer

A manager in the sponsoring organization(s) must review the DAR for a postal support and information systems project before forwarding the DAR to the approving officials. The reviewer’s signature indicates concurrence with the preparer’s report and analysis.

2-3.4 Approving Officials

The DAR must be approved at the approval level specified in the Delegations of Approval Authority issued by Finance. Postal support and information systems projects may require approval by all of the following:

a. Plant/district manager.
b. Area Capital Investment Committee (CIC).
c. Vice president of Area Operations.
d. Headquarters senior vice president or chief operating officer.
e. Headquarters CIC.
f. Postmaster general (PMG) and chief executive officer (CEO).
g. Headquarters Capital Projects Committee (CPC).
h. Board of Governors (after review and concurrence by the Capital Projects Committee of the Board).

2-4 DAR Planning Activities

A number of planning activities generally occur before the preparation of a postal support and information systems DAR. For example:

a. The sponsor conducts an initial briefing to discuss the DAR assumptions and schedules with the appropriate functional areas.
b. The project is added to the Five-Year Capital Investment Plan through the prioritization process.
c. The DAR is developed with system requirements, site-specific information, justification, and a deployment schedule.
d. The sponsor submits the DAR to Finance with supporting backup documentation, including a major assumptions list.
e. If the DAR has field impacts, the sponsor distributes the DAR to the area vice presidents for concurrence.
f. The sponsor distributes the DAR for concurrence to the following headquarters functional areas: Corporate Accounting; Chief Marketing Officer, Product Development; Chief Technology Officer; Employee Development; General Counsel; Intelligent Mail and Address Quality; Operations – Delivery and Retail; Facilities; Network Operations Management; Labor Relations; Engineering; Public Affairs and Communication; Supply Management; and Strategic Initiatives.
2-5 Format

The DAR for any project that requires Headquarters approval must be prepared as follows:

a. Use Microsoft Word for the text and Microsoft Word, Project, and Excel for the exhibits, in accordance with Postal Service standards.

b. Format the text in Arial 10-point type, left-justified, and single-spaced.

c. Set all margins (top, bottom, right, and left) to 1 inch.

d. Number all pages consecutively after the table of contents, except page 1.

e. Title all exhibits and include the name of the project as a header on each page.

f. Spell out numbers from zero to nine, and use numerals for larger numbers. However, use numerals for all measurements, percentages, and dollar amounts (e.g., 6.4 acres, 3 years, 7 percent, and $28.2 million).

g. Spell out terms the first time they are used. If an abbreviated form is commonly used, include it in parentheses; thereafter, use the acronym.

h. Print out the document on 8-1/2 by 11 inch paper on one side only.

See exhibits 2-1, 2-2, and 2-3 for sample DARs in the approved format.

2-6 DAR Components

A DAR is composed of a narrative section, exhibits, and required backup documentation. The DAR must include the required components for the type of project being requested (see exhibit 2-1). The complexity of the project determines the level of detail required. The DAR must be concise, direct, and detailed enough to enable the reviewing and approving officials to adequately assess the project.

The following are brief descriptions of each required component of the DAR in the order they appear in the document:

2-6.1 Cover Page

The cover page includes the Postal Service logo, the words “DECISION ANALYSIS REPORT,” the name of the project, the location (if applicable), and the preparation date. If the DAR contains proprietary information, it should be marked “RESTRICTED INFORMATION” to ensure confidentiality.

2-6.2 Signature Page

Signing the DAR indicates agreement with the project’s concepts, assumptions, and operational and budgetary impacts. Signatures of acting managers “for” reviewing and approving officials are not accepted. Acting
managers may not sign a DAR except in cases of long-term absence or for
details that have documented a temporary change in authority.

The signature page should conform to the following format:

**PREPARED BY:**  
<Signature and date signed>  
<Typed name, title, and organization>  
Date

**REVIEWED BY:**  
<Signature and date signed>  
<Typed name, title, and organization>  
Date

**APPROVED BY:**  
<Signature and date signed>  
<Typed name, title, and organization>  
Date

In most cases the sponsor signs the “APPROVED BY” block. When a project
affects multiple approval levels or multiple functional areas, you may add
more “APPROVED BY” signature blocks. In some situations, you may need
to add a separate “SPONSORED BY” block.

### 2-6.3 Table of Contents

The table of contents lists each main heading and exhibit title and the
beginning page number.

### 2-6.4 Executive Summary or Introduction

The DAR for a major postal support and information systems project begins
with an executive summary or introduction that briefly highlights each major
section of the DAR. The executive summary or introduction must be detailed
enough to convey an accurate understanding of the project. An executive
summary usually runs 1 to 2 pages. If the DAR narrative is less than
10 pages, a brief introduction may suffice.

Follow these guidelines when preparing the executive summary or
introduction:

a. Write this section after completing the rest of the DAR.

b. Avoid using technical terminology. Explain any terms that may be
   unfamiliar to the approving officials.

c. Do not include any information that is not discussed in more detail
   elsewhere in the DAR.

### 2-6.5 Background

The background section describes the problem or opportunity that requires a
request for a new postal support and information systems investment. The
background includes information needed to understand the investment
proposal, such as relevant history, what prompted the proposal, the
function(s) to be performed, and how the investment fits into the corporate strategic plan. Some of the following factors are often cited:

a. Corporate strategies, goals, and objectives (e.g., the Strategic Plan, Voice of the Customer, Voice of the Employee, and Voice of the Business).
b. Efficiency or productivity improvements.
c. Service improvements.
d. Customer service enhancements.
e. Economic and business opportunities.
f. Technological advances.
g. System obsolescence.
h. Elimination of support for an existing system.
i. Costs to maintain or upgrade an existing system.
j. Process re-engineering efforts.
k. Revenue generation.
l. Demographics (changes impacting revenue and volume growth).
m. Safety, health, and environmental issues.
n. Capacity issues.
o. Avoidance of catastrophic failures.
p. Future or next phases.

Test results or review findings may also prompt the implementation of a project. In this case, one of the following may be the driver(s) for initiating a new investment:

a. Pilot site or prototype testing results.
b. Proof of concept results.
c. Review team findings.
d. Outside consultant studies.
e. Finance, Inspector General, or Inspection Service reviews or audits.
f. Work group or functional recommendations (e.g., productivity improvements, or component changes).

2-6.6 System Description

Describe the new system or upgrade and related operations, using diagrams and illustrations as applicable. Explain any technical jargon and concepts so that someone who is not an expert in the field can understand the proposed project. If features or attributes are cited, explain their relevance, importance, and benefit(s).

2-6.7 System Benefits

The expected system benefits typically include factors such as the following:

a. Provides a management tool to improve efficiency.
b. Meets customer needs.
c. Provides service and productivity improvements.
d. Improves working conditions (e.g., safety, health, and environmental concerns).
e. Moves manual operations to an automated or mechanized environment.
f. Increases efficiencies from replacement of aging or obsolete equipment or parts.
g. Improves downstream operations.
h. Reduces downtime and maintenance costs.
i. Avoids catastrophic failures.
j. Generates revenue.
k. Adds necessary functionality.
l. Satisfies a legal requirements.

Use graphics and cite test results if they will provide a clearer understanding of the benefits. Also note that R&D activities that support the investment decision, such as pilot or prototype test results.

2-6.8 Alternatives

In the alternatives section of the DAR, the sponsor discusses and analyzes all viable solutions to the problem that were considered and that meet the requirements of the project. Clearly indicate which alternative is recommended, why the recommended alternative was selected, and how this alternative will solve the identified problem(s). If any alternatives were eliminated, explain why. In this section also address, if applicable, the costs of sustaining the existing systems (sustaining baseline), and include a net present value (NPV) analysis. Consult the manager of Capital and Program Evaluation to determine the applicability of an NPV analysis.

2-6.9 Justification

The justification section identifies and explains how the project was investigated and the reasons for making the investment. The sponsor must state the expected benefits to be derived from the system (see examples in part 2-6.7). Include the scope of the project, criteria, and considerations other than economics that were used in evaluating the decision, along with the current status of the opportunity. You may include illustrations, tables, and references. Dividing this section into subsections with headings may also be helpful.

2-6.10 Developmental Plans — R&D Projects Only

The development plan may include testing and development, pilot tests, or proof of concept proposals. Provide the following information in narrative or chart form:
a. Developmental plans.
b. Anticipated goals and objectives.
c. Expected outcome.
d. Time frames and deployment schedules.
e. Methodology and criteria used to measure results.

2-6.11 **Future Plans — R&D Projects Only**
A future plans section is required only for R&D, test and development, pilot, and proof of concept projects. If the project is phased, identify future plans based on pilot results, including anticipated costs and benefits, expected time frames, and potential deployment schedules.

2-6.12 **Procurement and Deployment Plan**
A deployment schedule is required for both capital and expense investments. The sponsor may present the information in narrative form or as a table. For site-specific projects, include the deployment schedule for each site. If existing equipment will be redeployed or removed, include the redeployment or removal schedule. Also indicate how the equipment or systems will be procured (competitive bid or sole-source contract), the acquisition strategy used to determine the procurement method, and when the contract will be awarded. If old equipment or systems are to be removed or relocated, include adequate funds in the cash flow to cover disposal costs. When replacing an existing system, identify any undepreciated balance for the system to be retired.

2-6.13 **Economics**
The economics section includes a discussion of economic issues that are relevant to the project, such as the requirements call, methodology used in the pilot test or R&D effort, and savings. If the project justification is based upon non-economic considerations, this must be clearly stated.

If the sponsor completed multiple analyses, summarize those that are applicable to the investment decision (e.g., expected results, sensitivity, risk, break-even, minimum hurdle rate, and threshold, lower-bound, and upper-bound scenarios). The minimum hurdle rate is the minimum ROI acceptable to the approval authority for a given project. The lower-bound and upper-bound economic scenarios correspond to the minimum and maximum performance scenarios, respectively. Additional analysis may include payback period or total cost of ownership, and an NPV analysis comparing the baseline to the proposed investment with projected cost avoidances.

The economics section may also include first full-year operating information, such as the number of full-time equivalent (FTE) positions that will be saved or added as a result of the equipment or systems procurement and deployment. You must identify any obligations incurred beyond the life of an R&D effort (such as lease obligations on buildings or contractual expenses beyond the test). This section must also include information on any undepreciated balance on equipment or systems that will be removed or retired as a result of the proposal.
2-6.14 **Risk Assessment**

In the risk assessment section of the DAR, identify the technological, operational and integration risks of the proposed investment, and rank each risk as low, moderate, or high. Risk is a measure of the probability and consequence of not achieving a defined project goal. The risk section of the DAR is used to identify the class of factors that (1) have a measurable probability of occurring, (2) have an associated cost or effect on the outcome, and (3) have alternatives from which the organization may choose. Risks are determined based upon a number of factors, including the maturity of the technology, experience with previous deployments, the results from any pilot or prototype tests, and the projected impacts on existing systems or operations. Include testing documentation in the DAR backup. Further information on risk management process is available in subchapter 5-4 of Handbook F-66.

2-6.15 **Performance Metrics**

Identify the specific metrics or indicators that will be used to measure system performance during implementation and after full deployment. These should be specific metrics that can be used to track actual system implementation and performance versus the projected operational and financial benefits cited in the decision document (e.g., workhour reductions, increased machine throughput, higher worker productivity, increased revenue, reduced maintenance workhours, reduced sick leave or injury compensation claims). A more complete definition is available in Handbook F-66.

2-6.16 **Financial Summary**

Include a chart in the established format showing the total capital and expense investments, and the results from the cash flow analysis, including operating variances from baseline operations.

The following financial summary format is used for traditional projects:

**Financial Summary**

<table>
<thead>
<tr>
<th></th>
<th>5-Year Operating Period ($ in thousands)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Investment</td>
<td>$ xx,xxx</td>
</tr>
<tr>
<td>Expenses Investment</td>
<td>$ xx,xxx</td>
</tr>
<tr>
<td>Total Investment</td>
<td>$ xx,xxx</td>
</tr>
<tr>
<td>Total Operating Variances</td>
<td>$ xx,xxx</td>
</tr>
<tr>
<td>Net Present Value</td>
<td>$ xx,xxx</td>
</tr>
<tr>
<td>Discounted at _____%</td>
<td></td>
</tr>
<tr>
<td>Return on Investment</td>
<td>xx.x%</td>
</tr>
</tbody>
</table>

*The minimum number of years depends upon the operating life of the equipment and/or system. Verify the operating period with Corporate Accounting, Finance.*
2-6.17 **Recommendation**

In the recommendation section, briefly state the recommendation, including the funding required, what will be delivered, anticipated procurement dates, and the major benefits that are expected to result from implementing the project. Include in this section only information that has been discussed in detail elsewhere in the DAR.

2-6.18 **Exhibits**

DARs for most postal support and information systems projects should include the following exhibits:

a. Cash flows.

b. Cash flow line-item descriptions.

c. List of major assumptions.

d. List of sites.

e. Project schedule (Gantt chart).

The following additional exhibits may be included if they serve to clarify the proposed investment and ensure a sound business decision:

a. Net present value (NPV) analysis.

b. Generalized schematics or flowcharts.

c. Floor layouts.

d. Service and productively improvements.

e. Sensitivity analysis.

f. Pictures.

g. Maps.

Include site-specific deployment plans and cash flows if needed or requested.

2-6.18.1 **Cash Flow Analysis**

A cash flow is required for all postal support and information systems projects except for certain R&D projects and those investments that have no operating variances and occur within a single 12-month period. A cash flow analysis is used to itemize investments and quantifiable costs and benefits over the applicable analysis period (usually the investment period plus the standard service life of the equipment and/or system). This information is used to determine the return of investment and net present value that will result from implementing the project. When a cash flow is required, it is also included as part of the backup documentation. For projects that have multiple investment scenarios, such as incentive- or performance-based contracts, you must include a cash flow for each scenario (i.e., threshold, upper-bound, and lower-bound).

