



OFFICE OF  
**INSPECTOR  
GENERAL**  
UNITED STATES POSTAL SERVICE

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# **Inbound China ePacket Costing Methodology**

## **Audit Report**

February 25, 2014

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**Report Number MS-AR-14-002**



OFFICE OF  
**INSPECTOR  
GENERAL**  
UNITED STATES POSTAL SERVICE

# HIGHLIGHTS

February 25, 2014

## Inbound China ePacket Costing Methodology

Report Number MS-AR-14-002

### **BACKGROUND:**

Global eCommerce continues to grow, and the Asia-Pacific region is expected to have surpassed North America in eCommerce in 2013, a trend forecasted to continue through at least 2016. To capitalize on this trend, the U.S. Postal Service launched a new item, the ePacket, through a bilateral agreement with China Post in fiscal year (FY) 2011. ePackets are small packages weighing up to 4.4 pounds with tracking and delivery confirmation features and are grouped with other inbound letter post packets. China Post is the largest exporter of ePackets into the U.S. with 96 percent of the total ePacket volume.

The Postal Service has priced ePackets under additional bilateral agreements with Hong Kong and Singapore, and negotiations have begun with South Korea as part of a larger strategy for developing the Postal Service's international market.

During FY 2012, China generated more than 26 million ePackets, resulting in over \$25 million in revenue, a volume increase of 182 percent, and a revenue increase of 316 percent over FY 2011. Our objective was to assess whether the Postal Service accurately determines the cost of inbound China ePackets.

### **WHAT THE OIG FOUND:**

The Postal Service did not isolate the cost of China ePackets, which limits its ability to establish effective pricing strategies. Although China Post sorts and dispatches ePackets separately from other mailpieces, the Postal Service did not calculate ePacket cost data separately from other letter post mailpieces or report it separately in the annual performance report to the Postal Regulatory Commission.

ePacket volume and revenue have increased, but the Postal Service still lost at least \$39 million during FYs 2011 and 2012. Until accurate costs for ePackets can be identified and used as a basis for pricing, the risk of revenue loss for ePackets remains high.

The Postal Service could also pursue a product classification change for inbound letter post packets, which could increase revenue from China Post and other business partners in emerging global markets.

### **WHAT THE OIG RECOMMENDED:**

We recommended the Postal Service track and report inbound letter post packet costs separately. We also recommended the Postal Service evaluate a product classification change for inbound letter post packets.

[Link to review the entire report](#)

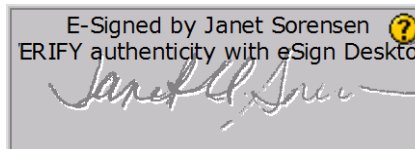


February 25, 2014

**MEMORANDUM FOR:** JOSEPH CORBETT  
CHIEF FINANCIAL OFFICER AND  
EXECUTIVE VICE PRESIDENT

GISELLE E. VALERA  
VICE PRESIDENT, GLOBAL BUSINESS

**FROM:**



Janet M. Sorensen  
Acting Deputy Assistant Inspector General  
for Revenue and Performance

**SUBJECT:** Audit Report – Inbound China ePacket Costing  
Methodology (Report Number MS-AR-14-002)

This report presents the results of our audit of the U.S. Postal Service's Inbound China ePacket Costing Methodology (Project Number 13RG010MS000).

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Joshua M. Bartzen, acting director, Sales and Marketing, or me at 703-248-2100.

Attachment

cc: Corporate Audit and Response Management

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## Introduction

This report presents the results of our self-initiated audit of the Inbound China ePacket Costing Methodology (Project Number 13RG010MS000). Our objective was to assess whether the U.S. Postal Service accurately determines the cost of inbound China ePackets. See [Appendix A](#) for additional information about this audit.

