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## SUBJECT: Management Advisory - Benchmarking of Parcel Surcharges <br> (Report Number DR-MA-05-001)

This report presents the results of our benchmarking review of the Postal Service's Parcel Surcharges (Project Number 05YG029DR000). Specifically, we determined how Federal Express (FedEx), United Parcel Service (UPS), and DHL ${ }^{1}$ assess surcharges on parcels. In addition, we determined whether the Postal Service could use a more effective and less complex method to assess surcharges.

The former vice president, Delivery and Retail requested this audit based on our ongoing audit of Balloon Rate and Parcel Surcharges (Project Number 05YG016DR000).

## Results in Brief

FedEx, UPS, and DHL have similar types of surcharges and use package dimensions and weight to assess the shipping cost. However, their surcharge categories are much simpler than the Postal Service's. The Postal Service could benefit from enhancing the Point-of-Service ONE (POS ONE) system to prompt retail associates to enter package dimensions when assessing surcharges.

[^0]Updating the POS ONE system would ensure the Postal Service is receiving the appropriate surcharge revenue.

In addition, FedEx, UPS, and DHL use Internet rate calculators that require customers to enter package dimensions and weight to estimate shipping costs. However, the Postal Service's Internet rate calculator requires customers to enter package weight, not dimensions, unless they select the large package option. As a result, customers who use the Internet to estimate the cost to ship a package may calculate the cost incorrectly.

We suggested the vice president, Delivery and Retail, coordinate with the vice president, Pricing and Classification, to simplify the method of categorizing surcharges. We also suggested the vice president, Delivery and Retail, enhance the POS ONE system to prompt retail associates to enter package dimensions to calculate the correct shipping costs. In addition, we suggested the vice president, Delivery and Retail, coordinate with the vice president, Pricing and Classification, and vice president, Product Development, to modify the Internet rate calculator to require customers to enter package dimensions to calculate the correct shipping costs.

Management agreed with the intent of suggestions 1 and 2 and has planned corrective actions that are responsive to our suggestions. Management did not agree with suggestion 3 , but their planned actions are responsive to our finding. Management's comments, in their entirety, are included in Appendix $C$ of this report.

| Background | Packages shipped through the Postal Service, FedEx, UPS, <br> or DHL retail sites require a surcharge when they meet <br> certain dimension and weight requirements. The packages |
| :--- | :--- |
| are usually weighed and measured to ensure the proper |  |
| cost is assessed to the customer. Figures 1 and 2 below |  |
| show the most common method used to determine package |  |
| dimensions ${ }^{2}$ (measuring length ${ }^{3}$ and girth ${ }^{4}$ of a four-sided or |  |
| three-sided package). ${ }^{5}$ |  |

[^1]Figure 1. Four-sided package


Figure 2. Three-sided package


Length $=20^{\prime \prime}$
Girth $(6+6+6)=18^{\prime \prime}$
Length + Girth $=38^{\prime \prime}$

| Measurement | Maximum |
| :--- | :--- |
| Length + Girth | 108 inches ${ }^{\prime}$ |
| Weight | 70 pounds |

In calendar year 2003, UPS led the national industry in courier, express, and parcel services with 46.5 percent of the market, followed by FedEx with 27 percent of the market, the Postal Service with 12.7 percent of the market, and DHL with 6.8 percent of the market. ${ }^{6}$ Table 1 shows the annual revenue for domestic ground transportation package services for UPS, FedEx, and the Postal Service and Table 2 shows the average daily package volume. We could not obtain the same information for DHL because its annual report did not provide this data. ${ }^{7}$

Table 1. Annual Revenue for Ground Transportation Package Services

|  | FY 2002 | FY 2003 | FY 2004 |
| :--- | ---: | ---: | ---: |
| UPS | $\$ 15,707,000$ | $\$ 16,460,000$ | $\$ 17,409,000$ |
| FedEx | $\$ 2,918,000$ | $\$ 3,581,000$ | $\$ 3,910,000$ |
| Postal Service | $\$ 2,080,000$ | $\$ 2,216,000$ | $\$ 2,207,000$ |
| DHL | Data not <br> available | Data not <br> available | Data not <br> available |

Source: UPS, FedEx, Postal Service, and DHL 2004 Annual Reports

[^2]Table 2. Average Daily Ground Transportation Package Volume

|  | FY 2002 | FY 2003 | FY 2004 |
| :--- | ---: | ---: | ---: |
| UPS | $10,112,000$ | $10,268,000$ | $10,676,000$ |
| FedEx | $1,755,000$ | $2,168,000$ | $2,285,000$ |
| Postal Service | $1,075,000$ | $1,129,000$ | $1,132,000$ |
| DHL | Data not <br> available | Data not <br> available | Data not <br> available |

Source: UPS, FedEx, Postal Service, and DHL 2004 Annual Reports

## Objectives, Scope, and Methodology

We determined how FedEx, UPS, and DHL assessed surcharges on packages. In addition, we determined whether the Postal Service could use a more effective and less confusing method to assess surcharges.

