

REPORT TO THE CONGRESS

**1998 INTERNATIONAL MAIL
VOLUMES, COSTS AND REVENUES**



POSTAL RATE COMMISSION
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Washington, DC 20268-0001

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NOTICE: This *Report* contains *information that the Postal Service considers to be of a commercial nature, including trade secrets, which under good business practices it would not publicly disclose. The Postal Service provided this information as required by 39 U.S. C. 3663(b), but it requests that this information be kept confidential.*

SUMMARY

This is the initial report to Congress on the costs, revenues, and volumes of international mail handled by the United States Postal Service. This report analyzes fiscal year 1998 information.

The Commission finds that the data provided by the Postal Service on its international mail costs, revenues and volumes are generally reliable and the Commission has included an analysis of the coefficients of variation for the attributable costs per piece of international mail products.

All international mail combined generated revenues equal to 112.9 percent of its attributable costs. In comparison, all domestic and international mail combined generated revenues equal to 158.3 percent of its attributable costs. The financial performance of international products is summarized in a table appearing at page 9 of this report

Financial results are presented separately for outbound international services and inbound international services. The Postal Service has unilateral authority to set the rates for mail sent from the United States to other countries. In total, Outbound International Mail recovers its attributable costs and makes a contribution to the institutional costs of the Postal Service, although at least four individual international services do not earn revenues **sufficient** to cover their attributable costs. See page 35.

The Postal Service does not set the rate of compensation it receives for delivering a substantial portion of the mail sent from other countries to the United States. The Universal Postal Union (UPU) establishes schedules of terminal dues that countries must accept as payment for the delivery of letters and printed matter. In total, Inbound International Mail does not recover its attributable costs, largely because terminal dues do not fully compensate the Postal Service for the delivery of inbound letters and printed matter.

The Postal Service was cooperative in providing data requested by Commission, however it failed to provide sufficient information to enable the Commission to evaluate two small international services, Value **Post/Canada** and Bulk Letter Service to Canada. Rates for these services were recently increased, which may be an indication that the revenues for these service have not been covering costs.

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I. INTRODUCTION

On October 21, 1998, the President signed into law H.R. 4328. H.R. 4328 contained a new § 3663 of title 39, United States Code. Section 3663(a) directs the Postal Rate Commission to submit to Congress a comprehensive report on the costs, volumes, and revenues of the Postal Service's international mail services by July 1 of each year. Section 3663(b) directs the Postal Service to provide to the Commission, by March 15 of each year, the data it needs to prepare its report. This is the first such report prepared by the Commission.

Because the Commission's task is novel, several issues of first impression had to be addressed during the course of preparing its report. The Commission opened Docket No. **IM99-1** to consider these issues. The most significant issues raised in Docket No. **IM99-1** were the precise nature of the data to be provided to the Commission by the Postal Service, the proper definition of individual international postal products for purposes of § 3663 analysis, the proper method for attributing costs to individual international mail products, and whether data provided by the Postal Service should be available for public inspection and comment.

Issues that the Commission needed to address were first raised in a round of pleadings prompted by a petition for rulemaking filed by United Parcel Service (UPS). UPS requested that the Commission commence a rulemaking to determine "(1) the data to be provided to the Commission by the United States Postal Service and (2) the methods to be used by the Commission in analyzing the costs, revenues, and volumes of each international mail product" to prepare the report required by § 3663. Petition of UPS to Institute **Rulemaking** Proceeding to Study International Costs and Revenues, December 16, 1998, at 3. In response, the Commission invited interested parties to submit comments identifying the specific international mail products or services that should be analyzed. The Commission included a preliminary list of possible international mail products and asked interested parties to comment on the

completeness of the list and the appropriateness of the level of disaggregation reflected by the list. Order No. 1226 (January 15, 1999) at 3.

Upon review of comments submitted, the Commission published a revised list of international mail products or “subclasses,” while recognizing that the Postal Service might not be able to produce reliable data on some products in time for the FY 1998 report. The Commission also decided that, to the extent possible, its report should include cost coverages for these international mail products, Order No. 1228 at 2, 5, even if the calculations of those cost coverages could not be revealed because of the commercial sensitivity of the underlying data. Order No. 1228 (February 16, 1999) at 6-7.

The issue of commercial sensitivity, however, was revisited when UPS sought access to essentially all the international mail data filed with the Commission by the Postal Service. UPS made its request in the form of a motion in Docket No. **IM99-1**. Motion of United Parcel Service to Provide Public Access to International Mail Data Requested in Order No. 1228 and for Opportunity to Provide Public Comment, March 26, 1999. In declining to disclose all of the international mail data provided by the Postal Service, the Commission distinguished the § 3663 reporting procedure from the Commission’s formal rate hearings, where the Commission must balance a litigant’s need for discovery of facts against a need for protection of commercially sensitive information. The Commission also noted that the Postal Reorganization Act reiterates the exemption from the mandatory disclosure policy of the Freedom of Information Act (FOIA) for commercially sensitive information, and that Congress had taken no steps to alter the Service’s eligibility for that exemption when passing § 3663. The Commission concluded that there was no basis for applying a blanket disclosure policy to information provided through the § 3663 reporting process. Order No. 1245 (May 21, 1999) at 3-4.

The March 15 deadline established in § 3663(b) is well ahead of the date by which the Postal Service had traditionally completed its International Cost and Revenue Analysis (ICRA). Nevertheless, the Postal Service was able to supply a large portion of the data requested in Order No. 1228 by March 15, 1999. Between March 15 and June 15, 1999, the Postal Service submitted additional clarifying information in response to six additional Commission data requests.¹ The Commission's data requests were promulgated via Order Nos. 1236, 1240, 1244, 1246, 1251, and 1252. The Commission's data requests generally sought information underlying the Postal Service's estimates of the costs, volumes, and revenues of international "subclasses."

The Commission has been able to evaluate the reasonableness of the Postal Service's methods of collecting international mail data and the reasonableness of its procedures for developing estimates of systemwide totals from those data. They should yield generally reliable results. However, the short time available for reviewing the data on international mail provided by the Postal Service has not allowed the Commission to evaluate that data as thoroughly as it evaluates such data in the context of a domestic rate case conducted under Administrative Procedures Act standards. The Commission has had less opportunity to independently confirm that data were sampled or compiled according to the established procedures. It also has had less opportunity than is available in a domestic rate proceeding to scrutinize the data for anomalous results. Although the Commission concludes that the Postal Service's estimates for international mail are generally reliable, this conclusion is more tentative than it typically would be if data on domestic mail were being evaluated in the context of a domestic rate hearing. As the Commission gains experience with the unique

¹ For convenience, this report uses a nontraditional method for citing references. Appendix A contains a list of numbered references with their complete titles. In this report, citations using the word "Source" followed by a page number or other location reference (e.g., Source 1, p. 3-1) refer to the specific numbered source listed in Appendix A.

characteristics of the data collection systems, rate structures, and markets for international mail, its subsequent § 3663 evaluations will be more definitive.

On June 7, 1999, the Postal Service submitted the FY 1998 ICRA Report — Postal Service Version. It included a new method for estimating attributable international transportation costs, and a new approach to analyzing the difference between imputed settlement costs and the settlement costs in the Books of Account. Because the Commission has not had time to fully consider the merits of the methodological changes in the postal Service version, it is not able to validate them. Nevertheless, the Postal Service's recent methodological changes, if subsequently determined to be valid, would have a noticeable impact on international mail costs and cost coverages. The impact that they would have is shown in Appendix F.

II. GENERAL DESCRIPTION OF INTERNATIONAL MAIL

A. The Basic Categories of International Mail Service

The Postal Service provides three broad categories of international mail service: letter post, parcel post and Express Mail. These categories reflect Postal Service agreements to provide a common set of services on a reciprocal basis with other members of the Universal Postal Union (UPU). With respect to outbound mail, the Postal Service provides mailers in the United States with access to the domestic delivery services offered by the postal administration of the destinating country. With respect to inbound mail, the Postal Service provides access to its domestic delivery services to the postal administration of the originating country.