The 2006 Postal Accountability and Enhancement Act (PAEA) allows the Postal Service to enter into bilateral agreements with foreign posts to promote an efficient operation of postal services with other nations.<sup>1</sup> One such agreement is between the Postal Service and the China Post Group (China Post). This bilateral agreement governs the exchange of international products and services between the Postal Service and China Post and supersedes postage rates established by the Universal Postal Union (UPU).<sup>2</sup>

The bilateral agreement between the Postal Service and China Post developed new rates for existing letter class mailpieces and a new letter class mailpiece for small lightweight packets weighing up to 2 kilograms (4.4 pounds). These mailpieces, called “ePackets,” offer delivery tracking and confirmation and are classified with market dominant products.<sup>3</sup> The first bilateral agreement between the Postal Service and China Post covering ePackets was approved in June 2010, and the most recent agreement was approved in November 2012. While similar bilateral agreements for ePackets have been developed with Hong Kong and Singapore, and negotiations have begun with South Korea, China Post remains the largest exporter of ePackets into the U.S., with 96 percent of the total ePacket volume.

The PAEA also requires the Postal Service to report costs, revenue, volumes, and quality of service to the Postal Regulatory Commission (PRC) annually. The Postal Service maintains a product costing system designed to meet these requirements, develop product costs, and provide information to support management decisions. The PAEA requires that each market dominant product cover its attributable costs and contribute to institutional costs. Because Postal Service revenue and accounting systems alone do not provide all of the required product information for reporting purposes, the Postal Service employs various statistical systems and special studies to generate the annual Cost Revenue Analysis (CRA) report for domestic products and the International CRA (ICRA) report for international products. The ICRA report provides the costs and revenue for all classes of international mail, such as inbound and outbound

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<sup>1</sup> Public Law 109-435, 120 Statute 3198, Title 39 U.S.C.

<sup>2</sup> The UPU sets the rules for international mail exchanges and makes recommendations to stimulate growth in mail, parcel, and financial services volumes and improve the quality of service for customers. The purpose of the UPU terminal dues system is to compensate the destination country for the cost incurred for the handling, transport, and delivery of letter-post items from abroad.

<sup>3</sup> According to the PAEA, market dominant products are products for which the Postal Service holds a monopoly and include First-Class Mail, Periodicals, Standard Mail, single-piece letters, Standard Post, Media Mail, Bound Printed Matter, Library Mail, Special Services, and single-piece International Mail. ePackets are considered inbound international Single-Piece First-Class Mail, a market dominant product.

First-Class Mail, Priority Mail, and Express Mail. ePackets are one of multiple mailpieces grouped within inbound international Single-Piece First-Class Mail – a market dominant product that is required to cover its collective attributable costs. Specific categories within this product, such as ePackets, are not required to cover their individual attributable costs. Recognizing the costs within these categories, however, is important to determine their profitability.

## Conclusion

The Postal Service does not isolate the cost of ePackets, which limits its ability to establish effective pricing strategies. Although China Post is required to sort and dispatch ePackets separately from other mailpieces, the Postal Service does not track ePacket cost data separately and records the data in the ICRA report as an aggregate figure for inbound international letter post mailpieces. This aggregate amount includes all inbound international letter post mailpieces, such as letters, postcards, printed papers, and small packets.

The volume for ePackets was only 3 percent of the Postal Service's total international mail volume in fiscal year (FY) 2012, but it was 13 percent of the total inbound letter post mail volume. China Post ePacket volume increased by 182 percent from FYs 2011 to 2012, and revenue increased 316 percent (see [Table 1](#)). However, the Postal Service still lost \$29.4 million on ePackets in FY 2012. In comparison, the Postal Service would have lost more than \$30.8 million in FY 2012 if ePackets remained at UPU rates.<sup>4</sup> Therefore, the Postal Service benefited from the bilateral agreement with China Post in that it decreased the Postal Service's net loss.

If the Postal Service isolated costs for ePackets from other letter post mailpieces, it would have more insight into the cost, pricing, and profitability of this significant inbound international mailpiece. Alternatively, the Postal Service could pursue a request to reclassify all inbound letter post packets, including ePackets, from a market dominant to a competitive product. While reclassification would require approval from the PRC, it could require the Postal Service to raise its rates and affect revenue from China Post and other customers in emerging global markets. Until accurate costing information for ePackets is identified and used as a basis for product pricing, the risk of revenue loss to the Postal Service for this mailpiece remains high. See [Appendix B](#) regarding monetary impact.