We administered a benchmarking questionnaire to a representative of UPS and used service guides and annual reports found on the Internet to answer some questions for DHL and FedEx. ${ }^{8}$ We also administered the benchmarking questionnaire to Postal Service representatives in the Eastern Area and Pittsburgh District office. To facilitate the interviews, we divided the questionnaire into three sections: types of surcharges, the process employees use to assess surcharges, and the process used to educate customers.

To determine how FedEx, UPS, and DHL applied surcharges to packages, we conducted observations at the retail sites of each company in the Washington, D.C., metropolitan area. For comparison, we also conducted an observation at a Postal Service retail site in the Washington, D.C., metropolitan area. We limited our review to packages shipped using domestic ground transportation.

This review was conducted from April through September 2005, in accordance with the President's Council on Integrity and Efficiency, Quality Standards for Inspections. We discussed our observations and conclusions with appropriate management officials and included their comments where appropriate.

## Prior Audit Coverage We did not identify any prior audits or reviews related to the

 objectives of this review.[^3]Parcel Surcharge Categories

When FedEx, UPS, and DHL categorize parcel surcharges, they use a much simpler process than the Postal Service's. We observed the process at the companies' retail sites and noted best practices that the Postal Service could implement to develop a more effective and less confusing way for retail associates to assess the correct surcharges.

The Postal Service uses categories based on package weight, dimensions, and physical characteristics to identify packages that should be assessed a surcharge. The Postal Service categorizes its parcel surcharges as balloon rate, nonmachinable, and oversized.

The balloon rate is a surcharge that covers the additional transportation cost the Postal Service incurs for packages that are large and lightweight. The nonmachinable surcharge applies to packages that meet weight, dimension, or physical characteristics, such as cans, rolls, tubes, and wooden or metal boxes. The surcharge applies only to Parcel Post, not Priority Mail packages. The oversized surcharge is a flat rate based on the zone to which a package is addressed and applies only to Parcel Post packages, not Priority Mail packages. See Appendix A for details of Postal Service surcharges.

FedEx, UPS, and DHL use categories based on package weight and dimensions to identify packages that should be assessed a surcharge. FedEx, UPS, and DHL use three different oversize categories that include one weight and one dimension requirement within each category. The three companies label these categories Oversize 1, Oversize 2, and Oversize 3. See Appendix B for details of the surcharges these companies assess.

When assessing surcharges, Postal Service retail associates must remember at least 10 requirements for nonmachinable packages, in addition to requirements for balloon rate and oversized packages. Retail associates must also remember specific requirements for the method used to mail the package, such as Priority Mail or Parcel Post. Priority Mail packages are assessed the balloon rate but not the nonmachinable or oversized surcharge. Parcel Post packages can be assessed the balloon rate or the
nonmachinable or oversized surcharge. Further, Parcel Post packages can be assessed a dual surcharge, such as a balloon rate and a nonmachinable surcharge.

In contrast, FedEx, UPS, and DHL use a much simpler process. Customer service representatives must remember only three oversize categories, and each category has only one weight and one dimension requirement. For example, all 3 companies categorize any package that weighs less than 30 pounds and is greater than 84 inches, but equal to or less than 108 inches in combined length and girth, as Oversize 1.

Although Postal Service management ranked the current process used to assess the surcharges as easy to moderate, one manager stated the current process is cumbersome. Another manager stated that the different surcharges and regulations made the process difficult for retail associates.

Because the Postal Service's process requires retail associates to consider several components before they categorize packages requiring surcharges, we believe the Postal Service should consider adopting the best practice the other three delivery companies use: a simpler method of categorizing parcel surcharges.

## Suggestion

We suggest the vice president, Delivery and Retail, coordinate with the vice president, Pricing and Classification, to:

1. Consider adopting the best practice that FedEx, UPS and DHL use: a simpler method of classifying the various types of surcharges.

## Management's Comments

Management agreed with the intent of the finding and suggestion. Management stated they understand that FedEx, UPS, and DHL use simpler parcel surcharges. Management also agreed there may be merit to revisiting their parcel surcharges and exploring where they might possibly be simplified.

