

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

<i>In the Matter of</i>	)	
	)	
Assessment and Collection of Regulatory	)	MD Docket No. 08-65
Fees for Fiscal Year 2008	)	RM No. 11312
	)	

**COMMENTS OF  
TATA COMMUNICATIONS (US) INC.**

Tata Communications (US) Inc. (“Tata US”) (f/k/a VSNL International (US) Inc.) hereby submits these comments in response to the notice of proposed rulemaking pending in the above referenced dockets.<sup>1</sup>

**I. The Current International Bearer Circuit Fee Regime, As Applied to Non-Common Carrier Submarine Cable Operators, Is Broken.**

The International Bearer Circuit Fee (“IBCF”) regime is broken at least with regard to non-common carrier submarine cable operators. It is vague, and the fee is grotesquely disproportionate to the cost of the capacity itself. Because the fee amounts are so unreasonable, and the requirements vaguely written, it is extremely difficult for a non-common carrier submarine cable operator to pass the IBCF through to its customers (many of whom are foreign, the subject matter of the fee being capacity connecting the U.S. and other countries). Moreover, the amount of the fee is not predictable in advance, which is a problem, because whoever has to pay the fee needs to be able to accrue for it.

---

<sup>1</sup> See *Assessment and Collection of Regulatory Fees for Fiscal Year 2008*, Notice of Proposed Rulemaking, MD Docket No. 08-65, RM-11312, FCC 08-126 (released May 8, 2008).

## **A. The IBCF Regime for Non-Common Carrier Submarine Cable Operators.**

Instructions on how the International Bearer Circuit fees regime is applied to non-common carrier submarine cable operators is set out each year by public notice as set forth below.

### **International Bearer Circuits**

**Who Must Pay:** Regulatory fees for International Bearer Circuits are to be paid by facilities-based common carriers that have active international bearer circuits as of December 31, 2006 in any transmission facility for the provision of service to an end user or resale carrier, which includes active circuits to themselves or to their affiliates. In addition, non-common carrier satellite operators must pay a fee for each circuit sold or leased to any customer, including themselves or their affiliates, other than an international common carrier authorized by the Commission to provide U.S. international common carrier services. **Non-common carrier submarine cable operators are also to pay fees for any and all international bearer circuits sold on an indefeasible right of use (IRU) basis or leased to any customer, including themselves or their affiliates, other than an international common carrier authorized by the Commission to provide U.S. international common carrier services. If you are required to pay regulatory fees, you should pay based on your active 64KB circuit count as of December 31, 2006.**

**Fee Calculation: \$1.05 per active 64 KB circuit or equivalent.**<sup>2</sup>

(Emphasis added.)

## **B. Calculation of the IBCF for Non-Common Carriers.**

How should this fee be calculated by a non-common carrier submarine cable operator?

On its face, one way to interpret the foregoing words could be that, since the fee calculation is based on 64KB circuits or equivalent (the size of a voice circuit), that this fee only applies to voice circuits. Non-common carrier submarine cable operators do not typically sell voice circuits; they sell (on an IRU or leased basis) bulk capacity to other non-common carriers or to U.S. and foreign carriers and other users that require significant amounts of capacity. (A non-

---

<sup>2</sup> *Regulatory Fees Fact Sheet: What You Owe – International and Satellite Services Licensees for FY 2007* at 3 (rel. August 2007) (the fact sheet is available on the FCC web-site at: [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-275938A6.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-275938A6.pdf)).

common carrier submarine cable operator's customer may use the bulk capacity for voice circuits, or as part of an Internet backbone, etc.) We do not know how much revenue a single 64KB voice circuit generates annually for a retail common carrier using the circuit as a voice circuit, but presumably it generates enough revenue so that an annual IBCF of roughly \$1.05 or thereabouts is reasonable in comparison to the annual revenue generated by that voice circuit. Also, presumably it can be passed through to the customer in some form with little problem. Were the FCC to clarify that the IBCF only applies to voice circuits, that would solve the non-common carrier submarine cable operator IBCF problem.