## ePacket Costs

The Postal Service did not isolate the cost of China ePackets because it did not identify specific costs attributable to ePackets. Further, the Postal Service did not track ePacket costs; and therefore, it did not report inbound international ePacket revenue and costs separately in its ICRA report. Because ePackets are grouped with other international

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<sup>4</sup> One requirement of bilateral agreements is that rates are more than UPU rates. Had this volume been processed and delivered using the UPU rate, the revenue for ePackets from China Post would have been \$23,946,076, instead of \$25,323,595.

letter post mailpieces,<sup>5</sup> which are classified under the market dominant category, attributable costs<sup>6</sup> are included in the aggregate for all international letter post mailpieces. Therefore, it is difficult for the Postal Service to determine whether this increasingly popular mailpiece is sufficiently covering its attributable costs.

While China ePacket revenues increased by \$19.2 million between FYs 2011 and 2012, (see Table 1), the Postal Service still lost \$9.6 million and \$29.4 million in FYs 2011 and 2012, respectively, under bilateral rates.

**Table 1. China ePacket Revenue and Volume  
FYs 2011 and 2012<sup>7</sup>**

<b>Fiscal Year</b>	<b>Revenue</b>	<b>Percent Increase</b>	<b>Volume (Pieces)</b>	<b>Percent Increase</b>
2011	\$6,090,441	N/A	9,521,158	N/A
2012	\$25,323,595	316%	26,831,047	182%

Note: N/A means not applicable.

Source: China Bilateral Rates, Air Conveyance Dues, Special Drawing Right Exchange Rate, Foreign Post Settlement System (FPS), and Global Business System (GBS).

Until accurate costs for ePackets can be identified and used as a basis for pricing, the risk of revenue loss to the Postal Service for ePackets remains high. Accurate costing and pricing are critical elements as the Postal Service pursues additional bilateral agreements with other foreign posts. We plan to review bilateral agreements in future audit work.

<sup>5</sup> Letter post mailpieces consist of letters, postcards, printed papers, and small packets.

<sup>6</sup> Attributable costs are the sum of volume variable plus product specific costs.

<sup>7</sup> FPS data was not available for FY 2011, therefore we used GBS data for FY 2011 and FPS data for FY 2012.

## Product Classification

The Postal Service could consider pursuing a request with the PRC to reclassify all inbound letter post packets as a competitive product to mitigate revenue loss. The PAEA allows the Postal Service pricing flexibility to assure adequate revenues to maintain financial stability.<sup>8</sup> Categorizing all inbound letter post packets as competitive products, rather than market dominant products, would require that the products cover their attributable costs.

If the Postal Service reclassifies all inbound letter post packets as competitive products, it is possible China Post would not agree to a new bilateral agreement for ePackets and instead revert to UPU rates. However, under UPU rates, ePackets would lose the delivery confirmation feature as well as the expedited service, which are incentives for customers mailing ePackets from China. The Postal Service is contemplating a move to reclassify all inbound letter post packets as competitive products, but it has not submitted proposals to its Executive Leadership Team, the Board of Governors, or the PRC.

## Recommendations

We recommend the chief financial officer and executive vice president:

1. Track and report costs and revenue for all inbound letter post packets separately from other international letter post mailpieces, such as letters and flats.

We recommend the vice president, Global Business:

2. Evaluate changing all inbound letter post packets from market dominant to competitive products.

## Management's Comments

Management agreed with our findings and recommendation 1 but noted that cost estimates would not necessarily be statistically valid or robust once the report recommendations were implemented. In addition, management believed there were inconsistencies in the report describing the requirement to cover ePacket costs. Management will implement this recommendation by January 2015.

Management agreed with recommendation 2 in subsequent correspondence, but noted that a product classification change would not always result in additional revenue or profit. Management will implement this recommendation by March 2015. Also in subsequent correspondence, management agreed with the monetary impacts in the report. See [Appendix C](#) for management's comments, in their entirety.

