

Office of Inspector General | United States Postal Service

Audit Report

Advance Electronic Data Holds and Reliability

Report Number MS-AR-19-002 | July 12, 2019



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Highlights

Objective

Our objective was to determine if the U.S. Postal Service is effectively fulfilling Customs and Border Protection's (CBP) advance electronic data (AED)-based holds for inbound international mail. AED includes mailpiece details such as the recipient's name and address, the sender's name and address, and package contents. AED can be sent from the originating post to the destinating post prior to the arrival of the mailing. We also assessed the reliability of AED.

The international mailing and shipping industry is growing significantly — global eCommerce topped \$2.8 trillion in 2018 and is projected to grow over 60 percent by 2021. The Postal Service recorded nearly 638 million pieces of inbound international mail in fiscal year 2018, with associated revenues totaling \$1.1 billion.

The Postal Service coordinates its international inbound mail acceptance operations with CBP. A key part of these efforts is the availability and use of AED.

AED is sent from the originating foreign post to the Postal Service, which then routes it to CBP. Based on AED, CBP requests specific mailpieces for the Postal Service to hold for further review before allowing them to enter the mailstream.

We have identified issues the Postal Service faced in capturing AED from originating posts and fulfilling CBP's AED-based hold requests in prior reports. Additionally, stakeholders, including the Administration and Congress, have become increasingly involved in the role AED plays in identification and enforcement efforts related to the trafficking of illicit opioids through the mail, leading to the passage of the Synthetics Trafficking and Overdose Prevention (STOP) Act in October 2018. A key focus of the STOP Act is to leverage the use of AED to prevent the Postal Service from unknowingly participating in the international trafficking of illicit synthetic opioids and other illegal drugs. The

“The Postal Service coordinates its international inbound mail acceptance operations with CBP.”

Government Accountability Office has been tasked with evaluating STOP Act implementation, and we have coordinated our audit efforts with that office.

What the OIG Found

The Postal Service did not always effectively fulfill CBP's AED-based holds for inbound international mail. Postal Service data showed they missed [REDACTED] of the [REDACTED] ([REDACTED] percent) AED-based holds during 2018. This represents a hold compliance rate of 88 percent, which is an improvement from 79 percent in 2017 and 67 percent in 2016.

Operational issues, including a failure to scan mailpieces, caused [REDACTED] ([REDACTED] percent) of the missed holds. The Postal Service did not identify reasons for [REDACTED] ([REDACTED] percent) missed holds and the remaining [REDACTED] ([REDACTED] percent) were missed due to other system and timing issues including no CBP hold alert or incorrect AED from the foreign post.

The Postal Service has taken actions to address missed holds by enhancing its operational scanning capabilities, staff training, facility-specific action plans, and ability to capture holds throughout its network, including at delivery units and processing plants. The Postal Service recently reported an AED-based hold compliance rate of 93 percent in April 2019.

While we support these actions, we found that a control for requiring information to be recorded when a missed hold is identified would help reduce the number of missed holds. Specifically, the Postal Service lacks a control to prevent the “comment” field for missed holds — the field the Postal Service uses to monitor the reasons for missed holds — from being left blank. Such a control should also allow an overwrite capability should the reason for a missed hold later be identified. Postal Service officials acknowledged the “comment” field was often blank ([REDACTED] times or [REDACTED] percent of total missed holds in 2018), as the mailing was still in the Postal Service processing network or they were unable to determine a reason for the missed hold within a reasonable period. While we recognize these challenges, the lack of a control for requiring information to be entered into the “comment” field for each of these misses limits management's ability to understand the reasons for missed holds and develop corrective actions.

We also tested the reliability of the AED received by the Postal Service from foreign posts across 64 countries between October 2017 and January 2019 (■ percent of this data was from China Post). This analysis covered over ■ million AED records received by the Postal Service, each with 13 data elements that aligned with Universal Postal Union requirements for sending international mail. Our analysis showed that data in nearly 171 million individual fields failed our reliability tests; these fields were associated with ■ million individual packages. This represented approximately ■ percent of the ■ million individual packages.

We also conducted further testing on a subset of the delivery address data from November 25 to December 1, 2018, to assess how closely the AED recipient address information matched address information in the Postal Service's Address Management System and another third-party address database. We found that 57 percent matched at the full address level (address plus nine-digit zip code).