Generally, the letter post and parcel post categories are divided into “air,” or premium service, and “surface,” or regular service. The UPU distinguishes between mandatory international services, which all members are obligated to provide, and optional international services. The exchange of international letter-post services on reciprocal terms is mandatory among UPU members. These services include letters and cards (LC), whose content is most comparable to domestic First-Class Mail, and other articles (AO, from the French term “autres objets”). The content of AO is comparable to domestic Standard A, Standard B, and Periodicals mail. Printed papers, literature for the blind, and small packets, are mandatory AO services. Services that are optional under the UPU structure include international parcel post (the air portion of which is analogous to domestic Priority Mail and the surface portion of which is analogous to domestic parcel post), and international Express Mail Service (EMS), which is analogous to domestic Express Mail.

There are subcategories of LC, AO, and parcel post that provide service enhancements to, or volume discounts from, these basic categories of service. Within

these subcategories are numerous rate groups. They reflect differences in terminal dues (the amount that postal administrations have agreed to charge for domestic delivery of mail originating in another country). They also reflect regional differences in international transportation costs, which are important for bulk mail and parcel services.

B. Characteristics of International Mail Rates

The Postal Service's international mail rates are designed to cover two sets of costs: (1) the cost that it incurs to collect and forward mail to the postal administration of the destinating country and, (2) the amount that the postal administration of the destinating country charges the Postal Service for domestic delivery of that mail. In aggregate, just about half of the costs of the Postal Service's outbound international mail consists of charges for domestic delivery in the destinating country.

Charges for delivering the Postal Service's outbound international mail in the destinating country are of three types. **LC/AO** mail is charged "terminal dues," parcel post is charged "inward land rates," and Express Mail Service is charged "imbalance charges." The terminal dues that are charged for delivering **LC/AO** mail are set by the UPU. These are based on a global average cost, and are the same for all UPU members. This reflects a universal service obligation on the part of UPU members to take all letter post items sent by other UPU members.

Terminal dues rates are set by the Congress of the UPU, which convenes every five years, The Postal Operations council of the UPU, however, can amend them between Congresses. The Postal Service unilaterally determines what it will charge to deliver optional categories of inbound international mail. It sets the inward land rates that it charges to deliver inbound parcel post. It may revise them annually. It also enters bilateral agreements that set the imbalance charges that it applies to inbound Express Mail Service.

Currently three terminal dues rate structures may be applied to the LC/AO mail of UPU members. The first is the basic dues structure, which is a flat rate per kilogram. Where the mail flow between a pair of member countries is above a 150-metric-ton-threshold, a second dues structure known as a “revision mechanism” may be invoked. The revision rate is a combined per-item and a per-kilogram rate that may be invoked for mail flows that are either considerably lighter than average, or considerably heavier than average, in terms of the number of pieces per kilogram. Invoking the revision mechanism has the effect of reducing terminal dues charged to deliver mail that is heavier than average, and of increasing terminal dues to deliver mail that is lighter than average.’ The third structure is a bulk mail option. Of minor importance is the lower terminal dues rate that applies to M-bags. (M-bags contain the AO mail of one mailer all going to a single foreign address.). The Postal Service also enters into multilateral payment agreements to settle its accounts outside the UPU structure. The Postal Service entered into separate agreements with the European Bilaterals (EURB)³ and Canada.

C. Description of Specific International Mail Services

Section 3663(a) of title 39 requires the Commission to prepare “a comprehensive report of the costs, revenues, and volumes accrued by the Postal Service in connection with mail matter conveyed between the United States and other countries.” Section 3663(b) indicates that the Commission’s report should “analyze the costs, revenues, and volumes for each international mail product or service, under the methods

² The revision mechanism is asymmetrical. It can be invoked to reduce terminal dues for flows of heavier-than-average mail from developing countries to industrialized countries, but cannot be invoked to reduce terminal dues for flows of heavier-than-average mail from industrialized countries to developing countries. See Appendix A, Source 14.

³ Belgium, Denmark, Finland, France, Germany, Great Britain, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Spain, and Sweden. See Appendix A, Source 13.

determined appropriate by the Commission for the analysis of rates for domestic mail.” Section 3663(b) does not specify which of the over 70 international products and services that the Postal Service offers should have its “costs, revenues, and volumes” separately analyzed in this report. The Commission, therefore, must decide at what level of detail a presentation of costs, revenues, and volumes would most meaningfully aid Congress’ understanding of the financial posture of the Postal Service’s international mail services.

The Commission infers from § 3663 that Congress contemplates a report that provides data and analysis from which the Congress can draw conclusions about the adequacy of the rates charged for international services, whether viewed from the standpoint of the Postal Service’s domestic users, or from the standpoint of the competitors of the Postal Service’s international services. From either viewpoint, it would appear that an important consideration is identifying which categories the Postal Service itself focuses on when it relates international mail rates to costs. Consequently, this report attempts to display the financial posture of the international services for which the Postal Service consciously designs a specific margin of revenue over costs (or “cost coverage”) when it chooses rates for its international services. In subsequent reports, the Commission will have an opportunity to consider whether additional criteria might be appropriate for determining the list of international services to be included in reports submitted under § 3663. The Commission’s first report under § 3663, however, presents cost, revenue, and volume data for a list of international services for which the Postal Service itself designs specific cost coverages. See Table II-1, below.

TABLE II-1
SUMMARY OF VOLUME, REVENUE, AND ATTRIBUTABLE COST
FOR SECTION 3663 INTERNATIONAL MAIL SERVICES

International Mail Category	Volume (1)	Revenue (\$) (2)	Attributable Cost (\$) (3)	Contribution (\$) (4)=(2)-(3)	Cost Coverage (5)=(2)/(3)
OUTBOUND MAIL					
surface					
Printed Matter & Small Packets. excl ISAL & Per	28,215	57,461			
Periodicals	65,082	68,615			
Parcel Post	2,312	57,607			
Int'l Surface Airlift	163,587	116,120			
ValuePost/Canada 1/		0			
Subtotal, Surface	259,196	299,803	310,880	(11,077)	96.4%
Air					
Letters and Letter Packages	510,053	451,943			
Postcards, Postal Cards, and Aerogrammes	63,010	31,299			
Printed Matter and Small Packets (AO)	45,017	194,833			
International Priority Airmail Service	52,843	39,219			
Bulk Letter Service to Canada 1/		0			
Parcel Post	4,240	124,029			
Express Mail International Service	4,694	125,363			
Subtotal, Air	679,857	966,686	633,264	333,402	152.6%
Initiatives					
Global Priority Mail					
Global Package Link					
Direct Entry/Inbound					
International Customized Mail					
Subtotal, Initiatives	33,002	66,307	76,356	(10,049)	86.8%
Total Outbound	972,055	1,332,796	1,020,520	312,276	130.6%
INBOUND MAIL					
Surface LC/AO	46,735	36,637			
Surface Parcel Post	2,142	16,752			
Surface Subtotal	48,877	53,389	62,561	(9,172)	85.3%
Air LC/AO	587,926	163,179			
Express International Mail Service	3,763	30,137			
Air Parcel Post	2,192	20,029			
Air Subtotal	593,881	213,345	222,081	(8,736)	96.1%
Direct Entry/Inbound	301	116			
Global Parcel Services	1,049	2,552			
Other 1/	-	12,909			
Total Inbound	644,108	262,311	287,379	(5,068)	98.2%
International Service Incremental Cost		0	122,445	(122,445)	0.0%
Total International Mail	1,616,163	1,615,107	1,430,344	164,763	112.9%
Source Table IV-2					

1/ See Table IV-2 for caveat.

A second concern causing the Commission to modify the list of international **services covered** by its report is that some international services are so small, and the sample data are so thin, that separating their cost, revenue, or volume data from the larger subclass to which they belong yields results that may not be sufficiently accurate to **support** meaningful conclusions. Accordingly, some **services** (specifically M-Bags) are combined with their parent subclass (AO) for purposes of calculating their cost coverages.