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<sup>8</sup> Public Law 109-435, 120 Statute 3201, 39 U.S.C.



## Evaluation of Management's Comments

The U.S. Postal Service Office of Inspector General considers management's comments responsive to the recommendations and corrective actions should resolve the issues identified in the report. Regarding management's assertions that separate tracking may not result in statistically valid or robust cost estimates and that movement to competitive products would not always result in additional revenue or profit, we agree and note that we recommended the Postal Service evaluate reclassification before making any changes. We also continue to believe these determinations can be made when results from implementation are available, and only after comparing results year over year. Regarding management's concern that the report did not consistently describe the cost coverage requirement for ePackets, we have clarified the language in the report to more accurately describe these requirements.

## Appendix A: Additional Information

### Background

The Postal Service prepares the CRA and ICRA reports annually as part of its reporting requirements under the PAEA.<sup>9</sup> The CRA report identifies all international mail costs in a single line item. The ICRA details this line item in terms of the international product categories. The PRC uses information in these reports to determine whether the Postal Service complied with the statutory requirement that each class or type of mail service bears direct and indirect costs attributable to that class or service.

The Postal Service's costing methodology for allocating costs to domestic and international products uses a top-down approach.<sup>10</sup> Because the Postal Service's revenue and accounting systems do not provide all the information needed to attribute costs to product subclasses and extra services, the Postal Service uses various statistical systems and special studies to determine revenues, volumes, and costs for many of its products, to support requests for postal price changes, and to make the case for new products and services.

Postal Service products are categorized as market dominant or competitive. Market dominant products are products for which the Postal Service holds a monopoly and include First-Class Mail, Periodicals, Standard Mail, single-piece letters, Standard Post, Media Mail, Bound Printed Matter, Library Mail, Special Services, and single-piece International Mail. Competitive products are those that are also processed and delivered by other industry entities, and include Express Mail. ePackets are one of multiple mailpieces grouped within inbound international Single-Piece First-Class Mail – a market dominant product that is required to cover its collective attributable costs

The first bilateral agreement for ePackets was developed with China Post for FY 2011. Today, similar bilateral agreements also exist with Hong Kong Post and Singapore Post. The Postal Service is working to extend use of this increasingly popular mailpiece with South Korea and other countries where small parcel trade is growing.

Under the UPU terminal dues system,<sup>11</sup> the Postal Service has no direct control over rate setting for letter post. However, the Postal Service may enter into bilateral agreements with countries to govern the exchange of international products and services. Rates set forth in bilateral agreements often exceed those rates established by the UPU. Therefore, a bilateral agreement can increase revenues and also foster collaboration between two postal operators to provide products and services to meet customer needs.

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<sup>9</sup> The 2006 PAEA requires the Postal Service to report annual costs, revenues, volumes, and quality of service to the PRC.

<sup>10</sup> *Benchmarking of Costing Methodologies* (Report Number MS-MA-13-004, dated August 14, 2013).

<sup>11</sup> Terminal dues are payments between member countries for the costs to process and deliver letter post mail.

## Objective, Scope, and Methodology

The objective of this review was to assess whether the Postal Service accurately determines the cost of inbound China ePackets. To accomplish our objective we:

- Interviewed Postal Service officials in the Cost Attribution Group, the International Accounting Office, and the Global Business Office.
- Reviewed the processes related to product costing for inbound international mail and for reporting it in the ICRA report.
- Examined the potential reasons for differences between domestic and international costs for specific international mail products.
- Analyzed international mail volume and how it affects costs overall. We evaluated and analyzed the revenue and cost for China ePackets as well as the ePackets' profitability.

We conducted this performance audit from February 2013 through February 2014 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 objective. We discussed our observations and conclusions with management on December 10, 2013, and included their comments where appropriate.

We did not perform a reliability assessment of any automated systems; however, we determined the data used for this report were reliable by validating the data to source documents.

## Prior Audit Coverage

We did not identify any prior audits or reviews in the past 3 years related to the objective of this audit.