The extent to which AED reliability issues could impact future international inbound operations will largely depend on the AED requirements the Department of Homeland Security is working to establish as part of their response to the STOP Act.

Because AED requirements are still under development, we are not making recommendations related to AED quality. We will, however, continue to monitor these issues as part of our overall inbound international mail audit work.

What the OIG Recommended

We recommended management develop and implement a control for requiring information to be entered in the "comment" field for tracking missed AED-based holds.

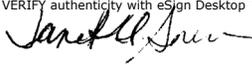
Transmittal Letter



OFFICE OF INSPECTOR GENERAL
UNITED STATES POSTAL SERVICE

July 12, 2019

MEMORANDUM FOR: ROBERT CINTRON
VICE PRESIDENT, NETWORK OPERATIONS

E-Signed by Janet Sorensen
VERIFY authenticity with eSign Desktop 


FROM: Janet M. Sorensen
Deputy Assistant Inspector General
for Retail, Delivery and Marketing

SUBJECT: Audit Report – Advance Electronic Data Holds and Reliability
(Report Number MS-AR-19-002)

This report presents the results of our audit of the Advance Electronic Data Holds and Reliability (Project Number 18RG010MS000).

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Joseph Wolski, Director, Sales, Marketing and International, or me at 703-248-2100.

Attachment

cc: Corporate Audit Response Management

Results

Introduction/Objective

This report presents the results of our self-initiated audit of Advance Electronic Data¹ Holds and Reliability (Project Number 18RG010MS000). The objective was to determine if the U.S. Postal Service is effectively fulfilling Customs and Border Protection's (CBP) advance electronic data (AED)-based holds for inbound international mail. We also assessed the reliability of AED.

Background

The international mailing and shipping industry is growing significantly — global eCommerce topped \$2.8 trillion in 2018 and is projected to grow over 60 percent by 2021. The Postal Service is an active participant in this international market, offering a variety of mailing and shipping products and services including Priority Mail International, commercial ePackages, and First-Class Package International Service. The Postal Service recorded nearly 638 million pieces of inbound international mail in fiscal year (FY) 2018, with associated revenue totaling \$1.1 billion.

The Postal Service coordinates its international inbound mail acceptance operations with CBP. A key part of these efforts is the availability and use of AED, which can include details, such as the recipient's name and address, the sender's name and address, and package contents. For inbound mailings, AED is sent from the originating foreign post to the Postal Service, which then routes it to CBP. ITMATT can be provided in one of two formats (Version 8 and Version 11), with slight differences in the number and size of data fields. For example, in Version 11 the address data is separated into specific fields (street, city, state, etc.) and some of the field lengths were increased to accommodate larger information sets.²

The international mailing and shipping industry is growing significantly. Global eCommerce topped

\$2.8 TRILLION

and is projected to grow over

60% by 2021



The Postal Service recorded nearly

638 million pieces

of inbound international mail in fiscal year 2018

with associated revenue totaling

\$1.1 BILLION



¹ There are two elements of advance data: PreAdvice of Despatch Prepared (PREDES) messages and Item Attribute (ITMATT) Pre-Advice message data. PREDES messages are sent from the country of origin to the country of final destination post. These messages contain information about receptacles, including the number of items, the item number, weight, etc. ITMATT messages are exchanged between the origin and destination posts to provide information about an item including details of the sender, addressee, and item content, and are required for CBPs and security screening of the item. We are focusing on ITMATT data for the purposes of this review as this information is critical for CBP's security screening activities.

² We found the Postal Service received AED for [REDACTED] million items in Version 8 format and [REDACTED] million items in Version 11 format in January 2019. The Postal Service provides AED for its outbound international mailings in both the Version 8 and 11 formats (as there are several posts that are still on Version 8 and cannot accept files in Version 11).

CBP staff analyze AED to identify mailpieces it would like the Postal Service to “hold” for inspection. The hold request is transmitted back to the Postal Service’s Global Business System (GBS), which then sends a “hold” notice when employees conduct initial acceptance scans (Receipt Verification Scans, or RVS)³ of inbound international mailings.