Since the FCC's instructions state that non-common carrier submarine cable operators must pay IBCF on 64KB circuits or equivalents, and since non-common carrier submarine cable operators do not sell 64KB circuits as such, some understand the FCC's IBCF regime to mean that non-common carriers are to pay IBCF on bulk capacity sold to anyone other than a U.S. facilities-based carrier with a Section 214 authorization. In practice, this often translates to the non-common carrier being required to pay IBCF on sales to foreign companies throughout the world. (Many non-common carrier submarine cable operator customers without Section 214 licenses are non-US carriers, ISPs, or universities or other educational consortiums.)

To illustrate how the above interpretation plays out, here is one example using TeleGeography market data for large capacity pricing (see Enclosure 1). The median monthly lease price during Quarter 1, 2008 for a transatlantic 10G was \$15,000 per month, or \$180,000 per year ( $\$15,000 \text{ per month} \times 12 = \$180,000$ ). The IBCF on a 10G, calculated per 64KB equivalent, at last year's IBCF of \$1.05 per 64KB equivalent, is \$127,008 ( $\$1.05 \times 120,960$ ). So, in this example, the IBCF equals 71.56% of the selling price of that capacity ( $\$127,008 = 71.56\% \text{ of } \$180,000$ ). Worse, since the IBCF must be paid by the non-common carrier

submarine cable operator if the capacity is active on Dec. 31, regardless of when during the year the customer leased it, then consider a customer who acquires this transatlantic capacity in November. The customer will make two monthly payments of \$15,000 per month for two months that year (totaling \$30,000 for the November, December capacity). Since the capacity was “active” on December 31, 2007, an additional \$127,008 is owed for that year’s IBCF. In this example, the annual IBC fee equates to a 423% surcharge on the amount paid for the capacity itself (\$30,000). It should not be difficult to picture a non-common carrier submarine cable operator’s conversations with a non-US carrier, ISP, or university, when they are asked to pay a \$127,008 surcharge on a \$30,000 invoice for two month’s capacity. When the incredulous and/or angry non-US customer asks to see a copy of the law or rule requiring payment of the surcharge, wanting proof that really is the way the U.S. imposes regulatory fees, all the non-common carrier submarine cable operator can produce is the short paragraph set out in Section A above, which is brief, vague, and buried in the midst of a longer FCC document. Moreover, it refers to 64KB circuits, which has nothing to do with what the customer has purchased. Customers purchasing bulk capacity from non-common carrier submarine cable operators do not buy it on a 64KB basis, and, in many (if not most) instances, the concept of 64KB circuits also has nothing to do with what the non-common carrier submarine cable customer ultimately uses the capacity for.

For non-common carrier submarine cable operators, the above is by no means an isolated example. Please note that according to TeleGeography (Enclosure 1), 63% of all transatlantic capacity was in fact purchased in 10G increments. Also see TeleGeography Research Group, *Bandwidth Pricing Report* (April 2008) at Enclosure 2.

During contract negotiations throughout the world (these contracts are typically for a one-year lease, or multi-year lease, or even a 15-year IRU), not only do non-common carrier submarine cable operators have to tell potential customers about the enormous amount of the fee, they also have to explain to customers that we do not know what the IBCF is going to be for any year in the future, and that we will not be able to tell them what the IBCF will be until at least six months after the end of any year in question. We can tell them that the IBCF was \$7.00 per 64KB circuit in 1999, and \$1.05 per 64KB circuit in 2007, and that it has stayed within that range during that period. Most businesses, whether those businesses are carriers, ISPs, or whatever, balk at signing a contract with a non-common carrier submarine cable operator agreeing to pay a fee that is known generally to be huge, and moreover, whose amount is unknown in the first, not to mention subsequent, years of the contract. Our own auditors are incredulous when told that we do not know how much we should accrue on our own books for these fees. We cannot know in advance how many 64KB equivalent circuits we will have to pay the fee on. Just because a non-common carrier submarine cable operator's customer has a Section 214 license in September, or at the beginning of a multi-year lease or 15-year IRU contract, that does not mean that same customer will still have a Section 214 authorization on December 31 of that year or each subsequent year of the contract.