Table II-1, therefore, displays costs, revenues, and volumes for all of the outbound international services for which the Postal Service separately selects a target cost coverage, except for **Valuepost/Canada**, Bulk Letters to Canada, and M-bags. It is apparent that Table II-1 disaggregates outbound services to a greater extent than inbound services. This reflects the fact that the Postal Service determines what it charges for outbound services+ but has only limited influence over the charges promulgated by the UPU for inbound **LC/AO** services. The Postal Service sets rates, and has distinct revenue targets, for more outbound services than there are distinct inbound services.

The outbound and inbound flows of the broad, UPU-defined subclasses of international mail are related in the sense that country pairs exchange mail service that is similar in content and service features. In the case of **LC/AO** mail, the same terminal dues rates are applied to both directions of the exchange. All things being equal, an increase in terminal dues will increase the markup on inbound mail and decrease the markup on outbound mail. It can be argued, therefore, that the outbound and inbound costs, revenues, and volumes of like services should be combined to determine the financial posture of a given service. Counter-arguments are that many outbound mail services do not have direct inbound analogues, and that outbound flows are not the primary cause of inbound mail flows. Furthermore, the costs and service features of outbound mail are largely within the control of the originating postal administration,

while the charges and service features that apply to inbound mail are largely determined by the UPU. It can be argued that because of this bifurcation of responsibility, the financial posture of a given outbound international service should be analyzed separately from its corresponding inbound service.⁴ The Commission has concluded that both points of view can be accommodated by presenting the costs, revenues, and volumes of outbound and inbound mail flows separately for the services included in Table II-1. The separated data can be readily combined by those who view particular outbound and inbound services as sufficiently related to warrant combined analysis.

The Postal Service characterizes some of its newer products that are designed to compete directly with privately provided international mail services as its international mail "initiatives." These are displayed together in Table II-1 at lines 15 through 19. A description of the international services listed in Table II-1 is presented in Appendix B.

⁴ The Postal Service itself has changed its position on this issue. Prior to 1986, the Postal Service pooled outbound and inbound costs in selecting target cost coverages for its international services. This had the effect of burdening outbound ratepayers with the cost of delivering inbound, foreign-origin mail. After it suspended application of the Private Express Statutes to its international services in 1986, the Postal Service designed rates for its outbound international services to cover the costs only of the outbound portion of each service.

III. MEASURING THE COSTS, REVENUES, AND VOLUMES OF INTERNATIONAL MAIL

A. Description of Data Sources and Data Development Methodology

The Postal Service uses many of the same data sources for international mail that it uses for domestic mail. For volumes, this includes the Permit system. For costs, this includes the In-Office Cost System (IOCS), the Transportation Cost System (TRACS), and the City Carrier and Rural Carrier data collection system. Where necessary, the Postal Service augments its data needs with additional data systems like the System for International Revenue and Volume — Outbound (SIRV/O) or the System for International Revenue and Volume — Inbound (SIRV/I). The Service also has to account for its new offerings referred to as initiatives. Because some of the existing data collection systems do not generate sufficient information on the initiatives, the Service uses alternative data sources to obtain estimates. This section briefly describes the data sources and the methodology the Postal Service uses to calculate the revenue, pieces, weight, and attributable cost for international mail. A more detailed description is contained in Appendix C. It should be noted that the Postal Service has provided attributable costs using the Commission's costing methodology, *i.e.*, the same costing methodology that underlies the recommended rates in the Commission's most recent decision in an omnibus domestic rate case.

(1) Outbound Revenue, Pieces, and Weight

In FY 1998, the Service obtained its volume and revenue data from the Permit system or permit-like systems. These systems identified 33 percent of outbound piece volume. See Appendix C at 3. The remaining 67 percent were obtained from the SIRV/O. The Permit system tracks the data from mailing statements on a census basis,

as do the permit-like systems. These census systems cover (1) Periodicals, (2) International Surface Airlift (ISAL), (3) International Priority Airmail Service (IPAS), (4) ValuePost/Canada, (5) Bulk Letter Service to Canada, (6) Global Package Link (GPL) (except for a small portion), (7) Direct Entry, (8) Express Mail International Service (EMS), (9) Global Priority Mail (GPM), and (10) International Customized Mail (ICM).

The SIRV/O is a stratified random sampling system that collects revenue and volume data for (1) Surface Printed Matter, (2) Surface Parcel Post, (3) Air Letters and Letter Packages, (4) Air Cards and Aerogrammes, (5) Air Printed Matter, and (6) Air Parcel Post. The SIRV/O is supported by the Military and International Accounting and Dispatch System (MIDAS). This operational system provides a census count of the weight of outbound mail by destination country. It provides a control weight figure for adjusting sample estimates to coincide with a direct measure of the actual weight of international mail.

The Service also uses an auxiliary sample data collection system independent of the SIRV/O to provide an estimate of GPM volume by country. The accounting systems do not track GPM volume by destination country. The sampling process is similar to the SIRV/O.

(2) Inbound Revenue, Pieces, and Weight

The Postal Service's International Accounts Branch (IAB) routinely collects volume information on inbound international mail from the manifests that accompany the mail. Source 1, p. 6-1 and Source 8, Response to Item 2. Through this process, it collects piece and weight data for parcel post, EMS, and M-bags. For LC/AO mail it collects only weight information. To develop the number of pieces for this mail, the Postal Service estimates the average number of pieces per kilogram by transportation mode and country or country groups. This estimate is obtained from the SIRV/I, which

is a stratified random sampling system similar to **SIRV/O**. The Service multiplies the total weight of inbound **LC/AO** mail for each country by the applicable piece per kilogram. Source 1, p. 8-2 and 8-5.

To develop inbound revenue for mail, the Service multiplies the volumes, described above, by the applicable terminal dues rate, inward land charge, or imbalance charge, adjusted for the appropriate exchange rate. The Service knows these charges from agreements with other countries and published schedules. Source 1, p. 6-1. The Postal Service maintains a separate system for accumulating revenue and volume information on inbound mail from Canada. The Service uses the same calculation procedure for Canadian mail as described above. Source 1, pp. 6-1 and 6-3.

Since the described procedure provides imputed values for revenue, the Postal Service adjusts the figures to match the revenues included in the Domestic RPW Report. Air conveyance dues and transit fees are obtained from the books of accounts. Source 1, p. 6-3.

(3) The Development of Attributable Costs for the Standard Services

There are six generalized components for international mail costs: (1) mail processing; (2) delivery (in-office and street), (3) domestic transportation; (4) international transportation; (5) settlement charges; and, (6) "all other" costs (primarily costs that piggyback on the directly variable costs). This categorization accounts for all cost elements in the Domestic Cost Segments and Components Report and the Domestic Cost and Revenue Analysis (CRA), which has a line item for international mail.

Outbound services incur domestic mail processing, domestic transportation, international transportation, terminal dues (the cost of delivery in the destination foreign country), and applicable "all other costs." Outbound costs do not require domestic

delivery. Inbound mail incurs domestic mail processing, domestic transportation, delivery, and applicable all other costs. Inbound mail does not incur settlement charges or international transportation costs.

The costs for mail processing are based on a combination of the Management Operating Data System (MODS) activity cost and In-Office Cost System distribution keys. Delivery costs are based on IOCS information and the data in the city and rural carrier cost system. This report is based on an ICRA that uses the Commission's methodology.

Domestic transportation costs are obtained from the book of accounts and distributed to international services on the basis of distribution keys derived from TRACS. For some expense categories, the TRACS data are not sufficiently detailed. In these cases, the Postal Service uses the outbound and inbound volumes described above as a distribution key. Source 1, p. 2-1.

International transportation cost is attributed only to outbound mail. The applicable cost for each service is obtained in four steps: (1) from International Accounts Branch (IAB) data, unit cost by country and mail category is calculated, (2) unit costs are multiplied by more detailed mail category information to develop country totals, (3) country totals are grouped into applicable rate groupings, and (4) the country group totals are reconciled to the book of accounts. Source 1, p. 4-1. Costs for Canada and Mexico mail are estimated using analogous domestic unit costs. Source 1, p. 4-4.