Do not include recurring or ongoing capital investments in postal support and information systems infrastructure that may be used to maintain original system or equipment performance over the life of the program in the original
funding request. However, these recurring capital costs are subject to appropriate review and approval outside the DAR process.

2-6.18.2 **Cash Flow Line-Item Descriptions**
Use this exhibit to explain each line item in the cash flow analysis — capital and expense investments, operating variances, and costs or savings. Provide all costs, calculations, charts, and references as appropriate.

2-6.18.3 **List of Sites**
This exhibit is required if the postal support and information systems project is justified on site-specific information, but is optional for projects that are not justified on site-specific information.

2-6.18.4 **Major Assumptions**
This exhibit lists the significant assumptions used in the analysis of the project (e.g., volume projections, deployment plans, productivity levels, DAR factors, and base-year labor rates).

2-6.18.5 **Project Schedule**
The DAR for postal support and information systems projects must include a milestone chart that shows each major step in the DAR and deployment process. See exhibit 2-2 for a list of required milestones. Exhibit 2-3 contains a project milestone chart.

2-6.18.6 **Net Present Value Analysis**
Where applicable, the DAR for postal support and information systems projects should include an exhibit detailing the NPV analysis. An NPV analysis is typically used to compare the present values of mutually exclusive alternatives with the continuation of present, or baseline, conditions. Contact the manager of Capital and Program Evaluation to determine the applicability of an NPV analysis.

### 2-7 Sample DARs
A sample of a postal support and information systems DAR project is included for guidance.

<table>
<thead>
<tr>
<th>This exhibit…</th>
<th>Shows…</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-1</td>
<td>The required DAR components by the type of project.</td>
</tr>
<tr>
<td>2-2</td>
<td>An example of milestones to be included in the project schedule.</td>
</tr>
<tr>
<td>2-3</td>
<td>A complete DAR for Intelligent Mail Data Acquisition System (IMDAS) — Mobile Data Collection Device Replacement.</td>
</tr>
</tbody>
</table>
### Exhibit 2-1

#### Required DAR Components by Type of Project

<table>
<thead>
<tr>
<th>Equipment, IT Systems, Support, or Other</th>
<th>Research and Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover page</td>
<td>Cover Page</td>
</tr>
<tr>
<td>Signature page</td>
<td>Signature Page</td>
</tr>
<tr>
<td>Table of contents</td>
<td>Table of Contents</td>
</tr>
<tr>
<td>Executive summary or Introduction</td>
<td>Introduction</td>
</tr>
<tr>
<td>Background</td>
<td>Background</td>
</tr>
<tr>
<td>System Description</td>
<td>System Description</td>
</tr>
<tr>
<td>Alternatives¹</td>
<td></td>
</tr>
<tr>
<td>Justification / System Benefits</td>
<td>Justification and System Benefits</td>
</tr>
<tr>
<td>Performance Metrics</td>
<td>Performance Metrics</td>
</tr>
<tr>
<td>Risk Analysis</td>
<td>Risk Analysis</td>
</tr>
<tr>
<td>Procurement and Deployment Plan</td>
<td>Procurement and Deployment Plan</td>
</tr>
<tr>
<td>Economics</td>
<td></td>
</tr>
<tr>
<td>Financial Summary</td>
<td>Financial and Economic Summary</td>
</tr>
<tr>
<td>Recommendation</td>
<td>Recommendation</td>
</tr>
<tr>
<td>Exhibits:</td>
<td>Exhibits:</td>
</tr>
<tr>
<td>Cash Flow</td>
<td>Cash Flow</td>
</tr>
<tr>
<td>Line-Item Descriptions</td>
<td>Line-Item Descriptions</td>
</tr>
<tr>
<td>Major Assumptions</td>
<td>Major Assumptions</td>
</tr>
<tr>
<td>List of Sites (if appropriate)</td>
<td>List of Sites</td>
</tr>
<tr>
<td>Sensitivity Analyses²</td>
<td>Sensitivity Analyses²</td>
</tr>
<tr>
<td>Net Present Value Analysis²</td>
<td>Net Present Value Analysis²</td>
</tr>
<tr>
<td>Project Schedule</td>
<td>Project Schedule</td>
</tr>
<tr>
<td>Backup Documentation³</td>
<td>Backup Documentation³</td>
</tr>
</tbody>
</table>

**Notes:**

¹ Where appropriate, consider a leasing alternative, and include a lease versus buy analysis as a sensitivity analysis exhibit and in the backup documentation.

² Contact the manager of Capital and Program Evaluation to determine if a sensitivity analysis and NPV analysis are required.

³ The DAR backup documentation is a separate document from the DAR (see requirements in chapter 2-6.7).
Exhibit 2-2
Project Schedule Milestones

Pre-deployment Activities

1. **Project Inception** — The date the sponsor initiates deployment planning for equipment projects that previously were the subject of an R&D effort (i.e., when the sponsor decides that a good idea has been conceived, identifies a need for the project, has developed a final scope for the idea, and determines to move forward on that idea). Generally, this is the date a project moves out of the R&D stage, although R&D and prototype evaluation may continue after this date.

2. **Prototype Evaluation** — The period for evaluating the operational prototype of the item or system proposed for deployment.

3. **DAR Preparation** — The period during which the sponsor develops a draft DAR and compiles backup documentation until the DAR is ready to be submitted for review.

4. **DAR Submission and Finalization** — The period during which the draft DAR is circulated for review and the sponsor revises the DAR based on functional comments until the final DAR is submitted to Finance for validation.

5. **Validation Process** — The period that begins when Finance initially reviews the draft DAR and backup package and ends when the vice president and controller of Finance signs the validation memo.

6. **CIC Review** — The date the area Capital Investment Committee meets with the sponsor and votes whether to proceed with the project.

7. **PMG Review** — The date (usually within one week of the CIC meeting) when the postmaster general meets with the sponsor and determines whether the project should proceed.

8. **CPC Review** — The date the Capital Projects Committee (CPC) meets to review the project and makes a recommendation to the full Board of Governors.

9. **BOG Approval and Funding** — The date the Board of Governors discusses and considers the project for approval. Contract awards and deployment schedules are usually dependent on this date.

10. **Compliance Reporting** — Compliance reporting begins with the approval of the investment by the Board (or postmaster general or officer as appropriate), and ends 18 months (6 quarters) after the program has been completed.

11. **Contract Award** — The time required by Purchasing or Procurement to advertise and award the contracts necessary to implement the deployment.

Deployment Activities

1. **In-plant Test** — Testing that takes place in the vendor’s manufacturing plant that tests the equipment being purchased by the Postal Service. After this test, the equipment is usually moved into a postal facility to prepare for the First Article Test.

2. **First Article Test and Customer Acceptance Test** — The date or time frame during which the first sample of purchased equipment or software is placed and tested for functionality, quality, and compliance with contract specifications. After first article acceptance, the supplier begins deployment as scheduled to other sites.

3. **Fixed Mechanization Award and Installation** — The time allotted for Purchasing to award the contract and Engineering (through Operations) to oversee installation of the equipment on site.
4. **Deployment and Implementation** — The time frame during which the purchased equipment and/or software is deployed to sites in accordance with the deployment plan. If the schedule for equipment and software deployment are different, then schedules for both must be included. This activity includes both begin and end dates.

5. **First Full Fiscal Year of Operations/Cost Savings** — The time frame in which cost savings for the first full operating fiscal year following full deployment, as reflected in the DAR, are realized.

6. **Submission of Additional Phase DAR** — The date on which the DAR for phased projects is to be submitted to begin a new review and approval process.

**Post Deployment Activities**

**Project Completion Date** — The project completion date is when the sponsor *expects* to see no capital or expense investment dollars charged to the project and the project has all the functionality promised in the DAR. This date is used to determine if the project has been completed on time.
Sample DAR — Postal Support and Information Systems Project

DECISION ANALYSIS REPORT

Intelligent Mail Data Acquisition System (IMDAS) - Mobile Data Collection Device Replacement

ENGINEERING
DELIVERY AND RETAIL
INTELLIGENT MAIL AND ADDRESS QUALITY

RESTRICTED INFORMATION
July 8, 2004
August 17, 2004 Revised
### Sample DAR — Postal Support and Information Systems Project

#### Intelligent Mail Data Acquisition System (IMADS) - Mobile Data Collection Device Replacement

### Signature Page

<table>
<thead>
<tr>
<th>PREPARED BY:</th>
<th>&lt;Printed Name&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirements Analyst</td>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REVIEWED BY:</th>
<th>&lt;Printed Name&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager, Equipment Requirements &amp; Economic Analysis</td>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REVIEWED BY:</th>
<th>&lt;Printed Name&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager, Delivery Operations</td>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REVIEWED BY:</th>
<th>&lt;Printed Name&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager, Intelligent Mail Planning &amp; Standards</td>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>APPROVED BY:</th>
<th>&lt;Printed Name&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice President, Engineering</td>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>APPROVED BY:</th>
<th>&lt;Printed Name&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice President, Delivery &amp; Retail</td>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>APPROVED BY:</th>
<th>&lt;Printed Name&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Vice President, Intelligent Mail &amp; Address Quality</td>
<td>Date</td>
</tr>
</tbody>
</table>
### TABLE OF CONTENTS

1. Introduction ........................................................................................................ 1
2. Background .......................................................................................................... 1
3. System Description ............................................................................................. 3
4. Alternatives Analyzed ......................................................................................... 5
5. Justification and Benefits .................................................................................. 7
6. Procurement and Deployment Plan .................................................................... 7
7. Economic Analysis ............................................................................................. 9
8. Financial Summary ............................................................................................. 9
9. Recommendation ............................................................................................... 9

Exhibit 1. Cash Flow ............................................................................................ 10
Exhibit 2. Cash Flow Line Item Descriptions ...................................................... 11
Exhibit 3. Major Assumptions ............................................................................... 13
Exhibit 4. Implementation Plan ............................................................................. 15
Exhibit 5. Current Applications Reliance on MDCDs ......................................... 16
Exhibit 6. Electronic Signature Capture ............................................................... 18
Exhibit 7. Two-Dimensional Barcodes ................................................................ 19
Exhibit 8. “Intelligent Mail” and the Standard Platform ...................................... 21
Exhibit 9. Program Schedule ............................................................................... 22
1 Introduction

This Decision Analysis Report (DAR) recommends funding approval of $XXX.XX million in capital and $X.XX million in expense, for a total investment of $XXX.XX million, to replace all existing Mobile Data Collection Devices (MDCDs) used by postal carriers and clerks. The current devices have components that are obsolete and being maintained out of decreasing residual stocks of these parts. Maintenance support will end in August 2005. Replacement of the MDCDs is necessary for continuation of service offerings and operations management programs that rely on the current handheld scanners. The proposed replacements, called “Intelligent Mail” Devices (IMDs), will have greater capabilities and support new product offerings, internal improvements, and revenue protection.

2 Background

In 1999, the Postal Service introduced Delivery Confirmation™, a special service that allows customers to determine the ZIP Code, date, and time of delivery of a specific mail piece, as well as any attempted deliveries and forwarded or returned shipments. This was followed in 2001 with a related service, Signature Confirmation™, which includes all of the benefits of Delivery Confirmation plus provides the customer with a signature from the person who accepts the mail piece. These services were enabled by the introduction of the MDCD and its supporting infrastructure.

MDCD Description

The MDCD is a portable handheld scanner deployed to support Delivery Confirmation and Signature Confirmation. This device is integral to the management of electronic delivery records and is now used to support many other programs as discussed in the History section of this report. The MDCD allows for alpha-numeric data entry using a key pad and scanning of one-dimensional barcodes like those used for serial numbers on numerous Postal forms. One-dimensional barcodes can have bars with varying widths and are similar to Universal Product Codes (UPCs) found on many retail products.
The MDCD is ruggedized for the Postal operating environment and is designed for use with one hand. It can be operated by either left or right handed users without modification. The scanner uses a cradle to transmit data and receive software updates that also functions as a charging station to recharge the scanner battery.

**History**

Deployment of the initial 318,000 MDCDs was completed in early 1999 in support of the Delivery Confirmation program. The database, communications, and reporting infrastructure to support Signature Confirmation were implemented in 2000. Today, there are over 340,000 MDCDs in use nationwide. In 2003, these devices were used to scan 514 million pieces of mail (including Express Mail and International Mail) for Delivery Confirmation, Signature Confirmation, and other Special Services.

The technology infrastructure deployed for the Delivery Confirmation and Signature Confirmation programs supports the collection, transmission, storage, and inquiry capabilities for all postal delivery records. This infrastructure provides data collection capabilities for many performance measurement programs and other programs, and supports:

- Shippers’ needs for easy-to-access delivery status information
- Creation of operational and service performance indicators
- Value-added services on accountable mail

Market research has determined that electronic, real-time, package delivery information has become the industry standard and a high priority for Postal Service customers. Since the introduction of Delivery Confirmation in 1999 and Signature Confirmation in 2001, there have been over one billion shipments using these services. They now represent more than one quarter of all Priority and Package Services and usage is still growing.

The MDCDs are not limited to scanning for a few product lines. Today, these devices are also a key resource for collecting and reporting operational performance data for the following programs:

- **Managed Service Points (MSP) Program** – MDCD scans of barcodes along the delivery route are used to improve consistency in the times of day that mail is delivered to customers.
- **Collection Box Management System (CBMS)** – MDCD scans for barcodes inside collection boxes identify early and missed pickups.
- **Automated Vehicle Utilization System (AVUS)** – Vehicle mileage information entered into the MDCD at points along the route allow tracking of vehicle utilization.
- **Standard Accounting For Retail (SAFR) / Small Post Office Reporting Tool (SPORT)** – Small post offices without retail window automation use the MDCD to report their revenue daily.
- **CONFIRM® & Entry Information (EI)** – MDCD scans of CONFIRM barcodes and mailing entry information support near-real-time tracking of First Class mail, periodicals, and Standard Mail letters and flats.
- **Special Services (Registered, Certified, and/or Insured Mail; Return Receipt for Merchandise and Collect on Delivery) including those offered for International Mail** – The MDCD is used to scan the mail piece and enter delivery information, signature information, and other information as appropriate for each service.
- **Automatic Data Entry (ADE)** – MDCDs eliminate data entry time by automatically recording attendance and other training information for instructor-led courses.