**II. The Current International Bearer Circuit Fee Regime, As Applied to Non-Common Carrier Submarine Cable Operators, Must Be Changed or Clarified.**

In our original filing, we put forth an alternative fee mechanism for non-common carrier submarine cable operators. We also invited other interested parties to suggest alternate plans. IBCF reform needs to occur now. Non-common carrier submarine cable operators and their customers world-wide should have clear information describing IBCF requirements. If indeed IBCFs are meant to apply to other than voice circuits - meant to apply to the bulk capacity

typically leased or sold on an IRU basis by non-common carrier submarine cable operators (STM-1s, STM-4s, STM-16s, and STM-64s, and 10-Gs) - then IBCFs should not be breathtakingly disproportionate in relation to the price of such bulk capacity, and they should be at least reasonably predictable in advance.

**III. Conclusion.**

Tata US respectfully urges the Commission to amend the Commission's rules and policies governing the application of IBCFs to non-common carrier submarine cable operators.

Respectfully submitted,

Tata Communications (US) Inc.

/s/ Rogena Harris

Rogena Harris  
Senior Counsel  
Tata Communications  
12010 Sunset Hills Road, 4th Floor  
Reston, VA 20190-5856  
(703) 766-3061  
rogena.harris@tatacommunications.com

Robert J. Aamoth  
Randall W. Sifers  
Kelley Drye & Warren LLP  
3050 K Street, NW, Suite 400  
Washington, DC 20007  
(202) 342-8620  
raamoth@kelleydrye.com  
Counsel to  
Tata Communications (US) Inc.