Settlement costs apply only to outbound mail. They reflect payment to foreign postal administrations for delivering or forwarding U.S. mail. Source 1, pp. 5-1 and 5-2. The Postal Service calculates an imputed value for these costs by multiplying the outbound volumes by the applicable settlement charge. The Postal Service does not reconcile the total imputed value to the book of accounts' value because the latter figure is accrued on a conservative basis to avoid underestimating expenses and

reflects other factors that are not a function of current volumes. In FY 1998, the Book of Accounts value was \$70 million higher than the imputed value. The Postal Service treats this difference as an incremental cost of providing international mail service as whole. Source 7, Response to Item 10.⁵

“All other” costs encompass all attributable costs not included above. These are mostly cost items that are treated as varying in proportion to directly variable cost. These costs include the costs of some lower level regional and headquarters administration, rents, fuels, utilities, supplies and services, and other support costs. There are also directly variable costs for supervision and for clerk and mailhandler nonmail processing activities.

(4) The Development of Attributable Costs for the Initiatives

Cost data for the initiatives are gathered from sources outside the main data collection systems because the initiatives are seldom observed in these systems with the exception of GPM, which is obtained from the IOCS. GPL costs are based on an engineering approach by which the operations are mapped out and classified as variable or fixed. Unit costs are estimated for each of the operations deemed variable and multiplied by volume to calculate total attributable cost. Source 3, Response to Item 9. The Postal Service also identified product-specific costs for GPL. These costs reflect advertising, promotional, and other costs related solely to GPL. GPM also had product-specific costs for the same activities. Source 7, Response to Item 9.

⁵ On June 7, 1999, the Postal Service submitted the FY 1998 ICRA report- Postal Service Version. The report contained a revised methodology for calculating international transportation cost and a different treatment of the difference between imputed settlement costs and the settlement costs in the Books of Account. Because of time constraints, the Commission has not been able to evaluate the merits of the changes. For this reason, the attributable costs in this report reflect the FY 1998 ICRA Report -- PRC Version.

The costing for Global Direct Services (Direct Entry/Inbound) and ICM reflects the costs of operations that vary by specific customer. Source 1, pp. Q-3 and 9-4.

The Postal Service estimates the costs for Global Parcel Services (GPS), an inbound service, using a proxy unit cost estimated for domestic Priority Mail. Transportation costs are adjusted to reflect weight differences between Priority Mail and GPS. Source 1, p. 9-5.

(5) International Mail Incremental Costs

The Postal Service has included costs that it views as incremental to International Mail as whole. The cost has two components. As discussed above, the first component reflects the difference in settlement charges between imputed costs used in the ICRA as attributable settlement cost, and the booked cost in the system of accounts. This cost amounted to \$70 million in FY 1998. The second component reflects expenses for the International Business Unit that amounted to \$52 million in FY 1998. ICRA Report, p. A-1, footnote 1. The reported amount includes the salaries and benefits for IBU personnel, supplies and services, rents, utilities, and other related expenses. Source 3, Response to Item 4. Together, these expenses amount to \$122 million.

These costs cannot be causally related to specific international services on the basis of current information, but can be causally related to international services as a whole. Accordingly, the cost coverages for specific products shown on Table II-1 do not reflect these incremental costs.

B. Evaluation of Data Sources and Data Development Methodology

This section discusses the reliability of the volume, cost, and revenue data. The organization of this section generally follows the preceding section. There is an

additional section **that** discusses data quality with respect to unit costs and cost coverage.

(1) Outbound Revenue, Pieces, and Weight

The volume and revenue data that the Postal Service uses for outbound international mail are quite reliable. Thirty-three percent of the volume data are collected using census data systems, and the other 67 percent is estimated using the **SIRV/O** system that has control numbers from the **MIDAS** system. The coefficients of variation (CV) for these data are very small.

Most of the census data (94 percent) comes from the Permit system. The Permit system has been accepted in omnibus domestic rate cases as reliable. It provides volumes and revenues for Domestic Standard A mail, which amounted to 83 billion pieces of mail in 1998. The system is based on mailing statements that contain the detail of a mailing related to pieces, weight, and revenue. The statements are checked by an acceptance clerk and entered into an automated accounting system. It is therefore well suited to the task of accurately accumulating volumes and revenues for any service. The data sources for the other 6 percent collect the same type of information without it being entered into an automated accounting system. These reports are similarly well suited to accurately generating volumes and revenues.

The **SIRV/O** is a well-designed system for randomly sampling containers of outbound mail. The cornerstone, however, is the **MIDAS** system, which provides a census count of the gross weight of all outbound mail by country, transportation mode, and UPU class. The Postal Service uses the **MIDAS** numbers as control totals in the expansion process. This adds to the reliability of the **SIRV/O** estimates.

The Commission's confidence in the reliability of the outbound RPW estimates is further bolstered for most of the major categories of outbound mail by their small **coefficients** of variation as shown by the **CVs** below.

TABLE III-1

COEFFICIENTS OF VARIATION FOR **SIRV/O ESTIMATES**
FOR SELECTED CATEGORIES

Mail Category	Coefficients of Variation		
	Revenue	Pieces	Weight
Air LC	1.3%	2.0%	1.0%
Air AO	1.7%	2.6%	2.0%
Air Parcel	1.7%	3.2%	2.9%
Surface AO	5.0%	6.7%	5.0%
Surface Parcel	2.9%	2.6%	3.4%

Source: Source 7, Response to Item 17

(2) Inbound Revenue, Pieces, and Weight

The Commission believes the Inbound RPW estimates are generally reliable because the **SIRV/I** sampling system underlying the estimates is well designed. The estimates may suffer from unquantifiable nonsampling error. Nonsample error, however, is not likely to be substantial for the reasons discussed below.

Like the **SIRV/O**, the **SIRV/I** estimate of pieces per kilogram relies on a set of control numbers that allows the Postal Service to calibrate sampled volumes to census-based volumes kept in the IAB. The control numbers are total kilograms by country and transportation mode. The IAB maintains a count of the weight of mail entering the U.S. based on the manifests that accompany the mail. Operations personnel check the contents of inbound containers against the manifests. When there is a discrepancy, these personnel prepare and dispatch to the origin country documentation known as a Bulletin of Verification. Data files are updated accordingly. Source 8, Response to Item 2. Thus, the Postal Service continuously takes steps to insure the accuracy of

inbound volume data. Since the control numbers appear to be accurate, the conversion of pieces per kilogram to total pieces should be reasonably accurate.

The Postal Service identifies two nonsampling error problems that have emerged. First, some inbound Canadian mail arrives in Postal Service containers and is not sampled because it is mistaken for U.S. Domestic mail. Second, the Postal Service has some indication that not all sampled mail containers from Canada and Europe are selected randomly. The Postal Service explains that the magnitude of the potential sampling problem is unknown as is the impact on revenue. The Postal Service adds, however, that it has taken three steps to address the potential problem. Source 8, Response to Item 1.

First, in the summer of FY 1998, the Postal Service began to clarify and improve field data collection and administrative procedures. Second, the Postal Service held a conference in November 1998 on international statistical programs bringing together data collectors, data collector supervisors, and headquarters personnel to discuss the issues. The Conference included workshops for each major program area, including SIRV/I. Third, the Postal Service is preparing and will soon release Handbook F-85, Data Collection Users Guide for International Systems. It contains updates of **out-of-date** field procedures and **consolidates** data collection policy and procedures for all international statistical programs. Source 8, Response to Item 2.

These corrective measures will only affect RPW data collected after FY 1998. The impact of these potential problems on the FY 1998 RPW data is unknown.

(3) The Attributable Costs for the Standard Services

These costs are generally reliable. On average, settlement costs and international transportation costs account for **71** percent of **the** total attributable cost for outbound services. The Commission has reviewed the underlying workpapers and found no material errors. The calculation of settlement costs is based on outbound

volume estimates which the Commission has concluded are reliable, as discussed above, and known and certain schedules for the various forms of settlement charges. International transportation costs are based on the generally reliable outbound volumes and unit cost figures developed from the IAB report which collects the actual outbound weight and cost by country. Moreover, these costs are ultimately adjusted to match the Book of Accounts. Thus, these costs should be reliable.

The other 29 percent of outbound costs and all inbound costs are based on the costing methods that underlie the domestic CRA. In domestic rate cases, the Commission has concluded that the data systems that underlie these costs are reliable. For this reason, the Commission believes these costs should be reliable here.