## Appendix B: Monetary Impacts

Recommendation	Impact Category	Amount
1	FY 2011 Revenue Loss <sup>12</sup>	\$9,577,729
1	FY 2012 Revenue Loss	29,414,916
<b>Total</b>		<b>\$38,992,645</b>

The monetary impact represents inbound China ePacket revenue loss during FYs 2011 and 2012.<sup>13</sup> The Postal Service does not currently report inbound ePacket revenue and costs separately in its ICRA report.

We calculated the ePacket revenue based on the rates of the China Bilateral Agreements. Nontransportation costs were based on a domestic First-Class, single-piece Parcel, excluding the Window Service cost, reported in the FYs 2011 and 2012 CRAs. Transportation costs were based on inbound letter post airmail reported in the FYs 2011 and 2012 ICRAs. For FY 2011, we calculated \$9.6 million in lost revenue based on 9,521,158 mailpieces multiplied by \$1.006 lost per piece. We calculated \$29.4 million revenue lost for FY 2012 based on 26,831,047 mailpieces multiplied by \$1.096 lost per piece. We believe the costs for ePackets would be more accurate if the Postal Service calculated and reported them disaggregatedly from the costs of other inbound letter post mailpieces such as letters and flats.

We did not project future losses for FY 2013 because costs for that fiscal year period are not yet available and the changes in costs across previous years provided no consistent trend that we could apply to a future projection.

<sup>12</sup> Amount Postal Service is (or was) entitled to receive but was underpaid or not realized because policies, procedures, agreements, requirements, or good business practices were lacking or not followed. This amount may be recoverable or unrecoverable and may apply to historical events or a future period (in the sense perceived future losses may be prevented by the implementation of a recommendation).

<sup>13</sup> This amount represents the revenue lost of ePackets originated from China.

## Appendix C: Management's Comments



February 7, 2014

JUDITH LEONHARDT  
DIRECTOR, AUDIT OPERATIONS

SUBJECT: Inbound China ePacket Costing Methodology (Report Number MS-AR-14-DRAFT)

The Postal Service appreciates the efforts of the Office of Inspector General (OIG) in examining the China Post ePacket costing and classification. The ePacket concept, inbound letterpost packages up to two kilograms with delivery confirmation, is a relatively new one. ePackets first appeared as part of the bilateral agreement between the Postal Service and China Post in late FY2010 and have since been incorporated into bilateral agreements with Hong Kong, Singapore, and South Korea, although China Post represents more than 95 percent of the total ePacket volume. Postal administrations that do not agree to the terms of the bilateral agreements within which the ePacket concepts exist have the right to mail inbound letterpost packages at the lower UPU rates, although they would generally have to forfeit the delivery confirmation component of the ePacket service if they did so.

The audit report's conclusion that the Postal Service should move inbound letterpost packets from Market-Dominant to Competitive status as a stand-alone product does not fully consider the repercussions of such an act. The Postal Service is not required, from a legal perspective, to move ePackets or inbound letterpost packets from Market-Dominant to Competitive. The move to Competitive could necessitate a substantial rate increase in order to comply with the statutory requirement that each Competitive product cover its attributable costs. The rate increase required from the move to Competitive could lead customers to shift their parcels to a less profitable alternative product, such as registered mail or letter class at UPU rates, which would further erode postal finances as these products must be made available at UPU-approved rates which will result in greater losses than are currently incurred by ePackets. Also, you should know that the Postal Service is currently in negotiations with China Post on a new bilateral agreement which would incorporate higher prices for ePackets and would reduce the losses associated with these items.

Further, the isolation of ePackets as its own cost category does not ensure that the costs would be more accurate than those currently reported to the Commission. Moreover, classification itself is blurred in the audit report. On page 1, it is stated that each market-dominant product must cover its attributable costs and make a contribution towards institutional costs. Page 2 then explains that ePackets are not required to cover their costs because they are international mail pieces subject to UPU pricing or bilateral agreements. Page 6 concludes that the Postal Service could consider reclassifying ePackets as competitive because they would then be required to cover their attributable costs. We recommend that you address these inconsistencies.