A detailed discussion of the potential impacts of MDCD end-of-life on each of these programs and services is included in Exhibit 5.
Exhibit 2-3 (p. 6)
Sample DAR — Postal Support and Information Systems Project

Current Situation
Handheld scanners have become a fundamental part of postal operations and the services we provide to our customers. The services represent significant volume and revenue for the Postal Service, and the operational programs provide key management tools for controlling costs. However, the original devices are now at the end of their useful lives and their failure rate has increased over the past few years. The supplier is obligated to support the devices only through August 2005, which is two-years beyond the design life of the units. The supplier is willing to extend limited support for an additional six months, but this extended support would not cover obsolete components and would be extremely costly. The sustaining alternative (scenario 4) discussed in Section 4 includes this additional support cost.

In addition, some of the infrastructure, and the ancillary systems that perform subsequent scanning of the delivery-related forms, are also at the end of their design lives and need replacement. As a matter of favorable timing, the need to replace the subsequent scanning operation will be eliminated since the proposed IMDs can capture signatures electronically.

Testing and Development
In November 2003, the Chief Operating Officer approved funding of $XXX million for three testing and development activities that are supporting MDCD replacement.

- Testing of the currently available handheld scanner technology provided a basis for defining the configuration of the new units. Features were evaluated in terms of performance and usability in the postal environment, potential value in postal operations and service offerings, impact on cost, and the device’s physical parameters, such as size, weight, and battery life. This activity was completed and the results are reflected in the configuration of the proposed new device.

- Selection of a supplier provides a mechanism to support this purchase as well as the purchase of a family of handheld scanners for other applications (the standard platform concept is discussed in the next section). Supplier selection is based on competitive evaluation of sample devices, as well as cost and each vendor’s ability to meet a wide range of Postal needs.

- Activities to shorten deployment lead time are scheduled to begin upon announcement of the winning supplier, and should be nearly complete at the time of the Board’s funding decision on this proposal. This task will consist of certain development, production engineering, and production planning work.

The minimal funding provided to accelerate these activities has allowed the Postal Service to defer significant funding for the production purchase for nearly a year without increasing the risks associated with the end-of-life condition of the current system.

3 System Description
The new IMDs will include state-of-the-art technology and have the same general physical and durability characteristics and base functionality as the MDCDs. They will also have enhanced capabilities and new features, including:

- **Signature Capture**
  The laser barcode scanner of the MDCD will be replaced with an imager similar to a digital camera. It will be used to capture an electronic picture of the customer’s signature at the time of delivery and reduce or eliminate the need to scan signatures from paper forms as a subsequent operation. It will also shorten the two-to-seven day waiting period before the information becomes available to customers. Electronic signature capture and its ramifications are discussed in Exhibit 6.

- **Two-Dimensional Barcode Reading**
  The ability to read two-dimensional barcodes that are used on meter strips and PC Postage will provide a mechanism for revenue protection. It will also support future service offerings involving the use of POSTNET, PLANET Code, Information Based Indicia, or other tracking/special
Sample DAR — Postal Support and Information Systems Project

Intelligent Mail Data Acquisition System (IMDAS) - Mobile Data Collection Device Replacement

- Personal Area Network (PAN)
  Wireless short-range communications will enable real-time availability of data within the plants, delivery units, and dock areas. This will support such applications as bundle and container tracking and business mail acceptance. It will also allow use of low-cost printers in offices that cannot justify the print workstations used in larger offices. In addition, PAN provides a mechanism for adding cellular-type communications capabilities in the future to support real-time availability of delivery or other data, a feature our competitors currently offer.

There will be two in-office configurations depending on the number of IMDs located at a site as shown below. Large Office configurations are those offices with nine or more IMDs and Small Office configurations are those with eight or fewer IMDs. The Large Office configuration uses the IMD cradle to download data from the IMD to a local computer which then transmits the data to the National Server to be stored and used by other applications. The Small Office configuration also uses the IMD cradle to download data from the IMD, but data transmission to the National Server is accomplished via modem.

MDCD replacement will also require replacement of scanner cradles and a portion of the in-office infrastructure, such as local computers, that are also near the end of their service lives. The functionality being updated is that of the data collection tool. The IMD will be integrated with, and continue to feed, existing software applications. It will also be fully integrated with the administrative infrastructure that handles such functions as data transmission, software distribution, remote monitoring, and asset management.

A total of 300,214 IMDS are planned for purchase under this program as replacements for 342,879 existing MDCDs as illustrated in Exhibit 3. Actual quantity may vary based upon final requirements, within the approved investment amount. A combination of factors has led to the determination that a
Sample DAR — Postal Support and Information Systems Project

Exhibit 2-3

4 Alternatives Analyzed

Seven alternatives have been considered and are presented below.

1. Baseline Alternative

The devices could continue to be used, as is, until they no longer work. The current scanners contain parts that are already obsolete and replacement components are not available. Also, a significant and increasing portion of the devices are expected to become un-repairable each year. It is expected that by the end of December 2005, there would not be enough devices remaining to continue to offer nationwide service for Delivery Confirmation and other services that require a scanner. Some products and services would no longer be available and many management tools would either provide information at a reduced level or disappear completely. This alternative would significantly reduce revenue and reduce operational efficiencies, so it is not considered feasible.
2. Postal Service Assumed Maintenance of Existing Devices
The Postal Service could ‘reverse engineer’ the current device and manufacture the obsolete parts to allow their continued support. Some parts could be replaced with similar components from other manufacturers, but would require expensive training to ensure compatibility, and possibly modification, to the device. The infrastructure is also nearing ‘end-of-life’ and would need to be replaced over time. The reverse engineering effort is expected to cost as much as the DAR proposal and would result in extremely high maintenance costs. While this option was considered, it was determined to not be viable due to proprietary hardware issues. Therefore, a financial analysis was not conducted for this alternative.

3. On-Demand Replacement with Rebuilt Devices
This alternative would continue to maintain the current devices as long as possible and supplement them with rebuilt devices as necessary to replace equipment that is no longer repairable. Rebuilt devices would be compatible with the existing infrastructure, but would continue to become obsolete technology and become more so over time. This option would involve very high support costs to further extend the life of obsolete equipment and would only be a short-term measure. As more and more of the old devices required replacement, the rebuilt units would become scarcer due to the same obsolescence. Within a few years at most, the Postal Service would be faced with the same decision as today. Therefore, a financial analysis was not conducted for this alternative.

4. On-Demand Replacement with New Technology (Sustaining Alternative)
This alternative would continue to maintain the current devices as long as possible and supplement them with new devices and associated infrastructure only as necessary to replace equipment that is no longer repairable. High maintenance costs would be incurred as a result of extending the service life beyond original expectations. This option would also require the creation of postal maintenance capability and associated overhead for some MDCD components. Based on current failure rate projections, the entire inventory would require replacement over a four-year period. The investment cost would be substantially more than the DAR, but it would be spread over four years instead of one or two. This alternative was identified as the best decision a ‘reasonable manager’ could make in the absence of the proposed solution and is the sustaining baseline used in this DAR for comparison to the DAR proposal. This alternative projects a Net Present Value of $XXX million.

5. Slowest Replacement without Extraordinary Support Costs
This alternative would replace the entire MDCD inventory and infrastructure at the slowest pace that would stay ahead of the projected MDCD failure rate without the need for extraordinary support costs. This would spread the investment spending over a longer period than alternative six, 18 months, which is the longest deployment that satisfies these constraints. This alternative was rejected because the minimal benefit would be offset by higher total investment and operating costs, as well as increased operational risks.

6. Fastest Practical Replacement (DAR Proposal)
The recommended alternative is to replace the entire MDCD inventory and all supporting equipment with new equipment as soon as possible (over a 12 month period) to minimize risks and achieve early benefits, eliminating the need for extraordinary costs to maintain the current units in the interim. This option would ensure uninterrupted service for the product lines and services that currently rely on data gathered with the MDCDs. This alternative projects a Net Present Value of $XXX million.

7. Lowest Cost Replacement to Sustain Current Operations
This alternative evaluated the commercial scanner marketplace to determine the lowest cost, commercially available device that would sustain current operations. This device could be applied to alternatives 4, 5, and 6. Although there are commercially available scanners, this option was eliminated because the devices and supporting equipment identified in this DAR are actually the lowest cost solution available.

This report recommends Alternative 6, Fastest Practical Replacement, as the best approach to MDCD Replacement. The results of a comparison of the recommended DAR proposal to the sustaining
alternative (Alternative 4) indicates that the DAR proposal has a Net Present Value (NPV) that is \$XXXX.XX million less negative, and therefore is the economically superior alternative.

5 Justification and Benefits

Replacement of the MDCDs is required for continuation of the service offerings and operational programs that rely on these devices. These services represent significant volume and revenue for the Postal Service, and the operational programs provide key management tools for controlling costs.

There are a number of concurrent benefits. The proposed IMD implementation incorporates electronic signature capture that will enable the Postal Service to eliminate operating costs for the current form scanning operation, as well as avoid associated equipment replacement costs. The timing of this investment will also allow us to consolidate functionality and avoid the cost of replacing about 1,000 computers used in print workstations and Delivery Confirmation Receipt Systems. Offering a standard family of scanners will allow other planned programs, such as Surface Air Support System Phase 3, to avoid the time and cost associated with evaluating, qualifying, and selecting a supplier, and much of the documentation development required to purchase and deploy their systems.

Other future benefits include the ability to read virtually any barcode format, which opens the door to new service offerings, revenue protection opportunities, and internal applications. The ability to provide timely, accurate information about the mail supports the Transformation Plan goals of increasing the value of postal products and services to our customers and improving operational efficiencies. The Transformation Plan specifically recognizes the need for capturing and managing data. It says we will "develop Intelligent Mail products that not only track and trace from origin to delivery, but also integrate information throughout the entire cycle of multiple business transactions." Reliable, modern scanner technology is a fundamental part of this effort.

Personal Area Networks, or PANs, will allow us to create and extend cost-saving applications to areas where it was not previously cost-effective to do so and provides a path for wireless long-range communications for real-time data availability. Small offices without computers will be able to print financial and accountable forms using only the device and any PAN-enabled printer at a fraction of the cost of traditional methods. PANs also support future enhancements via add-on modules such as a credit card reader or wireless two-way communications system. There is a wide range of possibilities for employing this capability in the Postal Service, such as bundle and container tracking, and improving control in business mail acceptance operations.

While the costs and savings directly associated with implementation of this program are included in the cash flow, there may also be future benefits and benefits for other programs. The primary objective is to replace the MDCD infrastructure without interruption in service. For this reason, the MDCD replacement program is presented as an enabler of other opportunities. Potential future capabilities and benefits discussed in this report are not included in this funding request.

6 Procurement and Deployment Plan

As part of the previously funded IMDAS Testing and Development program discussed in Section 2, potential suppliers were competitively evaluated on their product offerings, ability to meet the full range of postal requirements, and relative costs. A single supplier has been selected for the IMDs and supporting equipment, and an indefinite delivery contract has been awarded to this firm as the strategic source for all USPS handheld scanning requirements. The supplier will provide a family of devices to the USPS that will support this and other Postal programs with a common scanning platform. The supplier has begun development and production engineering of the new system using the previously approved funds.

Contract award for the production buy is expected in November 2004 and the First Article Test is planned for March 2005. Deployment is scheduled to begin in late April 2005 and end in April 2006, as shown in the program schedule included as Exhibit 9. This schedule will ensure that the new devices
Exhibit 2-3 (p. 11)

Sample DAR — Postal Support and Information Systems Project

Intelligent Mail Data Acquisition System (IMDAS) - Mobile Data Collection Device Replacement

<table>
<thead>
<tr>
<th>PERFORMANCE METRIC</th>
<th>TRACKING SYSTEM</th>
<th>METHOD</th>
<th>INDICATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactive communication between the IMDAS server and the Product Tracking System (PTS)</td>
<td>Asset Management System</td>
<td>Asset Management System standard daily reports</td>
<td>Communication inactivity between IMDAS server and PTS during deployment should be less than 24 hours</td>
</tr>
<tr>
<td>Service call response time for facilities with a malfunctioning IMDAS system</td>
<td>USPS (IT) Help Desk Resolution System</td>
<td>Detailed problem resolution reports &amp; exception reporting</td>
<td>USPS IT Help Desk Resolution Tickets show 24 hour or less resolution of 95% of reported help desk calls</td>
</tr>
<tr>
<td>Percentage of devices properly installed and communicating with the Asset Management System</td>
<td>Asset Management System</td>
<td>Equipment Status reports from the Asset Management System</td>
<td>At least 95% of all deployed IMDs properly communicate with the Asset Management System within 30 days after deployment ends</td>
</tr>
<tr>
<td>Percentage of delivered IMDs and related equipment</td>
<td>Integrated IMDAS Project Schedule</td>
<td>Variance reports derived from the IMDAS Integrated Project Schedule</td>
<td>Reports show all IMDs and related equipment have been delivered at least 30 days after scheduled completion date</td>
</tr>
<tr>
<td>Reduction in Carrier, Clerk, and Maintenance Work Hours</td>
<td>HQ Operations Catchball System</td>
<td>Field Impact Budget file for IMDAS-MCDC Replacement Program</td>
<td>Carrier reduction = 48,420 work hours (LDC 21/25); Clerk reduction = 133,192 work hours (LDC 48/88/89); Maintenance reduction = 13,410 work hours (LDC 36)</td>
</tr>
</tbody>
</table>

Risk Analysis

Technology Risk is moderate. The IMDs will be integrated from proven, off-the-shelf components by an experienced supplier. However, the IMD configuration will be new and has not been previously used in the Postal Service. Also, deployment will involve porting existing MDCD application software to a new platform and creating software for new applications.