The Commission also used the Service's input data in its own cost model. The Commission's cost for international mail matched the Postal Service's segment by segment. For this reason, the Commission believes the attributable costs for the standard services as calculated by the Service accurately portray the Commission's methodology.

(4) The Attributable Costs for the Initiatives

The Commission has not been able to verify the accuracy of the input data for the initiative cost models. It was able to review the model methodology underlying the models. The Postal Service here employs models generally similar to ones it has introduced in domestic omnibus rate cases and classification cases to support new classifications, discounts, or special services. These models are referred to as engineering models or special studies. In the domestic area, the Commission has relied on broadly similar models to support recommended rates and classifications.

Under this modeling approach, the Postal Service identifies all the operations that accompany a particular service. It then obtains unit cost estimates for each of the operations. Typically, the Postal Service obtains the unit costs from a special study

conducted to estimate the cost of a specific operation or group of operations or it uses a unit cost from the CRA for an analogous service and operation. After it **has** put together the applicable unit costs, the Postal Service obtains volume estimates to apply to them. If the service is already operational, actual volume estimates may be available, as they are for each of the initiative cost models.

All the models incorporate the approach described above. They appear to account for relevant operations and the unit costs estimates appear to be reasonable. For these reasons, the Commission uses these costs.

(5) Analysis of Unit Attributable Costs

The Postal Service computes estimates of Attributable Cost per Piece (ACP) for many categories of inbound and outbound International Mail for its annual "International Cost and Revenue Analysis" (ICRA) reports. These estimates of ACP are the result of complex calculations performed on uncertain values for parameters and variables derived from a number of Postal Service data systems and special studies. In this respect the international ACPs differ little from their domestic counterparts in the Service's annual CRA Report.

Like the estimates of ACPs for domestic subclasses, the ACPs for International Mail categories are subject to two kinds of errors. These are known as sampling and non-sampling errors. Sampling errors arise because, as a practical matter, it is usually possible to observe only a small fraction of the mail as it is collected, processed, transported and delivered by the Postal Service. Non-sampling errors arise if the sampling processes produce errors with an expected value that is unequal to zero; that is, if repeated applications of the sampling processes do not leave errors with an average of zero. Therefore, non-sampling errors cause unwanted biases in the value of the parameters or variables being sampled.

Eliminating non-sampling errors is one of the objectives of good sampling design and statistical methodology. Some sampling error, on the other hand, is inevitable. It can be reduced by taking larger samples but can only be eliminated by sampling all of the mail. Consequently, a prudent user of the Postal Service's estimates of ACP would want to have a measure of the likely size of the sampling errors that these estimates inevitably contain.

The coefficient of variation (CV) for the attributable cost per piece (ACP) of a subclass or category of mail is a general-purpose measure of the accuracy of the estimated ACP. The CV is defined as the ratio of the standard deviation of the estimation error divided by the estimate of ACP. It is usually expressed as a percent. As a rule of thumb, ~~plus-and-minus~~ two times the CV gives the interval around the estimate of ACP within which the unknown true value of ACP will fall with 95 percent confidence. For example, a CV of 4 percent for an estimated ACP of \$1 .00 means that one can be 95 percent certain that the true value of ACP will lie within the range between \$0.92 and \$1.08.

Table III-2 displays approximate values of the CVs for the ACPs of the major categories of inbound and outbound International Mail. The calculations have been made using an approximation formula derived in Appendix D and from estimates of ACPs and CVs for the components of the formula provided to the Commission by the Postal Service.

The column labeled "ICRA Cost per Piece" is the ACP for the corresponding category of mail as it appears in the Service's 1998 ICRA report where it is referred to as "unit volume-variable cost". "Revenue per Piece" is also as shown in the 1998 ICRA. "Percentage Cost Coverage" is the ratio of revenue to attributable cost expressed as a percent. The overall CVs for the fifteen major categories of inbound and outbound International mail are shown in the column labeled "CV of Cost per Piece". These overall CVs are derived directly from CVs for the various cost components and volume

as shown in Appendix D. Finally, the column labeled “Coverage t-value” on the far right holds t-values for statistical tests of hypotheses that the coverage is greater or less than 100 percent.

The t-values are defined as the Percent Cost Coverage minus 100 divided by the CV of Cost per Piece. The t-value is positive if the coverage is greater than 100 percent, as is the case for most categories of International Mail. A positive t-value is used to determine if there is any significant probability that actual coverage is less than 100 percent. Mail categories with cost coverages of less than 100 percent have negative t-values. For these categories the t-value is used to determine if there is any significant probability that the actual coverage is above 100 percent.

**TABLE III-2 COST PER PIECE, REVENUE PER PIECE
AND COEFFICIENTS OF VARIATION FOR INTERNATIONAL MAIL**

Summary					
International Mail Category	ICRA Cost per Piece (\$)	Revenue per Piece (\$)	Pct. cost Coverage	cv of Cost per Piece	Coverage t-value
Outbound:					
Letters and letter packages		0.886		3.00%	
Postcards, postal cards		0.497		6.00%	
International Priority Airmail		0.742		1.80%	
Air AO		4.328		4.50%	
Air Parcel Post		29.252		5.07%	
Express Mail International Service		26.709		3.20%	
Surface AO		2.037		8.63%	
Surface Publishers Periodicals		1.054		2.60%	
International Surface Airlift		0.71		0.37%	
Surface Parcel Post		24.917		9.42%	
Inbound:					
Surface LC/AO		0.784		9.76%	
Surface Parcel Post		7.821		21.35%	
Air LC/AO		0.278		7.70%	
Express Mail International Service		8.008		53.54%	
Air Parcel Post		8.137		17.49%	

The calculated CVs are approximate values for several reasons. First, ACP is a non-linear function of various estimates of volume-variabilities, distribution key shares and mail volumes produced by the Postal Service's data systems and special studies. For this and other reasons, the formula used to compute the overall CV for each category of mail from the CVs of its components can provide only a close approximation. Second, some of the CVs of the sampling statistics used in the formula are missing from the Service's responses to the Commission's information requests. In particular, there are no CVs for any cost pool volume-variabilities. These variabilities are all assumed to be equal to one and their CVs are assumed to be zero. It is

frequently the case that the **CVs** for distribution key shares and mail volumes are reported for aggregations of more than one category of mail, or in other ways that do not exactly match the **ICRA** report. For example, the cost pool definitions used to report **ACP** in the **ICRA** do not exactly match the cost categories for which the Service has reported **CVs** for the **IOCS** distribution keys. These and other defects in the data have been overcome by using proxies and by making other assumptions as needed to use whatever data has been supplied. Inevitably, the results of applying the formula, which follows the category definitions used in the **ICRA**, are approximations. The specific assumptions made to apply the approximation formula and the details of the calculations are described in Appendix D. The actual calculations were performed within a Lotus 1-2-3 worksheet.

The calculations of the overall **CVs** for Cost per Piece have been made under the assumption that all of the necessary estimates of volume-variabilities, distribution key shares and mail volumes are free of any biases that might be caused by non-sampling errors. The use of this assumption to calculate **CVs** does not mean that the Commission believes that Postal Service estimates are completely free of non-sampling errors. It means only that, if non-sampling errors are present, their effects are unknown. In Appendix D it is shown that correcting for an additive bias in most of the estimates would not strongly affect the **CVs**.

Table III-2 shows that for most categories of International Mail the Postal Service has collected cost and volume data with sufficient accuracy to allow statistically significant conclusions to be drawn regarding the coverage of **ACP** by revenues per piece as shown in the 1998 **ICRA**. The exceptions to this finding are inbound **LC/AO**, and inbound International Express Mail Service.⁶ The cost coverages shown for these services are not statistically meaningful since it is not possible to reject with 95 percent

⁶ These findings apply to the estimates of **ACP** found in the 1998 **ICRA** and not to the Service's estimates of Revenue per Piece which are regarded as accurate for this analysis.

confidence the null hypothesis that the actual cost coverage (the cost coverage without the sampling error) is greater or less than 100 percent.