Evaluation of Management's Comments

Management's comments are responsive to the finding and suggestion. Management's planned corrective action should correct the issues identified in the finding.

| Point-of-Service ONE (POS ONE) and | The Postal Service could benefit from revising the POS $\mathrm{ONE}^{9}$ system to prompt associates to enter package |
| :---: | :---: |
| Internet Rate | dimensions to assess surcharges. This would ensure the |
| Calculators | Postal Service receives the appropriate revenue. In addition, the Postal Service could modify the Internet rate calculators to require customers to enter dimensions for all packages to determine the correct shipping costs. |

POS ONE
Postal Service retail counters are equipped with scales, and most retail sites use POS ONE to process sales transactions. Associates are not prompted to enter package dimensions into the POS ONE system. To determine whether a package meets the criteria for a surcharge, they must weigh and measure it. If the package meets the criteria, POS ONE does not automatically notify associates to enter the data; instead, they must prompt the system to assess the surcharge.

We shipped packages at FedEx, UPS, and DHL retail sites to observe the process they use to assess surcharges, and noted best practices the Postal Service could use to develop a more effective and less confusing way for associates to assess the correct surcharges.

All retail counters at FedEx, UPS, DHL, and the Postal Service were equipped with scales and computers. During the transactions, the UPS representative and Postal Service associate measured and weighed the package. However, the DHL representative only weighed the package. When asked why, the DHL representative stated the package was small compared to packages DHL usually receives, such as sofas and mattresses.

The FedEx representative weighed the package but did not measure it because the dimensions were already printed on the outside of the box. The FedEx representative said he would have measured the package if the measurements had not been printed on the box because he needed the measurements to calculate the shipping charge. Table 3 shows the dimensions of the packages shipped by the companies and the surcharges they should have assessed based on their service guides.

[^4]Table 3. Package Dimensions, Weight, and Surcharge Category

|  | $\underline{\text { Length }}$ | $\underline{\text { Width }}$ | $\underline{\text { Height }}$ | Length/ <br> Girth | $\underline{\text { Weight }}$ | Surcharge <br> Category |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Postal <br> Service | 24 in | 24 in | 20 in | 112 in | 10 lbs | Oversized |
| FedEx | 24 in | 24 in | 24 in | 120 in | 28.75 <br> lbs | Oversize 2 |
| DHL | 34 in | 24 in | 20 in | 122 in | 36 lbs | Oversize 2 |
| UPS | 24 in | 24 in | 20 in | 112 in | 34.75 <br> lbs | Oversize 2 |

Source: Postal Service Domestic Mail Manual and FedEx, DHL, and UPS Service Guides

The UPS representative stated the use of a computer prompt makes the process easy. However, the representative stated the process can be difficult for customer service representatives who only occasionally receive packages. Postal Service management also stated a computer prompt would simplify identifying and assessing the parcel surcharges.

The Postal Service should consider adopting the best practice of using a prompt in POS ONE to remind the retail associates to enter package dimensions.

Internet Rate Calculators

The Postal Service and the three companies have Internet rate calculators that customers use to estimate shipping costs for packages. FedEx, UPS, and DHL Internet rate calculators require customers to enter package dimensions and weight to estimate shipping cost. However, the Postal Service Internet rate calculator does not require customers to enter package dimensions unless they select the "large package" option.

The Postal Service Internet rate calculator requires customers to enter the package weight; however, if customers enter only the weight and select the "parcel package" option, the system bypasses the requirement to enter package dimensions. As a result, customers who use the Internet rate calculator to estimate the shipping cost may calculate the cost incorrectly. The Postal Service Internet rate calculator advises the customer if the package may be charged a balloon rate, nonmachinable, or oversized surcharge. The Postal Service should consider adopting the best practice of using a prompt on the Internet rate calculator
to require customers to enter package dimensions to ensure they receive the correct estimate.

| Suggestion |
| :--- |
|  |
| Management's <br> Comments |

We suggest the vice president, Delivery and Retail:
2. Enhance the Point-of-Service (POS ONE) system to require retail associates to enter package dimensions to calculate the surcharge before assessing total shipping costs.

## Comments

Management agreed with the intent of our finding and suggestion. Management stated they agreed the POS ONE system should be enhanced to allow dimension prompts for parcel surcharges. Management also stated efforts were currently underway to modify POS ONE as well as Integrated Retail Terminal systems to start prompting for dimensions on some packages.

Management's comments are responsive to our finding and suggestion. Management's planned corrective action should correct the issues identified in the finding.