Postal Service employees then remove all the mailpieces from the receptacle and scan each one (i.e., perform item-level scanning) to identify the requested hold item.⁴ Postal Service staff then segregate the identified hold item from the rest of the mailstream and present it to the Postal Inspection Service (Inspection Service). Inspection Service staff conduct the “into customs” scan of each held item and present it to CBP for inspection. CBP then inspects the mailpieces in a designated area. The cleared mailpieces are then returned to Postal Service employees and redeposited back into the mailstream. If the Postal Service is unable to capture the hold at the ISC, it also has procedures and equipment to capture them further downstream in its operations network (such as at other processing facilities or delivery units) and to transport and present them to CBP for review.

We previously identified issues the Postal Service faced not only in capturing AED from originating posts, but also fulfilling CBP’s AED-based hold requests in earlier U.S. Postal Service Office of Inspector General (OIG) reports.⁵ Additionally, stakeholders, including the Administration and Congress, became increasingly involved in the role AED plays in identification and enforcement efforts related to the trafficking of illicit opioids through the mail, leading to the passage of the Synthetics Trafficking and Overdose Prevention (STOP) Act⁶ in October 2018. A key focus of the STOP Act is to leverage the use of AED to prevent the

Postal Service from unknowingly participating in the international trafficking of illicit synthetic opioids and other illegal drugs. Key provisions in the law include:

- Foreign posts are to provide AED on 100 percent of international mail by the end of 2020, except those who receive a waiver from CBP.
- The Postal Service will be subject to penalties if it accepts international mailings without AED beginning January 2021.

The Postal Service, CBP, Department of Homeland Security (DHS), Department of State (DoS), and Government Accountability Office (GAO) all have major implementation responsibilities.

While the key stakeholders continue to work on implementing the law, early goals have been missed or delayed. For example, the initial 2018 target set forth related to the number of inbound mailings with AED presented to the Postal Service was not met – 100 percent for those from China, Hong Kong, and Macau posts and 70 percent for posts from other designated countries — as the Postal Service was only provided ■ and ■ percent, respectively as of December 2018. In addition, a key joint strategic plan which was originally set to be completed by December 24, 2018,⁷ was not issued until April 2019. We are not delving further into these issues as part of this report due to the ongoing implementation and reviews related to the STOP Act.

The information presented below – on the Postal Service’s ability to comply with CBP’s AED-based hold requests and basic insights into the reliability of AED – can contribute to additional efforts to promote the overall safety and security of the mail and preserve the Postal Service’s brand as a trusted mail provider.

3 The RVS scan is used to alert employees to segregate receptacles containing AED-based holds from the mailstream. The initial scan reads the receptacle barcode, a 29-character standard Universal Postal Union (UPU) barcode applied by the foreign post on a container holding more than one individual mailpiece. A receptacle barcode can also be applied to an individual mailpiece when the item is considered its own receptacle, such as an oversized item like a tire.

4 To find the hold item inside a receptacle, employees must scan the individual item barcodes for each mailpiece. Item barcodes are placed on the item by the foreign post when the items are containerized for shipment. When the scans occur, information is fed to GBS to query the database for an AED-based hold notification.

5 A comprehensive list of prior reports is in [Appendix A](#).

6 [Public Law 115-271](#), Title VIII Miscellaneous – Subtitle A – Synthetics Trafficking and Overdose Prevention, enacted October 24, 2018.

7 P.L. 115-271, Title VIII Miscellaneous – Subtitle A, Section 8003(a)(2).

Finding #1: AED-Based Hold Performance

The Postal Service did not always effectively fulfill CBP's AED-based holds for inbound international mail. Postal Service data showed they missed [REDACTED] of the [REDACTED] ([REDACTED] percent) AED-based actionable⁸ holds during 2018. Operational issues, including a failure to scan mailpieces, caused [REDACTED] ([REDACTED] percent) of the missed holds. The Postal Service did not identify reasons for [REDACTED] ([REDACTED] percent) missed holds and the remaining [REDACTED] ([REDACTED] percent) were missed due to other system and timing issues including there was no CBP hold alert or incorrect PREDES from the foreign post.

“Postal Service data showed they missed [REDACTED] percent of AED-based actionable holds during 2018.”

The Postal Service has implemented corrective actions to address missed holds and continues to enhance its operational scanning capabilities, staff training, and ability to capture holds throughout its network including at delivery units and processing plants to help improve performance. See [Appendix B](#) for more detail on these corrective actions.

Postal Service data shows an improvement in AED-based hold compliance from 67 percent in 2016, to 79 percent in 2017, to 88 percent in 2018, and to

93 percent through April 2019.⁹ Furthermore, the Postal Service conducted facility-specific reviews of AED-based hold performance at three of its major ISCs in February 2019 — [REDACTED] — to identify root causes of performance issues, corrective actions, responsible parties, and milestones.