The column of t-values provides the evidence of statistical significance. The critical value of "t" for a one-tailed test with an assumed confidence level of 95 percent is 1.645. For this test a t-value greater than 1.645 means that the Postal Service's measurement of ACP is sufficiently accurate to leave it more than 95 percent certain that revenue per piece covers the actual (but unknown) true ACP. Conversely, a t-value of less than -1.645 means that the measurement of ACP is accurate enough to make it more than 95 percent certain that revenue per piece will fall short of ACP. Higher (in absolute value) t-values make it possible to draw more precise conclusions about coverage. For example, the t-value of 10.5 for outbound letters and letter packages shows that the coverage for this category of mail is much greater than the margin needed to establish statistical significance. T-values near 1.645, such as those for outbound Surface AO and outbound Surface Parcel Post, show that the coverages for these categories fall much closer to the boundaries that mark statistical significance. Nevertheless, there is less than a 5 percent chance that the cost of outbound "Surface AO" is covered by revenue, or that the cost of outbound "Surface Parcel Post" is not covered.

Only inbound Air LC/AO and inbound International Express Mail Service have t-values with absolute values of less than 1.645. The cost coverage for inbound Air LC/AO is only 50.9 percent, however, the t-value of 1.645 shows that there remains a modest probability of around 12.5 percent that revenue per piece actually covers ACP. For inbound International Express Mail Service the cost coverage of 99.1 percent is so close to 100 percent that it has little statistical significance. The t-value of 1.645 means that the probability that revenue per piece actually covered ACP is only about 50.9 percent while the probability that revenue fell short of attributable cost is almost as large at 49.1 percent.

On the whole, the Commission is able to more accurately estimate ACP on outbound categories of International Mail than inbound categories. This occurs because a large share of the cost of outbound mail consists of international transportation costs and terminal dues while these components are completely absent from the **ACPs** for inbound mail. The Service's data systems can identify international transportation costs and terminal dues by mail category fairly precisely as shown by the low **CVs** for these cost categories in the table in Appendix D. On the other hand, the Service's data systems do a poor job of identifying the shares of domestic costs for most categories of International Mail as described by the much higher **CVs** for the domestic cost categories entitled "Mail Processing," "Delivery," "Other," and, especially, "Domestic Transportation".

The approximation formula makes evident the fact that the CV associated with the ICRA estimates of volume are particularly important as determinants of the overall CV of ACP for a category of mail. Fortunately, the Postal Service's estimates of volume by International Mail category are good, even for categories with relatively few pieces. The highest CV for volume, 6.67 percent, is reported for outbound surface AO, a fairly small category of mail. The largest categories of international mail are inbound and outbound letters, cards and letter packages. The ICRA volumes for these categories appear to be accurately estimated as evidenced by their volume **CVs** of 2.0-1 percent outbound and 2.50 percent inbound.

IV. PRESENTATION OF COST, VOLUME, AND REVENUE DATA

This section presents the volumes, costs, and revenues for international mail. As noted elsewhere, the costs underlying the calculated cost coverages (*i.e.*, the ratio of revenue to attributable cost) reflect the methodology the Commission has applied in setting current rates for domestic subclasses. Generally, this methodology results in attributable costs that are somewhat higher than the method that the Postal Service advocates, and leads directly to lower cost coverages than the Postal Service would obtain.

The Postal Service has introduced a cost for international mail which has no counterpart in domestic mail, namely, the incremental costs for international mail service as a whole. As noted earlier, this includes the cost of the International Business Unit and the difference in settlement costs between booked costs and imputed costs (booked costs are higher than imputed). This is discussed further in Section IV.A and Appendix F. It should be noted that on June 7, 1999, the Postal Service submitted an ICRA reflecting its preferred cost methodology. That report incorporated changes to its previous methods for estimating international transportation and settlement costs not reflected in the ICRA provided to the Commission on March 15, 1999 or the revised PRC Version submitted on June 11, 1999. Because of time constraints, the Commission has not been able to evaluate the merits of these new estimation methods. For this reason, the data presented below reflect the March 15, 1999, FY 1998 ICRA Report — PRC Version.

A. Aggregate Data

International mail is separated between outbound and inbound services. The Postal Service states it designs rates for each of the outbound services so as to recover all domestic handling and transportation costs, international transportation costs,

settlement costs, and a markup. Source 7, Response to Item 18. For inbound mail, the Postal Service recovers costs through settlement charges. For LC/AO inbound mail from UPU countries, the Postal Service agrees to accept as payment a terminal dues rate that is based on a worldwide average cost. This rate does not fully compensate the Service for the cost it incurs delivering inbound mail. There are important constraints on the ability of the Postal Service to make terminal dues compensatory. The Service is one of many voices at the UPU Congress. Further, because the UPU Congress only meets every five years, terminal dues rates generally remain in effect for five years. For these reasons, the Service seeks to obtain cost based bilateral agreements with other countries. Despite bilateral agreements, as Table IV-I shows, inbound mail still does not pay its own way.

TABLE IV-1
SUMMARY OF FY 1998 REVENUE AND **ATTRIBUTABLE** COST
FOR OUTBOUND AND INBOUND INTERNATIONAL MAIL
(Amounts in Thousands)

Category	Revenue (\$) (1)	Attributable cost (\$) (2)	Incremental cost (\$) (3)	Total Attributable Cost (\$) (4)	Contribution (\$) (5)=(1)-(2)	Cost Coverage (6)=(1)/(4)
Outbound Mail	1,332,796	1,020,520	-	1,020,520	312,276	1306%
Inbound Mail	282,311	207,379	-	287,379	(5,068)	98.2%
Subtotal	1,615,107	1,307,899	-	1,307,899	307,208	123.5%
Int'l Mail Incremental Cost	-	-	122,445	122,445	(122,445)	-
Grand Total	\$1,615,107	\$1,307,899	\$122,445	\$1,430,344	164,763	112.9%

Source: Table IV-2 -- Reflects ICRA Report released 6/1 1199

In contrast, Table IV-I shows that outbound international mail makes a contribution to the Postal Service's institutional costs. There are a number of factors that affect the amount of this contribution. One is that unlike inbound LC/AO mail, the Postal Service has direct control over the rates that it charges for outbound LC/AO mail.

Another is that terminal dues charged to the Postal Service for LC/AO mail are low relative to what it costs industrialized destinating countries to deliver this mail. As a net exporter to these countries, the Postal Service is in a position to benefit from the relatively low terminal dues that other industrialized countries are currently paid to deliver LC/AO mail.

As Table IV-2 shows, the United States exports about 1% times as much mail as it imports. Low terminal dues help keep the total unit cost of the mail that the Postal Service exports low, thereby increasing the Postal Service's ability to set rates on that mail which generate net revenue. Moreover, the Postal Service's cost of delivering inbound mail is relatively low, which minimizes the losses to the Postal Service from delivering inbound mail.⁷ Low terminal dues combined with the Postal Service's position as a substantial net exporter of international mail are important factors making it easier for the Postal Service to set rates that generate the net revenue it seeks from international mail.

In FY 1998, the cost coverage for outbound mail was 130.6 percent while the cost coverage for inbound mail was 98.2 percent. Adding the figures for inbound mail to the figures for outbound mail reduces cost coverage from 130.6 percent to 123.5 percent. The reduction in contribution to institutional cost is \$5 million.

Inbound mail is not the only drag on international mail cost coverage; incremental costs also reduce cost coverage. The incremental costs of international mail service as a whole are costs which cannot be causally associated with specific international services based on the information currently available, but that would be eliminated if all international services were eliminated. Some of these costs, those

⁷ The Postal Service's unit operating costs have historically been among the lowest of the postal administrations of the 21 most industrialized countries. Source 12, p. 100. This implies that for most of the industrialized world, terminal dues are less than the economic cost of delivering inbound mail.

associated with the International Business Unit, cannot even be traced exclusively to outbound mail or to inbound mail. The incremental cost for which international mail service as a whole is responsible is included in the calculation of the overall contribution to institutional cost and the cost coverage of international mail as a whole. As a result, the cost base for determining the cost coverage for international mail as a whole is greater than the sum of the cost bases of the individual international services. Using this approach, the contribution of international mail as a whole is reduced from \$307 million to \$185 million, and its cost coverage declines from 123.5 percent to 112.9 percent. See Table IV-I .