We suggest the vice president, Delivery and Retail, coordinate with vice president, Pricing and Classification and vice president, Product Development, to:
3. Add a prompt to the Internet rate calculator requiring customers to enter package dimensions to assess surcharges before calculating the total shipping costs.

## Management's

 CommentsManagement disagreed with the finding and suggestion. Management stated the rate calculator is only an informational tool, not a rate assessment vehicle like POS ONE or Click-N-Ship. However, management stated they should consider defining some parameters for the "large package" option, which activates the dimensional-input prompts.

While management disagreed with our suggestion, their planned action is responsive to the finding and suggestion.

We appreciate the cooperation and courtesies provided by your staff during the review. If you have any questions or need additional information, please contact Rita Oliver, Director, Delivery and Retail, or me at (703) 248-2300.
/s/ Mary W. Demory
Mary W. Demory
Deputy Assistant Inspector General
for Core Operations
Attachments

cc: Alexander Lazaroff<br>Janet L. Webster<br>Frederick J. Hintenach III<br>Steven R. Phelps

## APPENDIX A. POSTAL SERVICE PARCEL SURCHARGES ${ }^{10}$



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## APPENDIX B. FEDEX, UPS, AND DHL PARCEL SURCHARGES ${ }^{12}$

| Surcharge | Requirement | FedEx | UPS | DHL |
| :---: | :---: | :---: | :---: | :---: |
| Oversize 1 (OS1) |  |  |  |  |
|  | Weight | Less than 30 lbs . | Less than 30 lbs . | Less than 30 lbs . |
|  | Dimensions | Greater than 84 ins. but equal to or less than 108 ins. in combined length and girth | Greater than 84 ins. but equal to or less than 108 ins. in combined length and girth | Greater than 84 ins. but equal to or less than 108 ins. in combined length and girth |
| Oversize 2 (OS2) |  |  |  |  |
|  | Weight | Less than 50 lbs. | Less than 50 lbs. | Less than 70 lbs. |
|  | Dimensions | Greater than 108 ins. but equal to or less than 130 ins. in combined length and girth | Greater than 108 ins. but equal to or less than 130 ins. in combined length and girth | Greater than 108 ins. but equal to or less than 165 ins. in combined length and girth |
| Oversize 3 (OS3) |  |  |  |  |
|  | Weight | 150 lbs. or less | 150 lbs. or less | 90 lbs. or less |
|  | Dimensions | Greater than 130 ins. in combined length and girth | Greater than 130 ins. in combined length and girth | Greater than 130 ins. but equal to or less than 165 ins. in combined length and girth |
| Excess Limits |  |  |  |  |
|  |  | \$30 for any package measuring greater than 130 ins. in combined length and girth | \$45 for any package measuring greater than 130 ins. in combined length and girth | $\$ 60$ for any package measuring greater than 165 ins. in combined length and girth |

[^6]
## APPENDIX C. MANAGEMENT'S COMMENTS










[^0]:    ${ }^{1}$ Per the 2004 Annual Report, DHL was named for the first letters of the last names of the three company founders, Adrian Dalsey, Larry Hillblom and Robert Lynn.

[^1]:    ${ }^{2}$ A package's dimensions are its length, width, height, and girth.
    ${ }^{3}$ Length is the longest side of a package.
    ${ }^{4}$ Girth is the distance all the way around a package at its widest point, measured at a right angle from the length.
    ${ }^{5}$ Postal Service Quick Service Guide 050, Basic Mailability and Processing Categories.

[^2]:    ${ }^{6}$ This information was obtained from the Deutsche Post World Net 2004 Annual Report.
    ${ }^{7}$ DHL is a Deutsche Post World Net company with corporate offices in Germany. The Deutsche Post World Net consists of mail, express, logistics, and financial services and the company files consolidated financial statements.

[^3]:    ${ }^{8}$ FedEx declined to provide benchmarking data, and DHL did not respond to our request.

[^4]:    ${ }^{9}$ POS ONE is an electronic system retail facilities use to record sales and payment transactions. Clerks use POS ONE to scan universal product code barcodes to record actual sales through a cash register. POS ONE will replace the Integrated Retail Terminal and will capture information about stamp and retail product sales.

[^5]:    ${ }^{10}$ Domestic Mail Manual, Issue 58, updated January 6, 2005.
    ${ }^{11}$ Priority Mail parcels are not assessed the nonmachinable or oversized surcharge.

[^6]:    ${ }^{12}$ Package rates and surcharges are from the FedEx Service Guide, January 3, 2005, updated April 4, 2005; the UPS Rate and Service Guide, Retail Rates, effective January 3, 2005; and the DHL Standard Rate Guide, effective January 16, 2005.