While we support these actions, we found that a control for requiring additional information be periodically recorded when tracking missed holds would help reduce the number of missed holds.

Comment Field Data

The Postal Service lacks a control to prevent the “comment” field for missed holds — the field the Postal Service uses to monitor the reasons for missed holds — from being left blank. When headquarters staff who are monitoring AED-based holds performance find a missed hold, they try to determine the reason by reviewing the scan results and processing operations and collaborating with local plant officials. These staff are then to select one of the predetermined categories in the comment field to record the reason for the missed hold.¹⁰ We noted, however, that Postal Service data on missed holds for 2018 showed [REDACTED] blank “comment” boxes [REDACTED] percent of total missed holds). Postal Service year-end data showed blank values for misses throughout the year, with most blanks occurring in AED that was accepted during November (see [Table 1](#)).

⁸ Hold requests that can be acted upon by ISCs. These are determined based on the RVS and presence of a Hold Request. Late Hold requests are not included.

⁹ The Postal Service will be increasing its AED-based hold compliance target to 100 percent by the end of FY 2019.

¹⁰ Based on our initial concerns identified during the audit, the Postal Service created standardized labels, whereby staff can choose from defined categories in the comment field when annotating reasons for missed holds.

Table 1. Blank Comment Boxes (by Month in 2018)

Month ^a	Missed Holds with Blank Comment Boxes	Percentage	Total Missed Holds
January	█	5.6%	█
February	█	2.2	█
March	█	1.0	█
April	█	11.1	█
May	█	2.0	█
June	█	2.0	█
July	█	4.1	█
August	█	8.5	█
September	█	10.3	█
October	█	17.7	█
November	█	20.0	█
December	█	15.5	█
Total	█	100.0%	█

^a We grouped these missed holds in the respective months of the pre-arrival data for each inbound mailpiece.
 Source: OIG analysis of Postal Service missed hold report data for 2018 (pulled in March 2019).

Postal Service officials acknowledged the “comment” field was often blank as they lacked additional information on the reasons for the missed holds at the time the 2018 year-end data was pulled (in March 2019). They also noted that the field is often blank as the mailing is still in the Postal Service processing network or they were unable to determine a reason for the missed hold within a reasonable period.

While we recognize these challenges, the lack of a control for requiring information to be periodically entered into the “comment” field for each of these misses limits management’s ability to understand the reasons for missed holds and develop corrective actions. Such a control should include an assessment of the status or final determination of each missed hold (e.g., “Still Reviewing” or “Unable to Determine Reason for Miss - Timed-Out”) and also allow an overwrite capability should the reason for a missed hold later be identified.

Recommendation #1

We recommend **the Vice President, Network Operations**, develop and implement a control for requiring information to be entered in the “comment” field for tracking missed Advance Electronic Data-based holds.

Finding #2: AED Reliability

We tested the reliability of the AED received by the Postal Service between October 2017 and January 2019. This analysis covered over █ million AED records received by the Postal Service across 13 AED elements that we aligned with eight select UPU requirements¹¹ for sending international mail (see [Table 2](#)).

¹¹ UPU guidance also requires a “signature (electronic)/date” element for every mailing, but we used that element to select our universe of 857 mailings for the period covered in our analysis, meaning that we included only records with a “signature (electronic)/date” that contained a date between October 1, 2017, and January 31, 2019, in our analysis.

Table 2. Crosswalk of UPU Required Elements and Postal Service AED Elements

UPU Required Element	Postal Service AED Element
Item ID	Customs barcode
Sender information: name, full address, postal code	Sender address name Sender address
Receiver information: name, full address, postal code	Delivery address name Delivery address Delivery address location ZIP code
Description of contents	Description
Weight, net, and total	Declared gross weight Net weight
Quantity	Number of units
Value	Declared value amount Declared value currency
Transaction type (gift, documents, merchandise, etc.)	Nature of transaction description

Source: OIG methodology for analyzing Postal Service AED.

The respective data was contained in one of two types of data tables — Item and Content. The (1) Item table contains “item records” for each individual mailing with postage affixed and the (2) Content table contains “content piece” records for the one or more pieces that may be included in an individual mailed item. For example, for a package that contains a pair of shoes and a hat, there would be one item record for the package and two content piece records — one for the

shoes and one for the hat. These records included AED received by the Postal Service from foreign posts covering 64 countries, with █ percent from China Post, █ percent from Canada Post, and the rest from posts from the remaining █ countries.