For comparison purposes, the systemwide cost coverage for domestic and international mail combined in FY 98 was 158.3.

B. Individual Services

This section highlights some of the FY 1998 results for individual services. The section discusses outbound and inbound mail separately and adds some further comments and observations in the last subsection.

In preparing this report, the Commission has not attempted to assemble a list of international mail products or services comparable to the domestic mail classification schedule. The list of international services in this report is not grouped according to homogeneous cost or demand characteristics designed to facilitate comparison of their cost coverages and rates with those of other international services, or with corresponding domestic mail services,

There are several factors that make compiling such a list difficult for international services. The structure of international mail classifications is, in large measure, determined by the Conventions of the UPU, and must be taken largely as given. The categories of mail defined by the UPU are broader than the corresponding subclasses of domestic mail in terms of content and service level, and therefore less homogeneous

in terms of cost and demand. **AO** mail, for example, includes mail that is similar to domestic Standard A, Standard B, and Periodicals mail. Service levels for the various categories of **LC/AO** mail are somewhat difficult to compare, either with other international categories or with domestic services. Some **AO** service is “surface” (non-priority) and some is “air” (priority) mail, while the corresponding domestic services generally receive non-priority service. Some **AO** mail (**ISAL**) is a hybrid of priority and non-priority service (receiving priority handling and air transportation within the U.S., but non-priority handling and ground transportation within the destinating country). A final factor making it difficult to compare the rates and cost coverages of international and domestic services is that terminal dues for **LC/AO** mail are not closely aligned with the cost of delivering such mail as they reflect a global average cost, and the level of terminal dues is sometimes below the economic cost of delivering mail in the destinating country.

The Postal Service submitted two documents that may assist the reader to more fully understand the scope of this issue. The first is a chart attempting to relate international and domestic services, Source 7, response to item 23, and the second is the Postal Service’s description of how it develops international mail rates, Source 7, response to item 18. These documents are Appendix G.

(1) Outbound Mail

Table IV-2 summarizes revenue and cost data for each international mail service.

TABLE IV.2
SUMMARY OF REVENUE, VOLUME, AND COSTS FOR OUTBOUND AND INBOUND INTERNATIONAL MAIL
 (COSTS REFLECT COMMISSION ATTRIBUTION METHODOLOGY)
 (Amounts in Thousands)

U.S. Total	Volume (1)	Revenue (2)	Volume Variable Cost (3)	Product Specific Cost (4)	Attributable Cost (5)=(1)+(4)	Contribution Revenue (6)=(2)-(5)	Unit Revenue Cost (7)=(6)/(1)	Unit Contribution Cost (8)=(5)/(1)	Unit Contribution Coverage (10)=(2)/(8)	
OUTBOUND MAIL										
Surfaces										
1 Printed Matter & Small Packets, excl ISAL & Per	28,215	\$ 57,481	\$ -	\$ -	\$ -	\$ 57,481	\$ 2,037	\$ -		
2 Periodicals	85,082	\$ 88,815	\$ -	\$ -	\$ -	\$ 88,815	\$ 1,054	\$ -		
3 Parcel Post	2,312	\$ 57,667	\$ -	\$ -	\$ -	\$ 57,667	\$ 24,917	\$ -		
4 Int'l Surface Airmail	183,587	\$ 118,120	\$ -	\$ -	\$ -	\$ 118,120	\$ 0,710	\$ -		
5 ValuePost/Canada		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%	
6 Subtotal, Surfaces	259,196	\$ 299,803	\$ 310,880	\$ -	\$ 310,880	\$ (11,077)	\$ 1,157	\$ 1,189	\$ (0,943)	98.4%
Air										
7 Letters and Letter Packages	510,053	\$ 451,943	\$ -	\$ -	\$ -	\$ 451,943	\$ 0,888	\$ -		
8 Postcards, Postal Cards, and Aerogrammes	83,010	\$ 31,298	\$ -	\$ -	\$ -	\$ 31,298	\$ 0,487	\$ -		
9 Printed Matter and Small Packets (AQ)	45,017	\$ 194,833	\$ -	\$ -	\$ -	\$ 194,833	\$ 4,328	\$ -		
10 International Priority Airmail Service	52,843	\$ 39,218	\$ -	\$ -	\$ -	\$ 39,218	\$ 0,742	\$ -		
11 Bulk Letter Service to Canada		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%	
12 Parcel Post	4,240	\$ 124,029	\$ -	\$ -	\$ -	\$ 124,029	\$ 29,252	\$ -		
13 Express Mail International Service	4,694	\$ 125,363	\$ -	\$ -	\$ -	\$ 125,363	\$ 26,707	\$ -		
14 Subtotal, Air	679,857	\$ 968,688	\$ 633,284	\$ -	\$ 633,284	\$ 335,402	\$ 1,422	\$ 0,490	\$ 152.8%	
Initiatives										
15 Global Priority Mail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
16 Global Package Link		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
17 Direct Entry/Inbound		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
18 International Customized Mail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
19 Subtotal, Initiatives	33,002	\$ 66,307	\$ 51,292	\$ 25,084	\$ 76,556	\$ (10,049)	\$ 2,099	\$ 2,314	\$ (0,304)	98.6%
20 Total Outbound	972,055	\$ 1,332,790	\$ 995,456	\$ 25,084	\$ 1,020,520	\$ 312,270	\$ 1,371	\$ 1,050	\$ 0,321	130.6%
INBOUND MAIL										
21 Surface LCAO	46,735	\$ 36,037	\$ -	\$ -	\$ -	\$ 36,037	\$ 0,784	\$ -		
22 Surface Parcel Post	2,142	\$ 16,752	\$ -	\$ -	\$ -	\$ 16,752	\$ 7,821	\$ -		
23 Surface Subtotal	48,877	\$ 52,789	\$ 62,561	\$ -	\$ 62,561	\$ (9,772)	\$ 1,092	\$ 1,280	\$ (0,188)	85.3%
24 Air LCAO	367,926	\$ 163,178	\$ 180,832	\$ -	\$ 180,832	\$ (17,653)	\$ 0,278	\$ 0,307	\$ (0,000)	90.3%
25 Express International Mail Service	3,763	\$ 30,137	\$ -	\$ -	\$ -	\$ 30,137	\$ 8,008	\$ -		
26 Air Parcel Post	2,192	\$ 20,029	\$ -	\$ -	\$ -	\$ 20,029	\$ 9,137	\$ -		
27 Air Subtotal	593,881	\$ 213,345	\$ 222,081	\$ -	\$ 222,081	\$ (8,736)	\$ 0,358	\$ 0,374	\$ (0,015)	98.1%
28 Direct Entry/Inbound	301	\$ 116	\$ -	\$ -	\$ -	\$ 116	\$ 0,385	\$ -		
29 Global Priority Services	1,049	\$ 2,552	\$ -	\$ -	\$ -	\$ 2,552	\$ 2,433	\$ -		
30 Other		\$ 12,909	\$ -	\$ -	\$ -	\$ 12,909	\$ -	\$ -		
31 Total Inbound	644,108	\$ 282,311	\$ 287,378	\$ -	\$ 287,378	\$ (5,068)	\$ 0,438	\$ 0,446	\$ (0,008)	98.2%
32 International Service Incremental Cost				\$ 122,445	\$ 122,445	\$ (122,445)				
33 Total International Mail	1,616,163	\$ 1,615,107	\$ 1,282,835	\$ 147,568	\$ 1,430,344	\$ 184,763	\$ 1,129	\$ 1,129	\$ 0.0%	112.9%

Source: FY 1998 International Cost and Revenue Analysis Report-PRC Version, June 11, 1999, pp. A.1, A.2, A.6, and A.7. USPS Response to Fifth Notice II.
 Note: International Service Incremental Costs reflect (1) the cost of the International Business Unit and (2) the difference in settlement charge claims. These costs are incremental to international service as a whole, i.e., eliminating any one individual service or any group of services would have no effect on the amount of these costs.