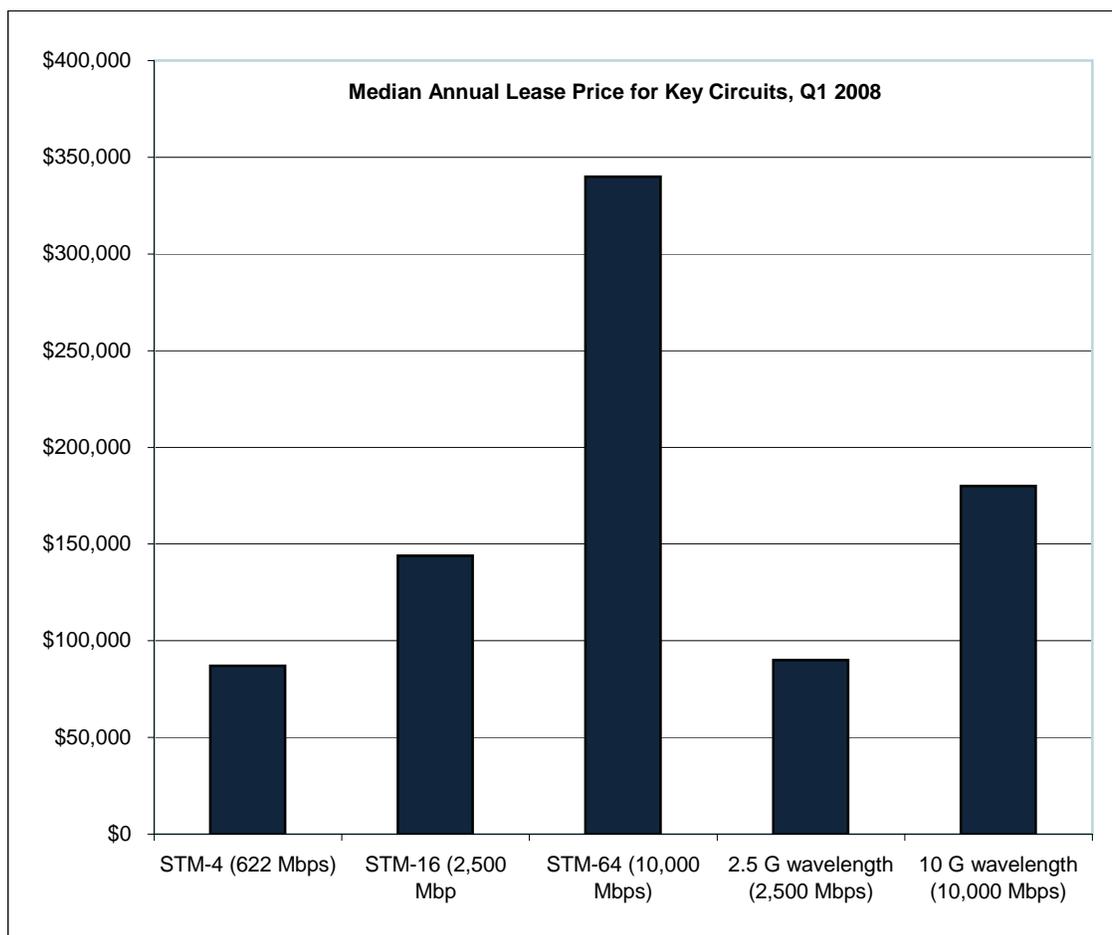
May 30, 2008

**Enclosure 1**

<b>Circuit Type</b>	<b>Median Monthly Lease Price, Q1 2008</b>	<b>Annual Lease Cost</b>	<b>Share of trans-Atlantic Capacity Purchases (Mbps)</b>
STM-4 (622 Mbps)	\$7,260	\$87,120	5%
STM-16 (2,500 Mbp)	\$12,000	\$144,000	10%
STM-64 (10,000 Mbps)	\$28,329	\$339,946	7%
2.5 G wavelength (2,500 Mbps)	\$7,500	\$90,000	3%
10 G wavelength (10,000 Mbps)	\$15,000	\$180,000	63%

**Source**

TeleGeography Research  
 Bandwidth Pricing Database  
 Global Bandwidth Forecast Service  
 Prepared by TeleGeography Research



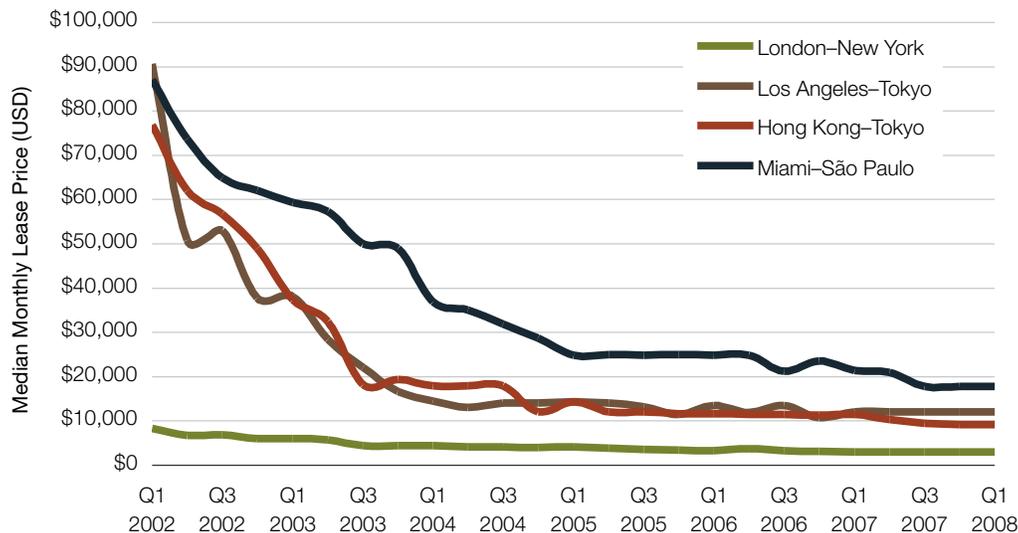
# BANDWIDTH PRICING REPORT

## Wholesale Pricing Overview

This *Bandwidth Pricing Report* provides an overview of global wholesale pricing developments during 2007 and early 2008. As part of its *Global Bandwidth Research Service*, TeleGeography performs a detailed annual analysis of global pricing trends by region and sub-region. This month's report gives an overview of the detailed market analysis and forecasts and global pricing snapshot that are found in the 2008 *Global Bandwidth Research Service* which TeleGeography released in April 2008.