Financial Risk is moderate. The investment is conservatively based on supplier proposals. Operating costs are conservatively based on current operations and supplier-proposed costs. However, there are two main sources of financial risk. The first is any unexpected technical problems and the second is schedule slippage, due either to technical problems or a delay in funding approval.

Schedule slippage would likely result in extraordinary costs to further extend support capability for the MDCDs. This would be necessary to avoid a break in the delivery of MDCD-supported signature and other services to customers and internally. This would make the DAR proposal resemble the sustaining baseline scenario described in the Alternatives Analyzed section. The contingency allowance in this DAR is considered adequate for “conventional” contingencies.
Operational Risk is low. The program is expected to improve operations. The primary risk would relate to schedule slippage causing interruption of MDCD-related services, or extraordinary efforts being required to avoid interruption after a program delay. However, these could be mitigated with increased spending (for example, extending support capability for the existing devices), so this is viewed as primarily a financial risk.

Integration Risk is moderate. Although the IMDs will be integrated from proven, off-the-shelf components by an experienced supplier, the IMD configuration is new and has not been previously used in the Postal Service. Also, deployment will involve porting existing MDCD application software to a new platform and creating software for new applications. Similar to the contingency plan for mitigating potential operational risk, integration risk can be addressed by extending support capability for existing devices.

7 Economic Analysis

The cash flow for this program, shown as Exhibit 1, includes a small amount of incidental savings that could be readily estimated; however, these savings are not sufficient to generate a positive return on investment. They include minimal labor reductions that impact clerks, carriers, and maintenance technicians (a total of 195,222 work hours, or 111 FTEs). The savings methodology and assumptions are discussed in detail in Exhibit 3.

8 Financial Summary

The following summary highlights the required investment and operating expenses for the proposed MDCD Replacement program.

IMDAS - MDCD Replacement Program
Five-Year Operating Period (000's)

<table>
<thead>
<tr>
<th>Capital Investment</th>
<th>$XXX,XXX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expense Investment</td>
<td>$X,XXX</td>
</tr>
<tr>
<td>Total Investment Requested for Approval</td>
<td>$XXX,XXX</td>
</tr>
<tr>
<td>Operating Variances</td>
<td>$X,XXX</td>
</tr>
<tr>
<td>Net Present Value (NPV) @ 7.5% Discount Rate</td>
<td>($XXX,XXX)</td>
</tr>
<tr>
<td>Return on Investment</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Analysis of Alternatives

NPV @ 7.5% Discount Rate | NPV Difference (Sustaining Baseline Vs. DAR Proposal)

Alternative Eliminated (Sustaining Baseline) | ($XXX,XXX) | $XXX,XXX |

Exhibit 1 shows the year-by-year cash flow and Exhibit 2 contains a description of each of the cash flow line items.

9 Recommendation

Recommend approval of $XXX XX million, which includes $XXX XX million in capital and $X XX million in expense funding. This structured replacement of the MDCDs and associated infrastructure has a Net Present Value that is $XXX XX million less negative than the sustaining alternative of replacing the existing equipment as it becomes unrepairable. This well planned and structured MDCD replacement program will ensure continued, uninterrupted delivery of the associated service offerings and is consistent with the mandate for universal service.
### Exhibit 1. Cash Flow

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capital Investment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td>ADP Hardware and Software</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td>Development Costs</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td>Logistics Support</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td>Site Readiness and Installation</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td>Site Preparation, local control</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td>Initial Maintenance</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td>Quality Assurance</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td>Contingency</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td><strong>Total Capital</strong></td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td><strong>Expense Investment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depot Spares</td>
<td>$(xxxxxxx)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td><strong>Total Investment</strong></td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td><strong>Operating Variance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Training, Personnel</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td>Initial Training, Non-Personnel</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td>Implementation Support, Personnel</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td>Implementation Support, Non-Personnel</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td>MDCS Support Savings</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td>Help Desk</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td>Telecommunications Costs</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td>Maintenance Service</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td>Labor Savings</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td><strong>Total Operating Variance</strong></td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td><strong>Net Cash Flow</strong></td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
<td>$(xxxxxxx)</td>
</tr>
<tr>
<td><strong>Return On Investment</strong></td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net Present Value @ 7.50% Discount Rate</strong></td>
<td>$(xxxxxxx)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$(xxxxxxx)</td>
</tr>
</tbody>
</table>
Exhibit 2. Cash Flow Line Item Descriptions

**CAPITAL ITEMS:**

*Equipment* – Total funding of $XXX XX million to purchase IMD hardware (IMDs and associated holsters, user guides, and cradles), storage racks, initial site spares, and equipment warranties, and to cover associated shipping charges.

*Automated Data Processing (ADP) Hardware and Software* – Total funding of $XX XX million to purchase:

- Advanced Computing Environment (ACE) computers to replace existing local workstations and servers;
- ACE computer software, licenses, and first-year software maintenance, and
- Telecommunications equipment hardware and installation, uninterruptible power supplies, and miscellaneous related items.

*Development Costs* – Total funding of $XXX XX million to cover one-time, non-recurring engineering costs associated with development of the IMD hardware and software.

*Logistics Support* – Total funding of $XX XX million to support development of IMD end-user and Postal Service help desk training courses/materials; delivery of end-user training to field trainers; and supplier help desk support activities during deployment and for three years after system deployment is complete.

*Site Readiness and Installation* – Total funding of $XXX XX million to cover IMD vendor-incurred costs for site readiness activities such as site surveys, and installation; old equipment reclamation and disposal; storage and handling of Postal furnished equipment; and replacement of the existing asset management system.

*Site Preparation, local control* – Total funding of $XX XX million to cover field site preparation activities.

*Initial Maintenance* – Total funding of $XX XX million to setup and provide repair/replacement service for the IMD hardware including the first year of service after the last system is deployed.

*Quality Assurance* – Total funding of $XXX XX million to support quality assurance and testing activities including postal contractor support of quality assurance activities, and hardware and postal contractor expenses associated with First Article engineering and acceptance testing of IMD hardware and software.

*Contingency @ 5% of all Technology Acquisition Management capital costs* – Total funding of $XX XX million will provide for unforeseen costs or minor additional requirements.

**EXPENSE ITEM:**

*Depot Spares* – Total funding of $XX XX million for an initial depot spare parts inventory of “Intelligent Mail” Device hardware.

**OPERATING VARIANCES:**

*Initial Training, Personnel* – Total funding of $XXX XX million to provide initial training as discussed in Exhibit 4. A total of 49,330 supervisory postal personnel will receive training and subsequently provide end user training to over 361,900 carriers and clerks via a one-hour, on-site course focused on the users’ needs. Training efforts will include multiple metro areas concurrently and cover the nation systematically. There are no recurring training costs since IMD training will be done in place of existing MDCD training.
Sample DAR — Postal Support and Information Systems Project

<table>
<thead>
<tr>
<th>Intelligent Mail Data Acquisition System (IMDAS) - Mobile Data Collection Device Replacement</th>
<th>Decision Analysis Report</th>
</tr>
</thead>
</table>

**Initial Training, Non-Personnel** — Total funding of $XX.XX million for travel costs associated with initial training efforts.

**Implementation Support, Personnel** — Total funding of $X.XX million to cover (1) program management office support for IMD equipment deployment; (2) engineering (i.e., design responsible organization) support during First Article Test and for system monitoring, and asset management during the life of the program; and (3) recurring Headquarters and Field deployment coordinator support during the life of the program.

**Implementation Support, Non-Personnel** — Total funding of $XX.XX million to cover implementation support activities including

- Recurring engineering costs incurred by the design responsible organization for contract labor, travel, and other expenses associated with system testing, change management, system monitoring, and asset management during the program’s life;
- Recurring costs incurred by IT portfolio management, host server support, application software and interface development and maintenance, database support, customer support, and security;
- Additional equipment purchases to support delivery route growth and replacement of destroyed or lost units not covered under the supplier-provided repair and replacement service; and
- MDCD reclamation storage costs; documentation costs (i.e., revision of internal documents such as handbooks and forms); and other non-personnel expenses (such as travel and contract labor) associated with:
  - Program Management support during IMD deployment;
  - ‘Intelligent Mail’ & Address Quality support;
  - Information Technology (IT) support, including IT portfolio management and application software development, integration, review, and testing; and
  - Coordinator support during IMD deployment.

**MDCD Support Savings** — Total non-personnel savings of $XXX.XX million due to elimination of MDCD support costs.

**Help Desk** — Total funding of $XX.XX million to provide continuing help desk support during the life of the program.

**Telecommunications Costs** — Total funding of $X.XX million to cover recurring telecommunications costs associated with the new devices.

**Maintenance Services** — Total funding of $XXXX million for recurring repair/replacement service for the IMD hardware after the initial service agreement ends, and for recurring software maintenance support provided by the contractor.

**Labor Savings** — Total savings of $XXX.XX million result from a reduction in clerk, carrier, and maintenance technician work hours as follows (with additional details included in Exhibit 3):

- Savings of $XX.XX million due to a reduction of 133,192 clerk work hours (81 FTEs);
- Savings of $X.XX million due to a reduction of 36,127 city carrier work hours (20 FTEs);
- Savings of $X.XX million due to a reduction of 12,293 rural carrier work hours (7 FTEs); and
- Savings of $XXX.XX million due to a reduction of 13,410 maintenance technician work hours (7 FTEs).
Exhibit 3. Major Assumptions

Comparison of Existing MDCD Quantities & Proposed IMD Quantities by User Type

<table>
<thead>
<tr>
<th>User Type</th>
<th>Current MDCD Quantity</th>
<th>Proposed IMD Quantity**</th>
</tr>
</thead>
<tbody>
<tr>
<td>City &amp; Rural Routes</td>
<td>234,477</td>
<td>234,477</td>
</tr>
<tr>
<td>Clerks (PO Box, Firms, etc.)</td>
<td>36,698</td>
<td>36,698</td>
</tr>
<tr>
<td>Highway Contract Routes</td>
<td>8,330</td>
<td>8,330</td>
</tr>
<tr>
<td>Collection &amp; Parcel Routes</td>
<td>12,476</td>
<td>12,476</td>
</tr>
<tr>
<td>Processing Plants</td>
<td>1,259</td>
<td>819</td>
</tr>
<tr>
<td>Other*</td>
<td>2,703</td>
<td>2,703</td>
</tr>
<tr>
<td>On-Site Spares</td>
<td>44,966</td>
<td>2,711</td>
</tr>
<tr>
<td><strong>TOTAL QUANTITY</strong></td>
<td><strong>342,879</strong></td>
<td><strong>300,214</strong></td>
</tr>
</tbody>
</table>

*Includes devices used by Contract Postal Units/Offices, Business Mail Entry Units, Detached Mail Units, Air Mail Centers, Bulk Mail Centers, and Military Post Offices

**Actual quantity may vary based upon final requirements, within the approved investment amount.

Comparison of Existing MDCD-related Equipment & Proposed IMD-related Equipment at Large and Small Offices

<table>
<thead>
<tr>
<th>Category</th>
<th>Large Offices</th>
<th>Small Offices</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Sites</td>
<td>10,107</td>
<td>29,500</td>
<td>39,607</td>
</tr>
<tr>
<td>Existing MDCD Quantities</td>
<td>271,083</td>
<td>71,816</td>
<td>342,899</td>
</tr>
<tr>
<td>Spares Reductions</td>
<td>(34,375)</td>
<td>(7,906)</td>
<td>(42,266)</td>
</tr>
<tr>
<td>Dock Unit Reduction</td>
<td>(400)</td>
<td>(400)</td>
<td>(800)</td>
</tr>
<tr>
<td>Proposed IMD Quantities</td>
<td>236,684</td>
<td>63,530</td>
<td>300,214</td>
</tr>
<tr>
<td>Existing Print Workstations and Delivery Confirmation Receipt Systems (DCRS)</td>
<td>2,556</td>
<td>0</td>
<td>2,556</td>
</tr>
<tr>
<td>Less Computer Consolidation</td>
<td>(1,019)</td>
<td>0</td>
<td>(1,019)</td>
</tr>
<tr>
<td>Proposed Print Workstations and DCRS</td>
<td>1,537</td>
<td>0</td>
<td>1,537</td>
</tr>
</tbody>
</table>

* Computers will be postal-furnished equipment (PFE)

Delivery Savings Assumptions

The delivery savings included in this report are based on a reduction in manual recording of delivery event information by carriers. With the current devices, carriers must manually record delivery event information each time an MDCD fails or an imperfect (i.e., poorly printed) barcode cannot be read by the device among other things. The new IMDs, however, will have lower failure rates and their imager will be able to automatically correct for most imperfect barcodes.
Exhibit 2-3 (p. 17)
Sample DAR — Postal Support and Information Systems Project

**Optical Scanning Workstation Operator Savings Assumptions**

The Optical Scanning Workstation (OSW) operator savings included in this report are based on a reduction in scanning of Postal forms that have been signed by customers. With the current system, these forms are consolidated, faceted, banded, and routed to the CFS unit. Operators feed the forms into the OSW to be imaged and uploaded to national databases. The solution proposed is that employees delivering signature items capture the electronic signature record at the point of delivery by imaging the signed PS 3849 Form. This is not an additional step at delivery as the employee currently has to scan the form's barcode so that it can be matched against the scan done by the OSW. Imaging technology incorporated into the “Intelligent Mail” Device allows this to happen automatically.