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The very small size – less than three one-hundredths of a percent of total mail volume in FY2013 -- of total ePackets, even after the tremendous growth rates (usually associated with new categories in their initial years), represents a serious challenge to the ability to use costing systems as the basis for developing the costs of ePackets in isolation. The ePacket concept is not, aside from the individual bilateral agreements, a product in the regulatory sense of the word. Hence, from a regulatory standpoint, the Postal Service is not obligated to report ePackets as a separate line item in the International Cost and Revenue Analysis (ICRA) report.

On page 2, the audit report states that the Postal Service lost \$29.4 million on ePackets in FY2012, but would have lost more than \$30.8 million if ePackets had remained at UPU rates, therefore acknowledging that the bilaterals resulted in financial benefit. In the analyses on both pages 2 and 3 of the report, the audit team calculates losses, an analysis which could not be possible without calculations of cost and yet, the point of page 3 was to emphasize that the Postal Service does not have estimates of costs.

Page 2 of the audit report states, "If the Postal Service isolated costs for ePackets from other letter post mailpieces, it would have more insight into the cost, pricing, and profitability of this significant inbound international mailpiece." Again, on page 3, the report states, "Because ePackets are grouped with other letter post mailpieces, which are classified under the market dominant category, attributable costs are included in the aggregate for all letter post mailpieces." [Footnotes omitted.] And on page 7, the report states, "We believe the costs for ePackets would be more accurate if the Postal Service calculated and reported them disaggregately from the costs of other inbound letter post mailpieces such as letters and flats." As these comments would require that ePackets costs be separated from other inbound letterpost piece costs, the move of inbound letterpost packets to Competitive would not solve this issue. Further, these comments are apparently made without knowledge that the financial model in support of Docket No. R2013-2, the latest China Post agreement, used the In-Office Cost System (IOCS) to split Inbound Air Letterpost costs by shape such that ePackets costs were not based on the aggregate Inbound Air Letterpost costs for all shapes, but rather used the subset of costs applicable to parcel shapes. The establishment of the bilateral agreements would not have been possible if the Postal Service had not provided the Postal Regulatory Commission with adequate cost data.

**Recommendation 1:**

We recommend the chief financial officer and executive vice president:

Track and report costs and revenue for all inbound letter post packets separately from other international letter post mailpieces, such as letters and flats.

**Management Response/Action Plan:**

Management agrees with this recommendation to the extent that "inbound letter post packets" are interpreted to be "ePackets". Given that ePackets do not have the same service features as "regular" inbound letterpost packets, and given that this audit report focuses entirely on inbound China Post ePackets, management assumes that this report intended to direct the Postal Service to track and report costs and revenue for ePackets, not for all inbound letterpost packets. Given the interest in ePackets, the costing data systems have already added "ePacket" to the listing of categories of mail for which questions leading to cost estimates will be gathered during the remainder of FY2014. However, as noted, ePackets represent less than one-tenth of one percent of total mail volume flowing through the Postal Service, and despite their growth in volume, management does not agree with the conclusion that the cost estimates that will be developed in this manner will necessarily be statistically valid or robust. That determination will be made when the data systems results are available, and only after comparing the results year over year.

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Target Implementation Date:  
January 2015

Responsible Official:  
Manager, Regulatory Reporting and Cost Analysis

**Recommendation 2:**

We recommend the vice president, Global Business:  
Evaluate changing all inbound letter post packets from market dominant to competitive products.

**Management Response/Action Plan:**


The Postal Service will continue to explore opportunities to transfer letterpost packets from Market-Dominant to Competitive. The Postal Service does not believe that a product classification change would always result in additional revenue or profit. This is especially true if the origin post reverts to UPU rates and sends the items as either registered mail or letter class and Postal Service losses would increase.

Target Implementation Date:  
March 2015

Responsible Official:  
Vice President, Global Business

This report and management's response do not contain information that may be exempt from disclosure under the FOIA.

  
Joseph Corbett  
Chief Financial Officer &  
Executive Vice President

  
Giselle Valera  
Vice President,  
Global Business

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