As in previous years, prices declined in all geographic markets covered by TeleGeography. However, significant differences persist: both the price levels and the rate of change vary widely (see Figure 1. Global STM-1/OC-3 Price Trends, 2002-2008).

FIGURE 1.  
Global STM-1/OC-3 Price Trends, 2002-2008



NOTES: Prices reflect median STM-1/OC-3 (155 Mbps) monthly lease prices, and exclude local access and installation fees.  
SOURCE: TeleGeography Research

© PriMetrica, Inc. 2008

**TeleGeography**  
A Research Division of PriMetrica, Inc.

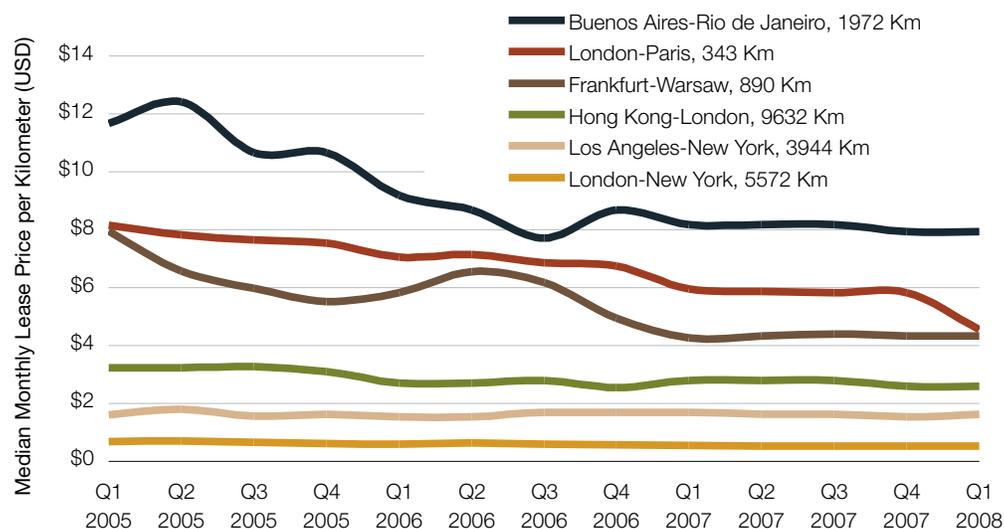
**Washington, DC Office**  
1909 K Street, NW  
Suite 380  
Washington, DC 20006 USA  
[www.telegeography.com](http://www.telegeography.com)

**For further information, please contact:**

Rob Schult  
+1 202 657 5342  
[rschult@telegeography.com](mailto:rschult@telegeography.com)  
Erik Kreifeldt  
+1 202 741 0049  
[ekreifeldt@telegeography.com](mailto:ekreifeldt@telegeography.com)

Greg Bryan  
+1 202 741 0050  
[gbryan@telegeography.com](mailto:gbryan@telegeography.com)

**FIGURE 2.**  
 Median STM-1/OC-3 Monthly Lease Prices per Kilometer for Several Global Routes, Q1 2005-Q1 2008



NOTES: Prices reflect median STM-1/OC-3 (155 Mbps) monthly lease prices, and exclude local access and installation fees.