- Total carrier labor reduction = 48,420 work hours (LDC 21/25) derived from:
  - Volume of Delivery Confirmation, Signature Confirmation, and other Special Services requiring manual input of date/time information = 4.8 million pieces/year (sources – (1) Product Tracking System Volumes for FY2004, Quarter 1 and (2) Quarter 3 Forecast with Future Rate Cases dated July 18, 2003)
  - Manual input time per item = 28.65 seconds (per Rate Case 2000 USPS-LR-J-135, Data Sheet A-7)
  - Manual Capture Rate = 75% (provided by HQ Delivery & Retail)

  - Volume of Delivery Confirmation, Signature Confirmation, and other Special Services requiring keyed/typed input of identification information = 40.7 million pieces/year (sources – (1) Product Tracking System Volumes for FY2004, Quarter 1 and (2) Quarter 3 Forecast with Future Rate Cases dated July 18, 2003)
  - Keyed input time per item = 11.4 seconds (per Rate Case 2000 USPS-LR-J-135, Data Sheet A-7)
  - Typing/Keying Capture Rate = 50% (provided by HQ Delivery & Retail)

**Optical Scanning Workstation Maintenance Savings Assumptions**

The OSW maintenance savings included in this report are based on a reduction in the number of OSW systems required in the field after IMDAS deployment without assuming a signature capture solution at Automated POS retail units. Since about 85% of the signature item delivery scans were tied to MDCDs, it is expected that no more than one OSW system will be required per district. The savings is based on eliminating the preventative maintenance for those OSW systems that are removed from service.

- 13,410 work hour reduction projected in Maintenance operations (LDC 36)
  - Annual preventative maintenance reduction of 90 hours per system
  - Based on FY 2003 OSW system complement of 229 existing systems and expectations that 80 will remain after IMDAS deployment.
Exhibit 4. Implementation Plan

**Training**
Training and deployment plans for the new devices have been developed through discussions with Delivery Confirmation coordinators and using lessons learned from the prior MDCD implementation. To minimize training requirements and reduce the learning curve, the screen flows on the IMD will be similar to the screen flows on the existing MDCDs.

Training efforts will include multiple metro areas concurrently and cover the nation systematically. Full-time Master Trainers will be provided for each district. At least one month prior to deployment, Master Trainers will receive eight hours of training from the supplier. Three weeks prior to deployment, Master Trainers will provide eight hours of training to over 2,000 Trainers who will lead the third tier of supervisor and station manager training. Just in time for local deployment, over 46,000 trainers, supervisors, and station managers will train over 350,000 end users via a one-hour on-site course focused on the users’ needs. During this time, Master Trainers will facilitate and moderate training, arrange for training facilities and equipment, and maintain training records. In each District, IMDs and computers used for training will subsequently be deployed as part of the local equipment complement.

**Coordination**
To coordinate the many activities occurring in the field, “Intelligent Mail” Coordinators will be assigned in each district. The coordinators will oversee site installations, equipment delivery, user identification label distribution, asset management and other program activities at the field level.

**Site Activities**
At facilities with nine or more MDCDs or a print workstation, the supplier will install the IMD system components. Supplier personnel must perform the installation to ensure no damage occurs to the equipment that would invalidate the warranty. The switchover will occur in one day, with all MDCD equipment removed and the IMD components installed in the same workspace. In facilities with eight or fewer MDCDs, the IMD system components will be shipped to the site and local personnel will complete the installation following a few simple steps as outlined in the installation instructions. Sites needing additional assistance will be able to contact the help desk that is funded under this effort. Existing communication and power outlets and racks will be used.

**Applications**
All existing applications will be migrated to the new platform at the time of delivery and the majority of operations will work the same as they do today. Applications like AVUS, CBMS, SPORT, and MSP will not differ from current processes. While Express Mail and Special Services mail pieces requiring signature will differ with the new electronic signature capture process, the screen flows will be similar to those in use today. The biggest operational changes are a result of streamlined operations for Registered Mail processing, firm sheet generation, and accountable mail logging. Any facility with an IMD computer will be able to readily generate and print these forms.

**Operation after August 2005**
A portion of the initial MDCDs that are displaced with new IMDs will be sent to the Critical Parts Center to serve as float stock for the remaining MDCDs. They will be used to replace devices that fail after August 2005, when supplier-provided maintenance support ends. This inventory will support the remaining MDCDs through the end of the deployment period, after which none will remain. Upon deployment completion, the MDCDs at the Critical Parts Center will be provided to the IMD supplier for proper handling and disposal as part of the MDCD reclaimation process.

**New System Operation**
Support requests for the new devices and related equipment will continue to be channeled through the existing Postal Service help desk for resolution. The new equipment will be proprietary and maintenance will be the supplier’s responsibility. We will not initially invest in maintenance documentation, but will leave the option open to purchase it later if deemed appropriate.
Exhibit 5. Current Applications Reliance on MDCDs

All of the following applications became possible or cost-effective to implement because the MDCDs became available:

- **Delivery Confirmation & Signature Confirmation**
  Delivery Confirmation allows customers to determine the delivery status of a specific mail piece. Signature Confirmation provides all of the benefits of Delivery Confirmation plus requires a signature from the person who accepts the mail piece. Carriers and clerks use the MDCD to scan mail piece and enter delivery information along with signature information, as required. Recipient signatures are captured on a Delivery Notice/Reminder/Receipt Form and its unique barcode is scanned, using the MDCD, to link the delivery record to the signature record. The signature record is subsequently scanned by centrally located Optical Scanning Workstations (OSWs) and matched with the delivery record. Over $XX billion in annual revenue relies on the Delivery and Signature Confirmation infrastructure to reliably document the time of delivery and provide information to customers in a timely manner. Without the MDCDs, we cannot offer valid proof of delivery time, so that service would cease. The electronic delivery record system could return to a paper-based, manually-entered process but signature data retrieval could take up to 30 days, as it previously did. The end result would be market share erosion.

- **Managed Service Points (MSP) Program**
  The MSP program has been implemented on about 98.5 percent of all city delivery routes and has improving consistency in the time of day that mail is delivered to customers. The MDCDs are used to scan barcodes at the delivery units and barcodes placed on customers’ mailboxes at intervals along a mail carrier’s route. The scan identifies the time of delivery at these locations and allows managers to evaluate carrier performance on the route and ensure that customers are receiving delivery at the expected time. The lack of handheld scanning devices would result in termination of this program since there is no comparable, cost-effective method for collecting this information.

- **Collection Box Management System (CBMS)**
  The CBMS is used by delivery unit managers to ensure adherence to collection box schedules and policies. The MDCDs are used to scan barcodes located inside collection boxes to capture time and location details, which enables identification of early and missed pickups so that customer service can be improved. Without the handheld scanning devices, there would be no method to view or measure street activity or collection box pick-up performance on a regular basis.

- **Automated Vehicle Utilization System (AVUS)**
  The AVUS program relies solely on the MDCDs to capture information for unit supervisors at over 9,200 sites on hourly utilization of postal vehicles and the actual number of miles driven versus the base route miles. If the MDCDs were no longer available, offices would have to revert to having each carrier complete a manual form each day to record vehicle utilization information.

- **Standard Accounting For Retail (SAFR)/Small Post Office Reporting Tool (SPORT)**
  The SPORT application allows over 10,000 small post offices without retail window automation to report their revenue daily using the MDCD or an administrative computer. Approximately 2,000 of these offices have an administrative computer, but about 8,000 of them rely solely on the MDCD to electronically report their sales activity each day and would not be able to do so without the device.

- **CONFIRM® & Entry Information (EI)**
  The CONFIRM service provides near-real-time tracking information on First-Class mail, periodicals, and Standard Mail letters and flats. EI is a pilot program that captures shipment ID barcode data at mail entry/acceptance points. The MDCD is used to scan the mailing entry information and CONFIRM barcode labels at mail entry points during induction to support “start of clock” data capture. A more costly, manual data collection method could be implemented if handheld scanning devices were no longer available.
Sample DAR — Postal Support and Information Systems Project

- Special Services (Registered, Certified, and Insured Mail; Return Receipt for Merchandise, and Collect-on-Delivery) including those provided for International Mail
  The MDCD is used to scan the mail piece and enter delivery information and signature information (if required). The scanner is programmed to prompt the carrier to capture additional information that is appropriate for each type of service. During 2003, over 300 million pieces of Special Services mail was scanned. The effective capture and management of delivery information could not be accomplished without equipment similar to the MDCD. Performing these functions manually would increase labor costs and result in more errors. The Postal Service would no longer be able to provide the consistent and reliable service that Special Services customers have come to expect, which would reduce their value.

- Automatic Data Entry (ADE)
  ADE is a successfully piloted application that is in the early stages of national deployment. It uses MDCD scanners to save data entry time by automatically recording attendance and other training information for instructor-led courses.

As discussed, some of these programs were implemented as labor-saving tools, and loss of the MDCDs would result in a return to more costly procedures and less timely, less reliable data. For the other programs, each was either not possible, not practical, or not cost-effective without the MDCDs. If the devices become inoperable and are not replaced, these programs could not continue to provide the core functionality that relies on the devices.
Exhibit 6. Electronic Signature Capture

An electronic delivery record system was implemented as part of the Delivery Confirmation Program. This system moved 400 million paper delivery records kept at individual post offices to a central computerized database. It resulted in a 100 percent increase in the record retrieval rate and a decrease in signature record data retrieval time, from 30 days to seconds (i.e., once the signature image has been captured).

One of the goals of IMDAS is to enhance the signature services offered by providing signature records quicker and at a lower internal cost. The IMD will capture the electronic signature record at the point of delivery, at the same time it scans the barcode. This eliminates the need to scan the signature form again at the plant and avoids the associated delay in making the signature available to the customer.

The Optical Scanning Workstation (OSW) is a high-speed scanner deployed in Computerized Forwarding System (CFS) units throughout the country. It is used to scan all signature forms. Employees who collect signatures must return the signed forms to their facility where they are consolidated, faced, banded, and routed to the CFS unit. Forms from all delivery units served by the CFS unit are consolidated and scanned and then archived.

Benefits of this method include:

- Availability of signature records as soon as the IMDs are cradled, eliminating the time it takes to consolidate, transport, and process forms on the OSW operation.
- Significantly reduced or eliminated workhours and other OSW operational costs. (Total elimination is dependent on implementation of a signature capture solution for items delivered across retail windows equipped with Point of Service (POS) automation which do not use MDCDs/IMDs).
- Virtual elimination of delayed or lost signatures due to misplaced, misrouted, damaged, or lost signature forms.
- Potential for reduction in paper storage requirements associated with signature forms that are currently stored for seven days after the OSW operation as a backup procedure.
- Laying the groundwork for future "Intelligent Mail" initiatives, such as the Universal Label which is planned to have a signature block incorporated, thus eliminating the need to use the signature form to capture signature records.

As part of a comprehensive solution, deliveries made at POS-equipped retail windows will be provided with a method of capturing signatures when required. Most POS terminals have been deployed but not all of them have scanners with imaging capability. However, they all have a customer display/signature pad and are capable of acquiring signatures electronically. The current plan is to activate the customer display/signature pad via a POS software release. Implementation will occur by the time IMD deployment is complete, which is expected to be in April 2006. Either of these methods will provide the same benefits as the IMD signature capture solution.
Exhibit 7. Two-Dimensional Barcodes

The MDCD can read what are termed “one-dimensional” (1D) barcodes, like the Universal Product Code (UPC) found on retail products. Data is encoded along only one dimension, the width of the barcode, by varying the width of the bars and the spaces between them. The bars and spaces are constant from top to bottom, so the barcode can be read by passing a laser beam across it at any height or angle. In a usable size, this format can encode only a limited quantity of characters, so it is typically used for identification number applications.

One-Dimensional (1D) Barcode

For Postal signature services, the recipient signs a form with a barcoded serial number. The MDCD scans the barcode and associates the serial number with other information, such as time of day. A subsequent scan of the form on other equipment captures an electronic image of the signature as well as the serial number, which is the key used to match the signature with the previously stored information. That is the scope of what the MDCD was designed and intended to do with a barcode.

Because of the limited amount of information that can be contained in a 1D barcode, many other barcode formats have been developed. These formats embed much greater information in a barcode by using both dimensions of the printed code, and are referred to as two-dimensional (2D) barcodes. The Postal Service has used 2D barcodes for decades as the basis for automating the distribution of mail and providing basic tracking and tracing services.

For example, POSTNET (POSTal Numeric Encoding Technique) is a 5-, 9-, or 11-digit numeric barcode used by the Postal Service to encode ZIP Code information for automatic mail sorting by ZIP code. It is unlike other barcodes because data is encoded in the height of the bars instead of in the widths of the bars and spaces. Most standard barcode readers cannot decode it. The POSTNET barcode was chosen by the Postal Service mainly because it is extremely easy to print on almost any type of printer.

Sample POSTNET Code

More recently, introduction of the Information-Based Indicia, such as is used for PC Postage, has created a need for new revenue protection capabilities in which handheld scanners can play a role. With the introduction of the “Intelligent Mail” concept, the ability of handheld scanners to read these 2D barcodes, and newer, more advanced 2D formats, has become a critical element.

Sample Information-Based Indicia Codes
Postal 2D Barcodes
A few of the current 2D barcodes were mentioned briefly above. To provide perspective, the following is a list of the main barcode formats in use today or anticipated in the near future, that the MDCD is not capable of reading.

**POSTNET Code** – Represents the 5, 9, or 11 digit delivery ZIP code. POSTNETs are used for sorting and the IMDS ability to read this type of code could provide for more efficient and accurate acquisition of delivery location information for those services that require it.

**PLANET Code** – This is the inverse of a POSTNET code and is used mainly for individual mail piece tracking services such as CONFIRM. IMDS could provide scan data that identifies the first or last handling by the Postal Service.