We then developed conservative reliability tests for each individual data element. Such tests included whether data contained a zero, null, “?”, or blank value or did not match the expected data format. Our analysis showed that data in nearly 171 million individual fields failed our reliability tests; these fields were associated with █ million individual packages. This represented approximately 34 percent of the █ million individual packages. Table 3 shows the results of these reliability tests.

These tests had some inherent limitations due to the nature of the data and timing of our testing. For example, we could not test the accuracy of parcel weight other than determining the number of parcels with no weight or a weight of 0 kilograms. Further, our tests were conducted as of a specific date in time and were not updated for changes in AED that occurred after the testing date, although we note that foreign posts may continue to update AED throughout the mailing process.

AED Statistics

- ❖ The number of countries with AED mailings have nearly doubled between January 2018 and 2019 (32 to 55).
- ❖ Mailings with AED increased by 18 percent between January 2018 and 2019 (█ million to █ million).
- ❖ AED was provided across six product types: Letter Post Express (█ million), Letter Post Other (█ million), Express Mail Service (█ million), Parcel Post (█ million), Letter Post Registered (█ million), and e-Commerce Parcels (█) for FY 2018.
- ❖ China Post provides all its data in Version 8 format, while others have increasingly been providing it in Version 11.

Table 3. AED Reliability Tests Results, by Failure Type (October 2017-January 2019)

OIG Selected Data Field	Reliability Test	Zero Values ^a	Blank/Null Values	Contains “?” Mark	Other	Total
Item Records^b						
Customs Barcode	Customs barcode does NOT match the required 13-digit format of the item number (i.e., “XX999999999XX”) or is blank or is a question mark (i.e., “?”).	n/a	2,647	12,560	198,642	213,849
Declared Gross Weight	Declared Gross Weight = 0 or less than zero	1,265,138	n/a	n/a	n/a	1,265,138
Delivery Address	Address field lacks either a numeric or alpha character required for a street name and/or number or is blank or is a question mark (i.e., “?”).	n/a	5,583	122,833	3,294,483	3,422,899
Delivery Address Location Zip Code	Does NOT contain a valid zip code. No numeric character in position 8 required for a minimum five-digit zip code (e.g., “US-99999”) or is blank or is a question mark (i.e., “?”).	n/a	9,235	29,535	2,231,400	2,270,170
Delivery Address Name	Delivery Address Name field lacks an alpha character, is blank or is a question mark (i.e., “?”).	n/a	5,077	159,441	625,949	790,467
Nature of Transaction Description	Nature of Transaction Description field is blank, has a null value, is a question mark (i.e., “?”) or is a hatch mark (i.e., “#”).	n/a	27,551	19,301,720	125	19,329,396
Sender Address	Address field lacks either a numeric or alpha character required for a street name and/or number or is blank or is a question mark (i.e., “?”).	n/a	4,009	598,906	60,015,266	60,618,181
Sender Address Name	Delivery Address Name field lacks an alpha character, is blank or is a question mark (i.e., “?”).	n/a	4,017	645,173	38,682,843	39,332,033
Content Piece Records^c						
Declared Value Amount	Declared Value Amount = 0 or less than zero.	13,925,508	n/a	n/a	n/a	13,925,508

OIG Selected Data Field	Reliability Test	Zero Values ^a	Blank/Null Values	Contains “?” Mark	Other	Total
Declared Value Currency	Declared Value Currency field is blank or a question mark (i.e., “?”).	n/a	3,488	39	n/a	3,527
Description	Description field lacks a vowel (excludes the following product acronyms “CD” / “DVD” / “VHS” / “DVR” / “LP”) or is blank or is a question mark (i.e., “?”).	n/a	38	15,531	6,833,704	6,849,273
Net Weight	Net Weight = 0 or less than zero.	22,671,215	n/a	n/a	n/a	22,671,215
Number of Units	Number of Units = 0 or less than zero.	424,896	n/a	n/a	n/a	424,896
Total		38,286,757	61,645	20,885,738	111,882,412	171,116,552

^a We used variations of zeros, such as 0, 0.0, 0.00, to test for zero values.