SOURCE: TeleGeography Research

© PriMetrica, Inc. 2008

## Regional Comparisons

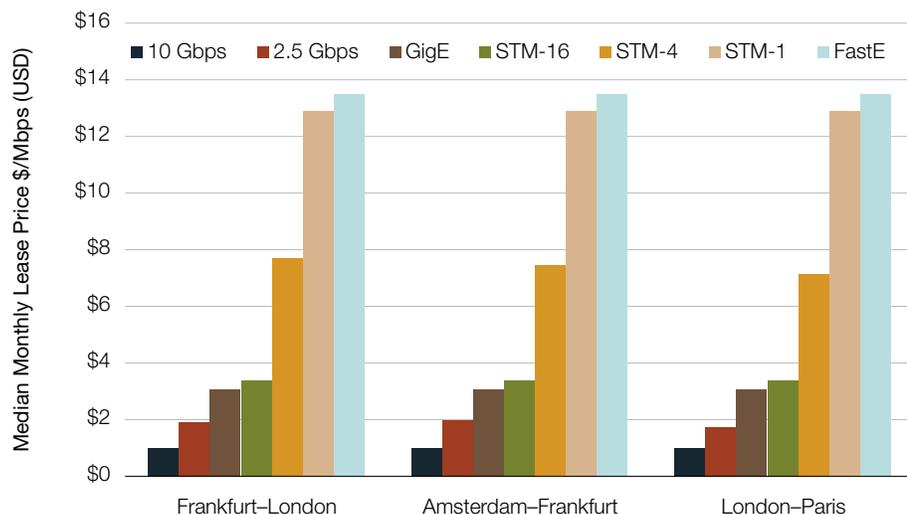
Price declines were modest on trans-Atlantic routes, where circuit prices are so woefully low that little scope remains for further reductions (see again, Figure 1. Global STM-1/OC-3 Price Trends, 2002-2008). Average trans-Pacific capacity prices declined 20 percent, though the pace of change varied widely depending on the destination. While trans-Pacific prices fell faster than trans-Atlantic prices, trans-Pacific circuits still cost far more than those crossing the Atlantic. Intra-Asian circuit prices fell at much the same pace as trans-Pacific prices. The price of submarine cable capacity between the U.S. and Latin America fell 26 percent in 2007, the fastest rate of decline of any of the major submarine cable routes tracked by TeleGeography.

The pace at which prices declined varied significantly within regions, depending on the specific route. In Asia, for example, the price of circuits to India plummeted, while prices to China were largely unchanged. Between the U.S. and Latin America, the price of submarine cable capacity to Brazil fell sharply, while circuit prices to Mexico held steady.

The price of terrestrial network capacity also displayed widely diverging trends. In the U.S., prices for protected SONET circuits were relatively stable in 2007, while prices for 10 Gbps wavelengths fell more than 20 percent on some routes. Gigabit Ethernet prices, too, fell more rapidly than SONET prices.

In western Europe, the price of SDH capacity (the European equivalent of SONET) declined only modestly in 2007. In contrast to the U.S., where wavelength prices tumbled on most routes, western European wavelength prices were largely stable. However, while the pace of price decline was modest, the market is highly competitive, and western European wavelength prices are largely comparable to U.S. prices.

FIGURE 3.  
European Median Monthly Lease Price per Mbps Across Capacities,  
Q1 2008



NOTES: Prices represent the median monthly recurring charge for each city pair, excluding local access and installation fees and divided by the Mbps of the circuit.

SOURCE: TeleGeography Research

© PriMetrica, Inc. 2008

Circuit prices to southern and eastern Europe remain more expensive than circuits within western Europe, but these higher prices are attracting competitors. Because of this growing competition, prices of circuits to southern and eastern Europe fell more rapidly than prices in the already competitive western European market.

While capacity prices slipped in all regions of the globe, vast disparities persist. Since carriers' costs (and hence, circuit prices) are influenced by the length of the circuit, the most meaningful way of comparing prices across routes is to compare the price per kilometer of capacity. Such a comparison reveals that circuits in Latin America are particularly expensive. The median price of an STM-1 between Buenos Aires and Rio de Janeiro in Q4 2007 was approximately \$8 per kilometer—more than five times the price per kilometer of an OC-3 from Los Angeles to New York (see Figure 2. Median STM-1/OC-3 Monthly Lease Prices per Kilometer for Several Global Routes, Q1 2005-Q1 2008). However the price per kilometer can still be relatively high for competitive routes that are very short distances, such as London-Paris.