**Information-Based Indicia, Postage Meter Strips, PC Postage** - PC Postage and digital meters allow customers to print their own postage. However, they are in formats that cannot be read by the existing scanners. These codes include information such as the date of mailing, originating ZIP code, and postage value. The new IMDS will be able to read these codes and could provide data for service analysis and revenue protection.

**4-State** – The 4-State barcode is used by our flat automation equipment for sorting flat mail pieces. It is also proposed that the 4-State code be offered as an alternative barcode for CONFIRM, allowing mailers to track more mail pieces. Also under consideration is using the 4-State code for special services in order to consolidate the amount of barcodes needed on a letter or flat mail piece today. This is pursuant to the “Intelligent Mail” ONECODE Vision. IMDS would be used as described under the PLANET code section above in addition to how they are used today for Delivery Confirmation and special services.

---

Sample 4-State Barcode

All of these barcode formats require an imager, like what is in the IMD, to be read. Rather than simply sensing the widths of bars and spaces, reading these kinds of barcodes is done by analyzing an electronic picture of the code.

As more and more information is added to the mail in the form of barcodes, Postal processes and successful competition become more reliant on integrated processes and equipment that use this information as part of normal operations. IMDAS is providing the vehicle to purchase a family of handheld devices capable of reading these barcode formats. The MDCD replacement device does not currently need to read every barcode above. However, IMDAS is a fundamental tool upon which our future operating concepts are based, and these concepts depend on a family of scanners that have these capabilities.
Exhibit 8. “Intelligent Mail” and the Standard Platform

“Intelligent Mail” refers to the capture and sharing of information about each mail piece throughout its processing through the system, allowing end-to-end visibility. The underlying concepts include uniquely identifying and tracking mail and enhancing the supporting infrastructure. Mail identification and tracking will rely on barcodes. The barcodes and the role of the IMD in reading them is discussed in Exhibit 7.

The “Intelligent Mail” Data Acquisition System (IMDAS) is a cornerstone of the supporting infrastructure. IMDAS will include a family of handheld data acquisition devices to support the needs of near-term and future “Intelligent Mail” efforts including:

- Replacements for the current Mobile Data Collection Devices (MDCDs);
- Scanners for use on docks to track arriving and departing mail containers;
- Acceptance/verification scanners;
- Devices for use in a variety of inventory management operations; and
- Handheld computers for supervisors in processing, customer service, and delivery operations.

This request supports the first item, MDCD replacement, by deploying new “Intelligent Mail” Devices (IMDs). The new devices and supporting equipment will be purchased through one supplier and allow the Postal Service to establish a standard platform for future data collection equipment purchases. This standard platform will consist of a family of integrated and compatible devices that meet the Postal Service’s needs and support the migration to “Intelligent Mail” applications. The use of a single supplier for all IMDAS-related purchases will simplify the procurement process, shorten deployment timetables, and support extensive sharing of data. Standardization will also reduce costs associated with application development, implementation, and maintenance.

One current program that is expected to benefit from this standard data collection platform is Phase 3 of the Surface Air Support System (SASS). Phase 3, which was approved by the Postal Board of Governors in June 2004, will purchase and use scanners to provide tracking and utilization information as mail containers and trailers move through the postal transportation network.
Exhibit 2-3 (p. 25)
Sample DAR — Postal Support and Information Systems Project
# 3 DAR Backup Documentation

## 3-1 About This Chapter

This chapter describes the minimum backup documentation that the sponsor must submit with the DAR for a postal support and information systems project.

## 3-2 Purpose

Send the backup documentation with the DAR to Finance for validation. The backup documentation provides support for the data and economic assumptions presented in the DAR. Upon request, the sponsor will provide backup documentation to functions other than Finance for review. The backup documentation must provide detailed supplemental information sufficient to accomplish the following:

a. Support the recommended alternative.
b. Show how the numbers in the DAR were derived.
c. Provide financial information such as supporting data for numbers in cash flows and baseline costs.
d. Provide a basis for validating the DAR, carrying out the compliance requirements, and supporting future audits or cost studies.

The complexity of the project determines the level of detail that you must include in the DAR backup documentation.

## 3-3 Format

The DAR backup documentation package for any project requiring Headquarters approval must meet the following guidelines:

a. All materials must be legible and compatible with Microsoft Word or Microsoft Excel as appropriate.
b. All pages must measure 8-1/2 by 11 inches.
c. To allow easy duplication, place all pages in a three-ring binder with tabbed dividers between sections. Do not bind the pages.
3-4 Investment Policies and Procedures — Postal Support and Information Systems

d. Include a cover page (similar to that used for the DAR) that identifies the material as “DAR Backup Documentation” with the same project name and date as the DAR.

e. Provide a table of contents that shows the title and beginning and ending page number of each major section of backup (e.g., A-1–A-6 or B-1–B-3).

f. Include a title page at the beginning of each major section.

g. Number all pages.

h. Date all pages. Show the date of revision on replacement pages.

i. Highlight the data actually used in the analysis, if appropriate.

3-4 Required Components

At a minimum, the backup for a postal support and information systems project includes the following (see exhibit 3-1 for further guidance):

a. Cover page.

b. Table of contents.

c. Cash flow analysis:
   (1) Investments.
   (2) Operating variances.

d. Other backup documentation:
   (1) Assumptions.
   (2) Performance metrics.
   (3) Functional and field review.

3-4.1 Cash Flow Analysis

The backup must include supporting documentation for each cash flow line item.

Investments

All capital and expense investments are itemized and expressed in terms of unit costs. The backup must include the signature of the subject matter expert (SME) who provided the estimates.

Normally all one-time (or nonrecurring) expenditures are capitalized for a single project, including one-time contract labor and the initial supply of spare parts. Certain exceptions to this rule apply:

a. One-time labor by Postal Service employees to manage projects is categorized as an operating variance.

b. Depot-stocked spare parts that are kept as replacements are categorized as an expense investment.

Do not include recurring or ongoing capital investments in postal support and information systems infrastructure that may be used to maintain original system or equipment performance over the life of the program in the original
funding request. However, these recurring capital costs are subject to appropriate review and approval outside the DAR process.

For further clarification of capital and expense classifications, refer to the appropriate accounting manuals or verify with Corporate Accounting, Finance.

**Operating Variances**

Operating variances include any changes from the baseline or current situation (i.e., all incremental costs and savings directly related to the project). Although there may be some one-time costs, operating variances are generally recurring costs (such as recurring spare parts cost). Include in the backup documentation both baseline and proposed costs required for each variance in the cash flow. The baseline includes impacts that result from official Postal Service volume forecasts, labor rates and scenarios taken from official sources, and other known events that will impact the baseline in the future. Operating variances are categorized by type (e.g., labor costs; start-up costs; one-time disposal costs for excess equipment; recurring software licenses; Help Desk support; and if appropriate, training costs, telecommunications, maintenance costs, utilities, recurring spare parts, and rent).

All source numbers must be supported with appropriate hard copy documentation such as the following:

a. Official Postal Service reports.

b. Signed written estimates from internal or external sources.

c. Pertinent pages from bulk purchasing agreements and contracts.

d. Telecommunication costs and utility bills.

e. Wage rate chart(s) for contract workers (non-Postal Service).

f. Excerpts from leases pertinent to the analysis.

g. Written documentation from SMEs.

*Note*: While it is necessary to identify changes from the baseline that include future cost avoidances, do not include these savings in the cash flow. However, you may include these savings in an NPV analysis comparing the baseline to the proposed investment with future cost avoidances.

**3-4.2 Other Backup Documentation**

**3-4.2.1 Assumptions**

The DAR backup documentation must also include supporting documentation for each assumption made in calculating operating variances or other analyses in the DAR. This includes the assumptions used to project labor rates, productivity levels, hardware performance, revenue increases, and volume projections.
3-4.2.2 **Budget Impact**

The budget impact should include a separate worksheet for each finance number (facility or area) impacted by the project, identifying areas of potential budget impact by fiscal year, line item, and labor distribution code (LDC) for the recommended alternative. Data is required only for the first year following final deployment unless costs and/or savings from the project are expected to be realized incrementally.

3-4.2.3 **Functional and Field Reviews**

Functional and field organizations that are directly affected by or that may influence the project must review and concur with the concepts, assumptions, and operational and budgetary impacts presented in the DAR. For example, the affected areas must concur with site-specific savings or with the allocation of workhour savings. The sponsor must respond in writing to any issues raised by the functional reviews, and all issues must be resolved. Copies of all concurrences, as well as follow-up correspondence are included as backup (see exhibits [3-2] and [3-3] for the DAR distribution and a sample concurrence sheet). Sponsors may obtain current DAR concurrence distribution lists from Capital and Program Evaluation, Finance.

3-4.2.4 **Other**

Additional backup documentation must be included as applicable – for example, an analysis of other alternatives, requirements calls, sensitivity analysis, risk analysis, management instructions, or other references.
### Exhibit 3-1

#### Required Backup Components

<table>
<thead>
<tr>
<th>Backup Component</th>
<th>Required Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational Description</td>
<td>A description of the hardware, software, and information systems being proposed and how they support Postal Service objectives. Include pictures, schematics, or drawings as appropriate. Use excerpts from the statement of work if applicable.</td>
</tr>
<tr>
<td>Operational, Hardware, and Space Requirements</td>
<td>Authoritative data showing the rationale for unit quantities and space requirements. Include diagrams, volume data, and revenue projections to support the proposed operational plan.</td>
</tr>
<tr>
<td>Investment Cost Estimates (Capital and Expense)</td>
<td>Signed documentation for all assumptions, rationale, and methods used to calculate each line item in the cash flow. If computer models were used to calculate workhours or savings, include both hard copy and data on electronic media (such as diskette, CD, or DVD) or via e-mail.</td>
</tr>
<tr>
<td>Operating Variances</td>
<td>Signed documentation for all assumptions, rationale, and methods used to calculate each line item in the cash flow. If computer models were used to calculate workhours or savings, include both hard copy and data on electronic media (such as diskette, CD, or DVD) or via e-mail.</td>
</tr>
<tr>
<td>List of Assumptions</td>
<td>Explanation of the rationale for all assumptions used in arriving at values cited in the DAR.</td>
</tr>
<tr>
<td>Economic Analysis (Cash Flow)</td>
<td>DAR cash flow, including a description of acquisition and deployment major milestones, plus a narrative describing how and when the proposed procurement will be completed.</td>
</tr>
<tr>
<td>Acquisition and Deployment Plan</td>
<td>A Gantt chart with narrative description of acquisition and deployment major milestones, plus a narrative describing how and when the proposed procurement(s) will be completed.</td>
</tr>
<tr>
<td>Performance Metrics</td>
<td>Narrative explanation of the methods, metrics, and indicators that will be tracked to assess program performance versus baseline.</td>
</tr>
<tr>
<td>Risk Analysis</td>
<td>Shows the elements of risk associated with the project, the evaluation of that risk and the risk analysis matrix.</td>
</tr>
<tr>
<td>Sensitivity Analysis</td>
<td>Modified DAR cash flows and list of assumptions for each scenario. Describe the rationale for each scenario and the detail of risk-type analyses, if applicable. At least one alternative analysis should be provided.</td>
</tr>
<tr>
<td>Complement Impact Analysis Cost Impact</td>
<td>Hard copies of worksheets used to compute personnel changes expected due to staffing modifications and other personnel costs. All calculations should be traceable to the project cash flow(s) shown in the DAR.</td>
</tr>
<tr>
<td>Budget Impact</td>
<td>Spreadsheet showing annual impact of project on workhours and budget.</td>
</tr>
<tr>
<td>Financial Impact Statements: Profit and Loss (P&amp;L) Statement</td>
<td>Hard copies and electronic files of MS Excel worksheets used to calculate changes in the P&amp;L as a result of the proposed project must be traceable to the DAR cash flow.</td>
</tr>
<tr>
<td>Concurrences</td>
<td>Copies of all comment memos and functional concurrences, as well as responses showing the resolution of identified problems (see exhibit 3.2 for sample DAR concurrence sheet).</td>
</tr>
<tr>
<td>Applicable Documents</td>
<td>Official memoranda, management instructions, standards documents, or other documents associated with the project.</td>
</tr>
<tr>
<td>Software Index</td>
<td>List of software files used to develop or support the DAR. Include copies of files on diskettes or other electronic media as part of the backup package.</td>
</tr>
</tbody>
</table>
Exhibit 3-2

DAR Concurrence Distribution

Decision Analysis Report — Headquarters Functional and Field Review

Copies of all Headquarters and Field review concurrence sheets and any responses to issues raised are included in the final Decision Analysis Report (DAR) as part of the backup documentation. Any issues resolution meeting may be required for some projects prior to final validation, depending on the criticality of the issue(s). Capital and Program Evaluation, Finance, depending upon the nature of the proposed investment, will determine modifications to these concurrence requirements.

USPS Headquarters Distribution

**CONCURRENCE FORM AND DECISION ANALYSIS REPORT**

Corporate Accounting .............. Kevin McNamara coordinates for Mgr. Corporate Accounting
Chief Marketing Officer
   Product Development ............ VP, Product Development, Marketing
Chief Technology Officer
   Information Technology .......... Debbie Judy coordinates for Chief Technology Officer
Employee Development ............ Bill Koukus coordinates for Mgr. Employee Development
General Counsel .................. William A. Campbell
Facilities Projects Only .......... Richard C. Jensen, w/cc: Susan Koetting
Intelligent Mail and Address Quality ... Jeff Freeman coordinates for Sr. VP, IMAQ
Operations ....................... Manager, Field Operations Requirements/Planning¹
   Delivery and Retail .............. Amy Wong coordinates for VP, Delivery & Retail
   Labor Relations ................ John Dockins coordinates for VP, Labor Relations
   Engineering .................... Tina Powell coordinates for VP, Engineering
   Facilities ....................... William Aspinwall coordinates for VP, Facilities
Public Affairs and Communication ... Joyce Carrier coordinates for VP, Public Affairs & Communication
Supply Management ............... Paula Garner coordinates for VP, Supply Management
Strategic Initiatives .............. Kathleen Cavanaugh

¹ Requests for concurrence from the following functional areas should be sent directly to Manager Field Operations Requirements/Planning, who coordinates Operations functional reviews and concurrence. Operations submits signed concurrence from Senior VP Operations with separate signed concurrences from VP Delivery & Retail, VP Network Operations Management, VP Labor Relations, VP Engineering, and VP Facilities.