^b There were a total of [REDACTED] million item records.

^c There were a total of [REDACTED] million content piece records.

Note: n/a – not applicable.

Source: OIG analysis of Postal Service data.

Key observations included:

- Some of the AED provided in key fields was not always complete, as illustrated by blank values. We found a total of 61,645 fields with blank or null values during our analysis, most of which were in the Nature of Transaction field.
- Some of the AED provided in key fields was not always accurate, as illustrated by “?” as the value. We found a total of 20,885,738 fields with “?” values during our analysis, most of which were in the Nature of Transaction field. We also identified a total of 38,286,757 fields with values of zero (“0”) during our analysis, most of which were in the Net Weight and Declared Value Amount fields.

- Some of the AED provided in a key field that should contain positive values, instead contained negative values. We found 3 records with negative values in Declared Gross Weight.
- Of the packages that failed our reliability tests, 30 percent failed one test and 4 percent failed two or more.
- Approximately [REDACTED] packages (less than .006 percent) failed all reliability tests.

We also conducted further testing on delivery addresses for a one-week section of that data – [REDACTED] records¹² between November 25 and December 1, 2018 – to assess how closely the recipient address information provided in the AED matched address information contained in the Postal Service’s Address Management System (AMS) and another third-party address database.¹³

Table 4 illustrates the tests we performed on these records.

¹² The [REDACTED] records consisted of [REDACTED] records from version 11 and [REDACTED] records from version 8. After extracting these records, we made some slight adjustments to the data – specifically concatenating the address fields into one and removing the “US-“ from the zip code field. Appendix A contains additional information on these tests.

¹³ The third-party database was from Esri, a Geographic Information Systems mapping tool that collects address data from a variety of other sources.

Table 4. Example of OIG Address Matching Test

AED Delivery Address Example	Actual AMS or Third-Party Address	OIG Categorization	
11 Charles Lane Anytown, ST, 12345-6789	11 Charles Lane Anytown, ST, 12345-6789	Full Address Match	<u>X</u>
		ZIP+4 Match	-
		Zip Code Match	-
Charz St. Anytown, ST, 12345-6789	11 Charles Lane Anytown, ST, 12345-6789	Full Address Match	-
		ZIP+4 Match	<u>X</u>
		Zip Code Match	-
Anytown, ST, 12345	11 Charles Lane Anytown, ST, 12345-6789	Full Address Match	-
		ZIP+4 Match	-
		Zip Code Match	<u>X</u>
[No match]	None	No Match	<u>X</u>

Source: OIG example of AED address matching test and categorization.

We found that while 57 percent of addresses matched at the full address level (the most stringent test), only 34 percent matched at the zip code level (the least stringent test) (see Table 5). We also found that AED addresses in version 8 (mostly China Post) had more matches than for version 11 (98 percent in Version 8 compared to 87 percent in Version 11).

Table 5. Summary Results of AED Reliability Test – Address Matching

Category	Number	Percentage of Total	Cumulative Percentage
Matched			
Full Address Level	██████	57%	57%
Zip+4 Level	██████	6%	63%
Zip Code Level	██████	34%	97%
No Match	██████	3%	3%
Totals	██████	100%	100%

Source: OIG analysis of AED addressing data.

CBP and the Postal Service recognize inherent limitations in overall reliability of the AED; however, they still view this data as a valuable tool for targeting suspect mailings and promoting more efficient acceptance operations. The extent to which these AED reliability issues could impact future international inbound operations will largely depend on the AED requirements the DHS is working to establish as part of their response to the STOP Act. Furthermore, the STOP Act recognizes the importance of AED quality by including periodic assessments of that quality, including the following:

- Section 8003(c)(1)(E) requires the Secretary of Homeland Security and the Postmaster General to periodically conduct *“an assessment of the quality of that information being received by foreign postal operators, as determined by the Secretary of Homeland Security, and actions taken to improve the quality of that information.”*
- Section 8003(d)(2) requires the Government Accountability Office to assess *“the quality of the information received from foreign postal operators for targeting purposes.”*

Because AED requirements are still under development, we are not making recommendations related to AED quality.

Management’s Comments

Management agreed with our findings and recommendation and noted that the success rate of AED hold requests has increased from 67 percent in 2016 to 93 percent in April 2019. Management also noted the CBP hold report is used to track the success rate against the target and provide detailed information that will drive improvement.