## Effective Capacity Prices and Revenues

High-capacity circuits, such as 10 Gbps wavelengths, tend to carry a lower price per Mbps of capacity delivered than smaller circuits (see Figure 3. European Median Monthly Lease Price per Mbps Across Capacities, Q1 2008). In recent years, prices of high-capacity circuits have been falling faster than prices of smaller circuits, decreasing the price per Mbps of capacity.

Demand for high-capacity circuits is growing far more rapidly than demand for low-speed circuits. For example in 2002, 10 Gbps wavelengths represented only 27 percent of all capacity across the Atlantic. By 2007, 10 Gbps wavelengths accounted for over 60 percent of trans-Atlantic capacity.

The combination of falling prices for high-capacity circuits, the lower price per Mbps of capacity of these circuits, and growing demand for high-capacity circuits presents something of a dilemma for network operators. Carriers are selling a great deal more bandwidth with each passing year but more

FIGURE 4.  
Effective Price Change on Major Submarine Cable Routes,  
2006-2007

	Change in Contract Price	Change Due to Shifting Circuit Mix	Effective Price Change
<b>Trans-Atlantic</b>	-8%	-9%	-16%
<b>Trans-Pacific</b>	-20%	-8%	-26%
<b>Intra-Asia</b>	-22%	-8%	-28%
<b>U.S.-Latin America</b>	-26%	-16%	-38%

NOTES: Change in Contract Price refers to the change in median monthly leases prices across all products between Q4 2006 and Q4 2007. Change Due to Shifting Circuit Mix measure effect change in prices due to the movement towards higher-capacity products with lower unit prices. Effective Price Change reflects the combined change in prices at the product level and from the change in types of products purchased.

SOURCE: TeleGeography Research

© PriMetrica, Inc. 2008

and more customers are opting for high-speed circuits, which carry a lower price per Mbps of capacity. Consequently, the effective price of network capacity (the price per Mbps of capacity sold) is falling far more rapidly than actual circuit prices (see Figure 4. Effective Price Change on Major Submarine Cable Routes 2006-2007).

Demand for long-haul network capacity continued to grow strongly in 2007. On most major submarine cable routes, growth ranged from just under 30 percent to slightly over 40 percent. However, due to the changing composition of circuits sold, revenue growth has not kept pace with demand growth. For example, demand for capacity between the U.S. and Latin America accelerated in 2007. However, circuit prices also fell rapidly and the number of buyers favoring higher-capacity circuits, with their lower price per Mbps of capacity, grew sharply. As a result, the estimated total wholesale revenues of submarine cable capacity between the U.S. and Latin America actually declined in 2007 (see Figure 5. U.S.-Latin America Demand, Revenue, and Effective Price Change, 2002-2007).

## Outlook

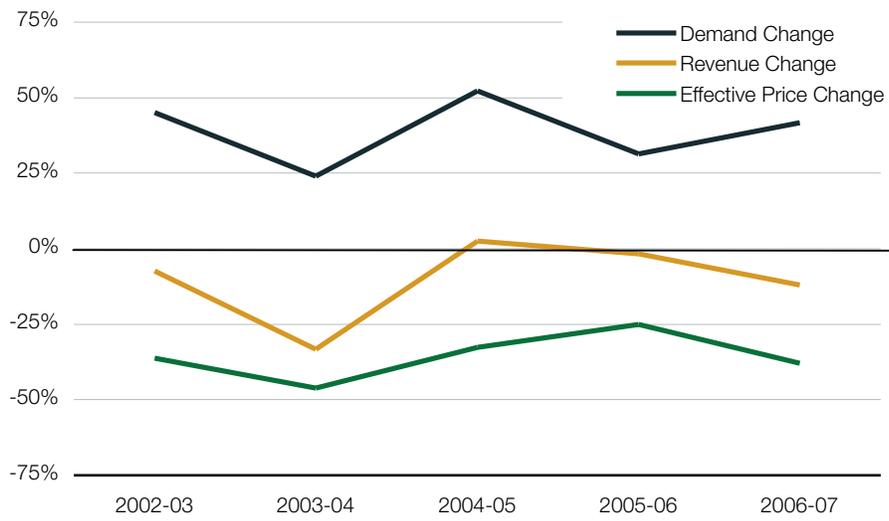
It's not easy being a wholesale carrier, and the coming year or two will remain challenging.