**DECISION ANALYSIS REPORT ONLY** (no comments required)

Lawrence E. Maxwell .............. Assistant Chief Inspector, Investigations and Security
Colleen McAntee ................. Office of Inspector General

Standard USPS Field Distribution

**REVIEW CONCURRENCE FORM AND DECISION ANALYSIS REPORT** (DAR)

For DARs that have field budget and/or field operational impacts, the area vice presidents must sign their concurrence with the DAR. Copies of the signed field concurrence forms and budget impact summaries must be included in the DAR Back-up. For site-specific equipment DARs, the plant/facility managers must sign their concurrence with the operational and/or budget impacts of the DAR. The site-specific impacts and requests for concurrence must be transmitted through the respective Area offices. Copies of the signed field concurrence forms and budget impact summaries must be included in the DAR Backup.
Notes:

No comments are requested from those individuals designated to receive a Decision Analysis Report Only. All other functional areas must submit a signed review concurrence form to the sponsoring organization within 3 weeks unless otherwise specified.

Copies of all signed review concurrence forms and any supporting documentation are sent to the Manager, Program Evaluation, Finance, for inclusion in the DAR Backup. If the reviewing organization has issues with the proposed investment, the sponsoring organization must respond to those issues in writing or by email. This procedure should be followed even if the reviewer checks that it is OK to Proceed. A copy of the response must also be forwarded to the manager of Program Evaluation for inclusion in the DAR Backup. Contact Program Evaluation, Finance, for updated the most current list of names and positions of stakeholders that will receive concurrence forms and DARs.
Exhibit 3-3
Decision Analysis Review / DAR Concurrence Sheet Sample

Operations
Headquarters Review

DAR: ____________________________________________

In accordance with the DAR Capital Investment Process.

<table>
<thead>
<tr>
<th>No Pending Issues</th>
<th>Issues as noted</th>
<th>Issues as noted</th>
</tr>
</thead>
<tbody>
<tr>
<td>OK to Proceed</td>
<td>OK to Proceed</td>
<td>DO NOT PROCEED</td>
</tr>
</tbody>
</table>

[  ] [  ] [  ] Operations plans described in the DAR are consistent with policies and programs.

[  ] [  ] [  ] Operations plans described in DAR will meet present service commitments and targeted service performance scores.

[  ] [  ] [  ] The support plan meets field requirements.

[  ] [  ] [  ] Risks identified in DAR accurately reflect HQ Operations and concerns are rated appropriately.

[  ] [  ] [  ] Program stated outcome supports the Strategic Transformation Plan.

[  ] [  ] [  ] Other issues to be raised:

Comments:

Reviewed by Operations:

<Signature>  __________________________  _______________
Typed Name                      Date

Senior Vice President,
Operations

Please return the completed review to the sponsoring organization.
Requested response time is 3 weeks unless otherwise noted.
4 Review and Approval Process

4-1 About This Chapter

All postal support and information systems projects are subject to the Headquarters review and approval process described in this chapter. Requests to modify an approved project must also be reviewed and approved following these procedures.

A project may be stopped or sent back to the sponsor for further work at any point in the review and approval process.

4-2 Purpose

The overall purpose of the review and approval process is to ensure the following:

a. The project is consistent with the Five-Year Strategic Plan and the goals of the Strategic Transformation Plan.

b. The project is prioritized in the Five-Year Capital Investment Plan and the planned commitments are in the appropriate years.

c. The economics are justified and properly analyzed regardless of the generative or non-generative nature of the project. All viable alternatives have been considered, the impacts of the investment have been properly evaluated, and the backup documentation adequately supports the proposed investment.

d. The sponsor has obtained appropriate concurrences for major assumptions.

4-3 Review Steps

The sponsor coordinates the Headquarters review and approval process for postal support and information systems projects (see exhibit 4-1).

Projects initiated by the field are subject to a financial assessment, review by the area Capital Investment Committee (CIC), and approval by the area vice president before the project may be forwarded to Headquarters for review, validation, and final approval (see Handbook F-66C).
4-3.1 **Functional Review**

The Headquarters review process begins when the sponsor forwards the DAR and backup (including an assumptions list) to Finance to begin the validation process. At the same time, the sponsor sends the DAR to applicable functions for review and concurrence with the concept and projected costs and savings. Upon request, backup documentation may be supplied to functions other than Finance for review. These functions include all the affected functional organizations listed in subchapter 2-4, as well as the Inspection Service and Office of Inspector General.

Review meetings may be necessary to resolve complex issues. All issues raised by the functional areas must be adequately resolved before the project can be validated and sent forward for approval.

4-3.2 **Functional Concurrence**

Finance forwards the results of the functional staff reviews to the respective vice presidents or managers to ensure the following:

a. Confirmation of the need, priority, and assumptions.

b. Concurrence with the achievability of operating costs and/or savings and resulting budget impacts and the volume and revenue projections.

c. Review of the inter-functional impacts.

d. Consistency with overall operational strategies and the implementation and tracking plan.

You must include the signed concurrences from the applicable vice presidents and managers as part of the DAR backup documentation (see exhibit [3-2] for a sample DAR concurrence sheet). The sponsor may get a copy of the DAR concurrence distribution list from Capital and Program Evaluation, Finance.

The sponsor revises the DAR and backup documentation as necessary to reflect any recommended changes. When significant changes are made to the basic program assumptions and the project costs and savings, change the date on the DAR cover page and obtain a new signature page.

4-3.3 **Approval of Sponsoring Vice President**

After the sponsor revises the DAR, the sponsoring vice president signs the DAR and sends it to Finance for validation (see chapter 5 for validation requirements).

4-3.4 **Validation Completed**

Once Finance completes the validation, Finance submits the DAR, executive summary, and validation letter to the vice president and controller of Finance for review and approval signature (see chapter 5 for validation requirements).
4-3.5 **Vice President Review and Final Approval**

Following validation by the vice president and controller of Finance submits the DAR, signed validation memo, and a briefing sheet prepared by the sponsor to the appropriate vice president or senior officer for review and final approval or to the Headquarters Capital Investment Committee (CIC). See Handbook F-66 for approval authority thresholds.

4-3.6 **CIC Review and Approval**

Upon final validation, the sponsor submits postal support and information systems projects that require approval above the vice president and senior officer-level through Capital and Program Evaluation to the Headquarters CIC. One week before its meeting, Headquarters CIC members receive the DAR, validation memo, an executive summary prepared by Finance, and an Opinion Letter (if the Inspection Service or Office of Inspector General issued one). The sponsor presents the project to the Headquarters CIC.

If the CIC votes to proceed with the project, the chief financial officer and senior vice president prepares a memorandum outlining any issues raised at the Headquarters CIC meeting and forwards the DAR and supporting materials to the postmaster general/chief executive officer (PMG/CEO).

4-3.7 **Postmaster General Review and Approval**

The sponsor schedules a meeting with the PMG/CEO. Before the meeting, the PMG receives the DAR, validation memo, executive summary, and Headquarters CIC issues sheet for review.

If a project is within the delegated approval level for the PMG/CEO’s final approval, the PMG/CEO signs the executive briefing sheet prepared by the sponsor. Projects to be approved by the Board of Governors (BOG) are forwarded to the Capital Projects Committee (CPC), which is a subcommittee of the Board of Governors.

4-3.8 **Capital Projects Committee Review**

Three weeks before its meeting, the CPC receives the DAR, validation memo, executive summary for review, along with a CPC briefing sheet that includes an issues sheet outlining issues raised during any previous CIC or CPC review. The CPC discusses the project with the sponsor and decides whether to present its findings and recommendation to the full Board of Governors or send the project back for further work.

4-3.9 **Board of Governors**

Four weeks before the BOG meeting, the members of the BOG each receive the DAR, validation memo, issues sheet, and a briefing sheet prepared by the sponsor for review. At the BOG meeting, the CPC chair reports the findings and recommendation of the CPC to the full Board to consider for approval. Minutes from the BOG meetings are used to document project approval.
4-4 Document Retention

The final approving authority returns the approved DAR (or DAR Modification Request) to Finance, which keeps the original file documentation. The sponsor retains a copy of the approved DAR and the complete backup for the project.
Headquarters Decision Analysis Report Review and Approval Process

1. Set Investment Priorities and Strategies
2. Decision Analysis Report (DAR) Prepared
3. DAR Distributed for Review and Validation
4. Headquarters and Area Vice President DAR Concurrence
5. Final DAR Prepared and Distributed
6. Finance Validation Completed
7. Senior Vice President Review and Approval
8. Capital Investment Committee Review and Approval
9. PMG/CEO Review and Approval
10. Capital Projects Committee Review
11. Board of Governors Review and Approval
12. Compliance Reporting and Post-Implementation Review and Close-Out
This page intentionally left blank
5 Validation

5-1 About This Chapter
The vice president and controller of Finance must validate all postal support and information systems investments of $5 million or greater and which require a DAR before final approval. The vice president and controller of Finance must also validate DAR Modification Requests for these projects. At the request of the sponsor, Finance will review investments under $5 million and issue a review letter.

5-2 Purpose
A validation is an independent verification of the accuracy and integrity of the documented arguments presented in support of the project. For a postal support and information systems project, the vice president and controller of Finance validates the site-specific models (if applicable) or the assumptions of the savings model, confirms the business decision, and ensures consistency with corporate goals and strategies.

The validation of a DAR or DAR Modification Request provides the following assurances to the approving officials:

a. The DAR and backup documentation is in full compliance with current investment policies and procedures, and it supports the overall corporate investment decision-making process.

b. Confidence in the magnitude and accuracy of the values in the DAR and that the project is a sound business decision.

c. The information (e.g., timing, investments, savings, assumptions, and analysis) presented in the DAR and its supporting documentation is reasonable, accurate, logical, valid, and auditable.

d. The sponsor adequately considered all viable, reasonable solutions and alternatives to the problem.

If any of the assurances in items a through d cannot be given, these issues must be raised during validation.
5-3 Responsibility

The vice president and controller of Finance completes the validation of a DAR at the Headquarters level. In cases where Finance is the sponsoring organization, the validation function must remain distinct and separate from DAR preparation.

Capital and Program Evaluation, Finance, also performs the following activities associated with validation:

a. Provides technical guidance for the economic analysis of project alternatives.

b. Participates in the Headquarters review process and issues comments on preliminary and final DARs.

c. Reviews Compliance Reports and evaluates DAR Modification Requests for approved projects.

d. Coordinates reviews among Finance functions.

5-4 Time Frame

The validation must be completed before the senior management or the Headquarters CIC considers the DAR for approval, as applicable.

5-5 Procedures

Exhibit 5-1 provides a list of validation tasks to help the validator complete a sound, logical analysis of major postal support and information systems projects. Some items may not apply to all project proposals. Conversely, it may be appropriate to consider questions and concerns not found on the list in exhibit 5-1. In particular, the validator should ensure that any discrepancies or questions arising from the functional reviews have been resolved.

5-6 Validation Documentation

The vice president and controller of Finance prepares a validation memorandum (or review letter) and executive summary that summarize the DAR recommendation. If the validation does not fully confirm the economic analysis, the vice president notes specific exceptions. A sample validation memorandum and executive summary for a postal support and information systems projects are included as exhibit 5-2.
## Validation Process for Postal Support — Systems Projects

<table>
<thead>
<tr>
<th>Objective</th>
<th>Validator Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct a policy review</td>
<td>Ensure that the DAR complies with current policy and procedures and Board of Governors’ issues and concerns. Verify that the project is part of the Five-Year Capital Investment Plan and is properly prioritized and funded within the approved budget year.</td>
</tr>
<tr>
<td>Edit draft DAR</td>
<td>Guide the sponsor on format and content issues. Provide written comments to the sponsor. Annotate the DAR with suggested revisions.</td>
</tr>
<tr>
<td>Identify and help resolve DAR issues</td>
<td>Analyze and report on issues that require resolution. Work with the sponsor to resolve issues.</td>
</tr>
<tr>
<td>Verify the requirements</td>
<td>Review the sponsor’s data and methodology. Verify the accuracy of requirements analysis. Ensure that functional management review, comment, and concur. Review the backup documentation.</td>
</tr>
<tr>
<td>Verify the investment costs</td>
<td>Review the sponsor’s source data and methodology. Review the estimates for accuracy and completeness. Ensure that Headquarters functional and field organizations and all other subject matter experts concur. Review the backup documentation.</td>
</tr>
<tr>
<td>Review the operating cost variances</td>
<td>Review the methodology and analysis of operating variances. Ensure that the DAR lists all significant assumptions. Report issues that require management discussion. Review the backup documentation.</td>
</tr>
<tr>
<td>Verify the cash flows and economic analysis</td>
<td>Ensure that the time phasing of cash flows and escalation, labor, and discount rates are accurate; and ensure that the return on investment (ROI) and net present value (NPV) calculations are accurate.</td>
</tr>
<tr>
<td>Review assumptions and sensitivity analysis</td>
<td>Review the sensitivity of ROI and NPV to fluctuations in key assumptions. Report findings and develop exhibits as required.</td>
</tr>
<tr>
<td>Analyze the financial impact</td>
<td>Analyze and report on the projected impacts, by fiscal year, to the complement, the profit and loss (P&amp;L), and the operating budget. Create any necessary exhibits for internal communication.</td>
</tr>
<tr>
<td>Edit final DAR</td>
<td>Verify the accuracy of the final DAR values and cash flows, and coordinate any necessary revisions before final publication.</td>
</tr>
<tr>
<td>Complete final DAR and backup the file</td>
<td>Organize and index the official backup files including Headquarters functional and field concurrences and comments, significant correspondence, working papers, and electronic files.</td>
</tr>
<tr>
<td>Prepare the validation documents</td>
<td>Write the validation memo and executive summary.</td>
</tr>
</tbody>
</table>
Exhibit 5-2 Investment Policies and Procedures — Postal Support and Information Systems

Exhibit 5-2 (p.1)
Sample Validation Memo and Executive Summary

VICE PRESIDENT, CONTROLLER

UNITED STATES POSTAL SERVICE

October 26, 2004

<NAMES OF SPONSORING VICE PRESIDENTS>

SUBJECT: Intelligent Mail Data Acquisition System — Mobile Data Collection Device Replacement Decision Analysis Report

The subject Decision Analysis Report (DAR) dated July 8, 2004, and revised October 15, 2004, has been reviewed and validated.