1/ The Postal Service did not provide separate cost data for these services, but it did provide separate revenues and volumes. The revenues and volumes for ValuePost/Canada cannot be separated between surface periodicals and all other surface AQ. Therefore, the costs, revenues, and volumes for ValuePost remain in surface periodicals and all other surface AQ. The revenues and volumes for Bulk Letter Service to Canada can be separated from the data for Air Letters. Since the costs for Bulk Letters to Canada would remain in the cost for Air Letters, the unit cost, contribution, and cost coverage for Air Letters would be overstated. For this reason, the data for Bulk Letters to Canada remains in the Air Letter category.

2/ The revenue amount reflects Internal Air Conveyance Data and Transit revenue. Corresponding costs are included in inbound costs by service.

It shows that of the fourteen outbound services for which the Commission received separate cost data, at least four are **noncompensatory**:⁸ (1) Surface Printed Matter and Small Packets; (2) Surface Periodicals; (3) Global Priority Mail; and, (4) Global Package Link. During FY 1998, Surface Printed Matter and Surface Periodicals experienced cost coverages of percent and percent, respectively. According to the Postal Service, the contribution was positive for Fiscal Years 1993 to 1995, but was slightly negative in FY 1996, correlating with the increase in terminal dues that went into effect in the second quarter. The negative contribution continued in FY 1997 and FY 1998. The Postal Service acknowledged that because of these poor results, it planned an average increase of about 15 percent for these services. The increase became effective May 30, 1999. The Postal Service also stated that it might have to raise these rates still more in the future. Source 7, Response to Item 12.

Global Package Link had a cost coverage of percent in FY 1998 with attributable costs exceeding revenues by . The Service reported that the businesses using this service were adversely affected by the downturn of the global economy and the corresponding decrease in value of some foreign currencies. The economic slowdown hurt the Postal Service's business customers because there were substantially fewer overseas orders and, accordingly, fewer packages were mailed. The Postal Service believes that revenue will cover cost in FY 1999 because (1) it has increased rates by about 9 percent on average; and, (2) it expects to achieve cost reductions in this area. The Postal Service did not provide any specific information on the expected cost reductions. Source 7, Response to Item 12.

Global Priority Mail shows a cost coverage of percent for FY 1998. The Postal Service observes that revenues covered volume variable costs but not the

⁸ The Postal Service did not provide separable data for Bulk Letter Service to Canada and ValuePost/Canada. However, based on FY 97 results it implemented rate increases that did not become effective until well into FY 99.

combination of volume variable and product specific costs. Revenues fall short of costs by _____ when product specific costs are included. The Postal Service believes the contribution to institutional costs will improve because of expected reductions in advertising expense that accounted for _____ of the _____ product specific cost in FY 1998 and because of the 14 percent average rate increase that was effective in December, 1998. Source 7, Response to Item 12.

ValuePost/Canada and Bulk Letter Service to Canada are services with very little volume. The Postal Service provided ValuePost/Canada's share of the revenue and volume of Surface AO overall, but did not provide ValuePost/Canada's share of the revenue and volume of Surface AO's component parts (periodicals and all other). The revenues and volumes of Bulk Letter Services to Canada remain subsumed within the revenues and volumes that the Postal Service provided for Air Letters. The Postal Service did not provide separate attributable cost estimates for either of these services.

Early in the § 3663 information gathering process, the Commission asked the Postal Service to identify the FY 1998 costs attributable separately to ValuePost/Canada and Bulk Letter Service to Canada. See Order No. 1226 at 3 and Attachment. The Postal Service stated that it did not track costs separately for these services. Comments of the United States Postal Service on Order No. 1226, filed January 29, 1999, at 3. Subsequently, the Postal Service indicated that it bases rates for these services on costs estimated separately for each service. See Appendix A, Source 7. Twice, the Commission requested the FY 1998 attributable cost estimates for each of these services that the Postal Service would use to set rates for those services. Order No. 1240, Item 3; Order No. 1244, Item 6. Twice, the Postal Service did not directly respond. See Source 3, Item 3, filed May 17, 1999, and Source 8, Item 6, filed May 27 1999.

In Order No, 1251, the Commission described specific calculations that it suspected the Postal Service applied to FY 1997 data to estimate the attributable costs

for ValuePost/Canada and Bulk Letter Service to Canada that the Postal Service used when it designed the rate increases for those services that took effect May 30, 1999. The Commission asked the Postal Service to confirm that it used the calculations described, and to provide equivalent calculations for FY 1998. The Postal Service's response to Order No. 1251 confirmed that it used the method of calculating FY 1997 costs that the Commission described, but said that the data needed to perform equivalent calculations for FY 1998 were not available. For this reason, the Commission has not been able to report separate attributable cost estimates for these services for FY 1998, and therefore can not compute cost coverages for these services.

(2) Inbound Mail

As shown on Table IV-Z, inbound mail, as a whole, had a cost coverage of 98.2 percent in FY 1998 with revenue falling short of attributable cost by over \$5 million. The losses are directly traceable to Surface LC/AO and Air LC/AO. These services combined to lose million. The difference in cost coverage is a result of how settlement charges (terminal dues, etc.) are established.

UPU terminal dues rates are based on global average cost and are noncompensatory for the U.S. Postal Service. The U.S. Postal Service has entered into separate agreements with Canada and the European Bilateral group, presumably, to obtain rates that cover costs. However, the remaining UPU countries account for 42 percent⁹ of inbound LC/AO and the Postal Service still did not achieve a compensatory cost coverage for inbound LC/AO as a whole. The Commission was not able to satisfactorily disaggregate costs by terminal dues regime because the costs provided by the Postal Service are averaged across regimes.

⁹ Based on Postal Service Response to Order No. 1236, Item 15.

Unlike terminal dues, inward land charges for parcel post and imbalance charges for EMS are not based on a global average, but reflect country-specific costs. For parcel post, each country publishes annual rates reflecting a per-piece and per-kilogram rate. The U.S. Postal Service also has bilateral agreements with ten countries. As Table IV-2 shows, the unit revenues exceed the unit attributable costs for both categories of parcel post. Surface parcel post and air parcel post show cost coverages of percent and percent respectively. Achieving a positive outcome for EMS, should not pose a problem as the Postal Service is free to enter into bilateral agreements with other countries in which rates can be cost based. In fact, the U.S. Postal Service has agreements with 188 countries. Source 9, pp. 5 and 6. The cost coverage for inbound EMS is percent.

(3) Other Comments

The Postal Service provided the distribution of the major categories of outgoing international mail between Household and Non-Household mailers. Table IV-3 arrays this information along with revenue and cost data.

TABLE IV-3
COMPARISON OF REVENUE AND COST DATA
AND PERCENTAGE DISTRIBUTION OF **ORIGINATING** VOLUME
FOR SELECTED INTERNATIONAL MAIL CATEGORIES

Mail Categories	Percentage Non-Household (1)	Distribution Household (2)	Revenue (\$) (3)	Attributable cost (\$) (4)	cost Coverage (5)
<u>Mostly NHH</u>					
EMS	91%	9%	125,363		
ISAL	100%	0%	116,120		
IPA	100%	0%	39,219		
Air AO	65%	35%	194,833		
Air CP	60%	40%	124,029		
Surface AO	90%	10%	126,076		
Subtotal			725,640	600,414	120.9%
<u>Mostly HH</u>					
Air LC	45%	55%	483,242		
Surface CP	11%	89%	57,607		
Subtotal			540,849	343,750	157.3%

NHH = Non-Household; HH = Household

Source: Postal Service Response to Second Notice, Item 21 & Table IV-2

The weighted average cost coverage for the two categories with the highest proportion of Household mail is 157.3 percent. For the six categories of mail with the highest proportion of non-household mail, the cost coverage is 120.9 percent. The largest volume category, Air Letters and Cards, which contains 55 percent household mail (315 million pieces),¹⁰ has the second highest cost coverage at _____ percent. The second largest volume category is ISAL mail (164 million pieces), which contains no household mail. It has a cost coverage of _____ percent.

¹⁰ 573 million pieces from Table II-1 times 55 percent from Table IV-3.