Regarding recommendation 1, management stated they have updated the weekly CBP hold reports comments section to add a new dropdown section “unable to determine a cause” rather than leaving the comment blank. They also have updated the associated quality control check to ensure there are no blanks in the comments section of these reports. These actions were completed as of June 24, 2019. See [Appendix C](#) for management’s comments in their entirety.

Evaluation of Management’s Comments

The OIG considers management’s comments responsive to the recommendation in the report. Based on management’s implementation of corrective action, we consider recommendation 1 closed with the issuance of this report.

Appendices

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Appendix A: Additional Information

Scope and Methodology

Our objective was to determine if the Postal Service is effectively fulfilling CBP's AED-based holds for inbound international mail. We also are assessing the reliability of AED and summarizing the status of the implementation of recent AED-related legislation. To accomplish our objective, we:

- Reviewed and analyzed Postal Service data on hold performance and AED for 2018. We received a data set from the Postal Service in February 2019, and an updated data set in March 2019. This updated data set address some of the categorization issues we raised during our audit work.
- Reviewed the AED-related components of the Postal Service's various international bilateral/multilateral and data sharing agreements.
- Analyzed the reliability of AED presented to the Postal Service from the foreign posts. We collected records from the Customs and Border Protection Manifest system that contained international AED tables from October 2017 through January 2019. These records were from the Version 8 and Version 11 formats and contained both item-level and receptacle-level information. This analysis covered over [REDACTED] million AED records received by the Postal Service across 13 data elements that we aligned with eight select UPU requirements for sending international mail. We analyzed data across multiple fields when necessary to account for format differences between the two data versions – for example, 8 data fields in Version 8 aligned with the “Sender information” and “Recipient information” elements, while only four data fields in Version 11 aligned with these same elements. We then ran basic reliability tests on this data.

We also took a one-week section of that data – [REDACTED] records between November 25 and December 1, 2018 – to assess how closely the AED recipient address information matched address information contained in the

Postal Service's Address Management System (AMS) and another third-party address database using geocoding software. We tested the match using the methodology described earlier in Table 3. We also discussed these methodologies and results with Postal Service officials.

- Reviewed related laws and regulations, including the Substance Use – Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act , the Trade Act of 2002, and the 2018 STOP Act.
- Interviewed various Postal Service Network Operations officials involved in the collection, analysis, and use of AED.
- Reviewed past OIG and GAO audit work.

We conducted this performance audit from March 2018 through July 2019, in accordance with generally accepted government auditing standards and included such tests of internal controls as we considered necessary under the circumstances. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. We discussed our observations and conclusions with management on June 12, 2019, and included their comments where appropriate.

We assessed the reliability of the Postal Service's AED-based hold compliance data by evaluating the Postal Service's related methodology, reviewing the code they used to extract the data, testing the data for completeness, comparing it to related reports, and reviewing it with Postal Service officials. We assessed the reliability of the Postal Service's AED by performing the tests as described in this report, as well as reviewing these tests and results with Postal Service officials. We determined these data were sufficiently reliable for the purposes of this report.

Prior Audit Coverage

Report Title	Objective	Report Number	Final Report Date	Monetary Impact
<i>Management Alert - Inbound International Mail Operations - ██████████ and Nearby Offsite Facilities</i>	Assess international inbound mail operations at the ██████████ and other offsite facilities used by the ISC.	MS-MT-19-001	11/19/2018	None
<i>International Exchange Offices</i>	Evaluate inbound international mail acceptance at Postal Service International Exchange Offices.	MS-AR-18-001	12/11/2017	None
<i>International Mail Security</i>	Determine how inbound international items are inspected as they arrive in the U.S.; and determine what options exist to collect EAD and the costs and benefits of using it to target mail for inspection.	GAO-17-606	8/2/2017	
<i>Prohibited Inbound International Mailings</i>	Evaluate the Postal Service's processes for handling prohibited inbound international mailings such as cigarettes and prescription drugs.	MS-AR-17-008	7/18/2017	None
<i>Inbound International Mail Operations - ██████████ ISC</i>	Assess inbound international mail operations and safety and security concerns with inbound mail at the ██████████	MS-AR-17-003	12/30/2016	None
<i>Inbound International Mail Operations - ██████████</i>	Highlight significant safety and security weaknesses at the Postal Service's ██████████	MS-MT-16-004	9/28/2016	\$1,050,530