The sponsor of the DAR recommends funding authorization of $XXX.XX million in capital and $X.XX million in expense funding for a total investment of $XXX.XX million to replace all existing mobile data collection devices (MDCDs) used by postal carriers and clerks. Replacement of the MDCDs is necessary to support critical postal infrastructure systems and to maintain a competitive level of service offerings to our customers. The proposed MDCD replacements, called intelligent mail devices (IMDs), will have enhanced functionality and support new product offerings, internal process improvements, and revenue protection.

Deployment of the initial 318,000 MDCDs was completed in early 1999 in support of the Delivery Confirmation program. The database, reporting infrastructure, and communications to support Signature Confirmation were implemented in 2000. Today, there are over 340,000 MDCDs in use nationwide. In 2003, these devices were used to scan 514 million pieces of mail for Delivery Confirmation and Signature Confirmation.

In November 2003, the chief operating officer approved funding of $X.XX million for testing and development activities in support of this MDCD replacement DAR. A total of 300,214 IMDs are planned for purchase and deployment in this program as replacements for the 342,879 existing MDCDs. The reduction in the planned number of replacement units is due primarily to a projected decrease in the number of spare units. The quantity may vary based upon final requirements within the approved investment amount. A key objective of the MDCD replacement program is to develop a family of integrated and compatible data collection devices utilizing a standard platform that will meet the future requirements of the Postal Service. The standard platform will support the migration of existing applications and the development of new applications to exploit the “Intelligent Mail” concept collectively called the Intelligent Mail Data Acquisition System (IMDAS).

The operating variances over the analysis period total $X.XX million. The Net Present Value of the cash flow, when discounted at 7.5 percent, is -$XXX.XX million, and there is no return on investment. At full-up implementation, the proposed investment is expected to produce a net reduction of 111 full-time equivalent positions in mail carrier, maintenance, and Optical Scanning Workstation operations. The sponsor performed an analysis to compare alternative program strategies to the proposed investment. The replacement of the existing MDCDs and associated infrastructure has an NPV that is $XXX.X million less negative than the sustaining alternative of replacing the existing equipment as it becomes obsolete and unrepairable.

475 L’ENFANT PLAZA SW
WASHINGTON, DC 20260-5000
Pending funding approval, a delivery order will be issued in November 2004 against the competitively awarded contract for the IMDS and supporting infrastructure equipment. Deployments are scheduled to begin in April 2005 and end in April 2006.

The project is consistent with the Transformation Plan’s strategic focus and is included in the operating and capital investment plan. The project must be submitted to the Board of Governors for final approval. Pending approval, quarterly compliance reports and post-implementation reviews must be prepared for the project.

< Signed >

Vice President, Controller

1cc: Mr. Mazzei
Mr. Batterton
Mr. Rapp
Ms. Malone
Mr. Reblin
Ms. Wright

475 L’ENFANT PLAZA SW
WASHINGTON, DC 20202-5000
EXECUTIVE SUMMARY

SUBJECT
Intelligent Mail Data Acquisition System (IMDAS) — Mobile Data Collection Device Replacement Decision Analysis Report

BACKGROUND
Deployment of the initial 318,000 mobile data collection devices (MDCDs) was completed in early 1999 in support of the Delivery Confirmation program. The database, reporting infrastructure, and communications to support Signature Confirmation were implemented in 2000. Currently there are over 340,000 MDCDs in use nationwide. Replacement of the MDCDs is necessary to support critical postal infrastructure systems and to maintain a competitive level of service offerings to our customers. The proposed MDCD replacements, called intelligent mail devices (IMDs), will have enhanced functionality and support new product offerings, internal process improvements, and revenue protection.

In November 2003 the Chief Operating Officer approved funding of $X.XX million for testing and development activities in support of this MDCD replacement Decision Analysis Report. A total of 300,214 IMDs are planned for purchase and deployment in this program as replacements for the 342,879 existing MDCDs. The quantity may vary based upon final requirements, within the approved investment amount. A key objective of the MDCD replacement program is to develop a family of integrated and compatible data collection devices utilizing a standard platform that will meet the future requirements of the Postal Service. The standard platform will support the migration of existing applications and the development of new applications to exploit the “Intelligent Mail” concept collectively called the Intelligent Mail Data Acquisition System (IMDAS).

Pending funding approval, a sole source contract will be awarded in November 2004 for the IMDs and supporting infrastructure equipment. Deployments are scheduled to begin in April 2005 and end in April 2006.

PROJECT OBJECTIVES
1. To maintain competitive service offerings to our customers.
2. To support critical postal infrastructure systems.
3. To establish a standardized platform for a “family” of Postal Service scanners.
4. To enhance the functionality of the existing devices by incorporating new technology such as signature capture, two-dimensional barcode reading, and personal area networks.

FINANCIAL SUMMARY ($ in thousands)

<table>
<thead>
<tr>
<th>Investment</th>
<th>Approval Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Investment</td>
<td>$XXX,XXX</td>
</tr>
<tr>
<td>Expense Investment</td>
<td>$X,XXX</td>
</tr>
<tr>
<td>Total for Approval</td>
<td>$XXX,XXX</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash Flow Data</th>
<th>5-Year Operating Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Operating Variance</td>
<td>$X,XXX</td>
</tr>
<tr>
<td>Net Present Value discounted at 7.5%</td>
<td>($XXX,XXX)</td>
</tr>
<tr>
<td>Return on Investment</td>
<td>N/A</td>
</tr>
</tbody>
</table>

REQUESTED ACTION
Authorization is requested, subject to approval by the Board of Governors, for total funding of $XXX.XX million, which includes $XXX.XX million in capital funding and $X.XX million expense funding to replace all existing MDCDs used by Postal Service carriers and clerks. An analysis was performed to compare alternative program strategies to the proposed investment. The replacement of the existing MDCDs and associated infrastructure has a Net Present Value that is $XXX.X million less negative than the sustaining alternative of replacing the existing equipment as it becomes obsolete and irreparable.
6 DAR Compliance Reports

6-1 About This Chapter

Every quarter sponsors must prepare and submit DAR Compliance Reports for review for major facility projects from the date of final approval until 18 months after in the project’s completion.

6-2 Purpose

DAR Compliance Reports track the progress of a project and its compliance with the approved plan (i.e., the DAR and any approved DAR Modification Requests). More specifically, the report serves the following purposes:

a. Indicates the status of each operational, real estate, and financial goal of the project, documenting any changes from the approved DAR.

b. Measures the progress and actual budget impact of investments and operating variances.

c. Helps identify the need for a DAR Modification Request.

d. Provides feedback on actual versus planned results that should prove useful in planning future projects.

6-3 Responsibility

The sponsor must ensure that DAR Compliance Reports are prepared. The sponsor designates key resources and specifies who prepares these reports (usually the project manager). The sponsor must become thoroughly familiar with the economic and operational plans presented in the approved DAR, DAR backup materials, and any DAR Modification Requests. See Handbook F-66, General Investment Policies and Procedures, chapter 7, for detailed Compliance Reporting requirements and exhibits.
6-4 Time Frame

A Compliance Report must be prepared each postal quarter from the time a DAR receives final approval until 18 months after final deployment. The reported information must be current as of the close of each quarter and must be submitted 1 week after the close of the Postal Service quarter.

6-5 Document Retention

Finance places the original Compliance Report with the master DAR file for future reference and distribution upon request. The sponsor retains a copy of all Compliance Reports in their project file.
7 DAR Modification Request

7-1 About This Chapter

A DAR Modification Request must be reviewed, validated, and approved before the sponsor may deviate from the approved DAR for a postal support and information systems project. The vice president and controller of Finance must approve exceptions to this policy.

7-2 Purpose

A DAR Modification Request is a request to depart from the approved plan (i.e., the DAR) and any previously approved DAR Modification Requests. The DAR Modification Request serves the following purposes:

a. Controls the flow of funds for the project as set forth in the approved DAR.

b. Strengthens the sponsor’s accountability in complying with the approved facility and operational plans.

c. Allows managers to adjust for opportunities or problems that arise during the project’s life cycle.

d. Ensures that significant changes to investments and operating variances are properly documented and approved.

A DAR Modification Request may not be used to update the operating variances in the approved DAR to correspond to actual results (such as a change in utility rates, wage rates, or staffing plan). A DAR Modification Request must be based on an investment change or a significant operating change.

In rare cases, the proposed changes to an approved DAR may be so great that a completely new DAR and backup documentation may be required.
7-3 Definitions

A DAR modification may be an investment-related or operational change from the approved DAR.

Investment-related modification — A proposed change to the approved investment funding contained in the DAR.

Operational modification — A significant change that affects the scope of the project, cash flow operating variances, investments, or assumptions upon which a project was justified. The proposed operational change may or may not require additional funds.

7-4 Responsibility

The need for a DAR Modification Request is often identified when a Compliance Report is prepared. If there is any question whether a DAR Modification Request is required, contact Capital and Program Evaluation, Finance, Headquarters.

The sponsor must identify the need, prepare the request, revise the economic analysis and cash flow, and coordinate the necessary approvals. The project sponsor, preparer, and approving officials must sign the request, which indicates their agreement with the revised project concepts, assumptions, and operational and budgetary impacts.

7-5 Time Frame

A DAR Modification Request must be submitted on a timely basis (i.e., when a major operational or investment-related change becomes known) and must be approved before the change from the approved plan is initiated.

All DAR Modification Requests must be submitted and approved before the supporting contracts are signed.

7-6 Required Components

The following items must be included in a DAR Modification Request for a postal support and information systems project. The narrative section should not exceed two or three pages.

7-6.1 Cover Page

The cover page should identify the document as a “DAR MODIFICATION REQUEST” and indicate the name of the project (the same as the originally approved DAR) and the date.
7-6.2 **Signature Sheet**

Include the same signature lines — preparer, reviewer, sponsor (if applicable), and approving officials — as the signature page of the original DAR. Additional signatures may be required if the request is for additional capital funding that requires the project to be approved at a higher level.

7-6.3 **Background**

Include the following background information:

a. Amount previously approved.

b. Final approval date (DAR and any approved DAR Modifications).

c. Final approval authority (e.g., vice president, postmaster general and chief executive officer, or Board of Governors).

d. Project justification (summary of main points from approved DAR).

e. Update on progress toward deployment of the equipment.

7-6.4 **Problem Definition and Justification**

Describe the proposed change and explain why it should be approved.

7-6.5 **Financial Summary**

Include a table in the format shown, including additional information as appropriate for the specific project:

<table>
<thead>
<tr>
<th>Five-Year Operating Period</th>
<th>Original DAR or Previously Approved DAR Modification (Final Approval Date)</th>
<th>DAR Modification (Date of Request)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital</td>
<td>$____________</td>
<td>$_________</td>
<td>$_______</td>
</tr>
<tr>
<td>Expense</td>
<td>$____________</td>
<td>$_________</td>
<td>$_______</td>
</tr>
<tr>
<td>Total</td>
<td>$____________</td>
<td>$_________</td>
<td>$_______</td>
</tr>
<tr>
<td>Operating Variance</td>
<td>$____________</td>
<td>$_________</td>
<td>$_______</td>
</tr>
<tr>
<td>Net Present Value Discounted at __ %</td>
<td>$_________</td>
<td>$_________</td>
<td>$_______</td>
</tr>
<tr>
<td>Return on Investment</td>
<td>$_________</td>
<td>$_________</td>
<td>$_______</td>
</tr>
</tbody>
</table>
7-6.6 **Recommendation**
Summarize the proposed change and make a formal request to modify the original plan, increase the authorized funding, or both.

7-6.7 **Exhibits**
If the proposed change affects the cash flow, include both the originally approved cash flow and the update. For other exhibits, include only the revised version.

7-6.8 **Backup Documentation**
Include any materials that will support the proposed change to the approved project.

7-7 **Validation**
The sponsor forwards the DAR Modification Request to Capital and Program Evaluation, Finance, for validation (see chapter 5). Modification requests for R&D projects do not require validation, but Finance must review the modification request. A letter from the Controller describing the outcome of the review is sent to the sponsor.

7-8 **Review and Approval**
A DAR Modification Request must be approved in writing before the requested action is taken or additional funds are committed. Generally, a DAR Modification Request must be approved by the same approving officials as the original DAR. However, a request for additional capital funding may require higher-level approval. The review process at Headquarters is coordinated by the sponsor.

Requests to modify a field-sponsored project must be reviewed and approved by the field before being forwarded to Headquarters for review, validation, and final approval (see Handbook F-66C). If a DAR Modification Request for such a project is denied at any level, a copy of the request and the decision must be sent to Capital and Program Evaluation, Finance, Headquarters.

7-9 **Document Retention**
Upon final approval, Finance keeps the approved DAR Modification Request along with the original DAR, and the sponsor keeps a copy in their project file.