The deployment of multiple trans-Pacific cables, two new cables to Australia, and several intra-Asian cable networks will intensify competition in all of these regional markets. The construction of new cables to Africa will finally bring competition to a market that has long been underserved. However, the number of planned cables suggests that pricing competition may soon be fierce on these routes.

The steady transition of bandwidth buyers to larger circuits will continue to present a problem for carriers in most markets. Somewhat ironically, the markets that are least affected by this transition are the relatively mature markets of western Europe and the U.S. and the trans-Atlantic route.

For more in-depth analysis and projections of wholesale prices and revenues, please see TeleGeography's *Global Bandwidth Forecast Service*, which provides wholesale price and revenue forecasts for key global routes through 2014.

**FIGURE 5.**  
U.S.-Latin America Demand, Revenue, and Effective Price Change,  
2002-2007



NOTES: Demand change represents reported annual change in purchased capacity on selected route. Effective price change computed from revenue change and demand change.

SOURCE: TeleGeography Research

© PriMetrica, Inc. 2008

## Price Watch

TeleGeography's Price Watch service allows market participants to track recent pricing developments at a glance. Price Watch tracks pricing changes on nine key routes worldwide. Because pricing in some regions, particularly on terrestrial routes, is distance-sensitive, prices are stated both in absolute terms and in dollars per Mbps per mile.

Price Watch information is drawn from TeleGeography's *Bandwidth Pricing Database* ([www.telegeography.com/products/bandwidth\\_pricing/](http://www.telegeography.com/products/bandwidth_pricing/)). The online database provides access to capacity prices on over 125 separate routes and capacities between 2 Mbps and 10 Gbps.

Monthly lease figures are an average of the median price over the previous three months.

### March 2007 (USD)

	Monthly Lease Price			Monthly Lease Price/Mbps/Mile		
	E-1	OC-3	OC-48	E-1	OC-3	OC-48
<b>Intra-European Routes</b>						
London - Paris	\$300	\$2,500		\$0.704	\$0.068	
London - Frankfurt	\$315	\$2,300		\$0.400	\$0.038	
London - Milan	\$420	\$3,400		\$0.352	\$0.037	
London - Madrid	\$425	\$3,500		\$0.271	\$0.029	
<b>Transoceanic Routes</b>						
London - New York	\$450	\$3,100		\$0.065	\$0.006	
Los Angeles - Tokyo	\$1,400	\$12,000		\$0.128	\$0.014	
<b>Trans-American Routes</b>						
New York - Los Angeles		\$5,800	\$50,000		\$0.015	\$0.008
Los Angeles - San Francisco		\$1,800	\$14,750		\$0.034	\$0.017
New York - Washington, DC		\$1,450	\$12,500		\$0.046	\$0.025

### March 2008 (USD)

	Monthly Lease Price			Monthly Lease Price/Mbps/Mile		
	E-1	OC-3	OC-48	E-1	OC-3	OC-48
<b>Intra-European Routes</b>						
London - Paris	\$270	\$1,950		\$0.634	\$0.059	
London - Frankfurt	\$275	\$2,000		\$0.349	\$0.033	
London - Milan	\$375	\$3,100		\$0.315	\$0.034	
London - Madrid	\$385	\$3,200		\$0.246	\$0.026	
<b>Transoceanic Routes</b>						
London - New York	\$425	\$3,000		\$0.061	\$0.006	
Los Angeles - Tokyo	\$1,300	\$12,000		\$0.119	\$0.014	
<b>Trans-American Routes</b>						
New York - Los Angeles		\$5,500	\$39,500		\$0.014	\$0.006
Los Angeles - San Francisco		\$1,600	\$14,000		\$0.030	\$0.016
New York - Washington, DC		\$1,400	\$12,000		\$0.044	\$0.024