Report Title	Objective	Report Number	Final Report Date	Monetary Impact
<i>Inbound International Mail Operations - ██████/ISC</i>	Highlight significant inbound international mail security weaknesses at the Postal Service's ██████ ISC.	MS-MT-16-003	9/21/2016	None
<i>International Inbound Mail Verification</i>	Highlight significant international inbound mail verification weaknesses at Postal Service ISCs at the ██████ ██████ locations.	MR-MT-16-001	1/28/2016	None
<i>U.S. Postal Service Handling of Inbound International Mail at the ██████ ██████</i>	Determine whether the Postal Service is complying with established inbound international mail policies and procedures.	NO-MA-15-006	9/3/2015	None

Appendix B: Postal Service Actions to Enhance AED-Based Hold Compliance

The Postal Service placed a priority on making operational, system, technological, and process improvements to enhance its AED-based hold compliance. The following summarizes some of the Postal Service's current actions:

- *Operations*
 - The Postal Service has enhanced its RVS scanning capabilities, including communicating related item-level scanning processes and procedures to staff through stand-up talks and other training.
 - Ongoing operations performance reviews are being conducted at all the ISCs.
- *Performance monitoring*
 - The Postal Service has improved the quality of tracking and reporting of missed holds and determining the reasons for such. This includes more effectively (1) distributing performance reports to CBP and Postal Service staff in the field and (2) capturing hold performance data throughout the network — at domestic sorting facilities, delivery units, and the ISCs.
 - It has also developed and deployed a dashboard for delivery units to track the status of hold items destined for their unit.
- *Technology* - The Postal Service has improved scanning visibility throughout the network to intercept requested holds that were received after the mailing was already accepted into the Postal Service network (i.e., the CBP hold request was received after the mailing was already accepted).
- *Equipment* - The Postal Service has expanded and enhanced item-level scanning capabilities on equipment at the ISCs. This includes using equipment to identify and capture holds at domestic sorting facilities and at delivery units (to identify AED-based holds that were not originally caught at the ISCs).
- *Inspection Service collaboration* – Inspection Service staff have taken an increasing role in the presentation of holds to CBP by scanning the items into customs.
- *Planning* – The Postal Service conducted facility-specific reviews of AED-based hold performance at three of its major ISCs in February 2019 — [REDACTED] — identifying root causes of performance issues, corrective actions, responsible parties, and milestones. These plans are valuable tools to understanding the specific reasons why holds are being missed at each facility; particularly as each facility has unique inbound international mail operations.

Appendix C: Management's Comments

ROBERT CINTRON
VICE PRESIDENT, NETWORK OPERATIONS



July 8, 2019

LAZERICK C. POLAND
DIRECTOR, AUDIT OPERATIONS

SUBJECT: Advance Electronic Data Holds and Reliability (Report Number MS-MT-19-DRAFT)

Thank you for providing the Postal Service with the opportunity to review and comment on the subject draft management alert report. We appreciate the engagement of the Office of the Inspector General (OIG) with us, as well as the opportunity to review and comment on the provided recommendations.

Since the inception of the Advance Electronic Data holds capability, USPS has been tracking CBP holds by generating a weekly excel worksheet. The portion of CBP holds that USPS captured and presented to CBP has increased from 67 percent in 2016 to 93 percent in April 2019. USPS management resources complete the report and assign a category for each hold and determine a root cause for any failures. Scan data and actual processing results from the ISC's are used for this analysis. The report is a snapshot in time and all scans are updated each week. In some cases the root cause cannot be determined based on scan data alone and the comments field was left blank. The CBP Hold report is used to track the success rate against the target and provide detailed information that will drive improvement.

OIG Recommendation #1:

We recommend the Vice President, Network Operations, develop and implement a control for requiring information to be entered in the "comment" field for tracking missed Advance Electronic Data based holds.

Management Response/Action Plan:

Management agrees with this recommendation. USPS has updated the weekly CBP hold report comments section to add a new dropdown selection "unable to determine a cause" rather than leaving the comment blank. USPS has updated the quality control check when the report is generated to ensure no blanks exist in the comments section.

USPS requests this recommendation be closed upon issuance of the report.

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Target Implementation Date:

Completed Jun 24, 2019

Responsible Officials:

A/Manager, Global Trade Compliance



Robert Cintron
Vice President, Network Operations

cc: Corporate Audit Response Management



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