

2010 SUBMARINE CABLE AND EQUINIX DATA CENTER MAP

ABOUT EQUINIX

Equinix provides a global service delivery platform comprised of more than five million square feet of carrier-neutral data center space in 19 key markets in 10 countries. Equinix's International Business Exchange™ (IBX™) data centers are strategically located in close proximity to the world's submarine cables and provide key network peering and interconnection points where global enterprises, financial services, content, cloud, and network service providers exchange business-critical data.

DATA CENTER METRO LOCATION LEGEND

EQUINIX DATA CENTERS

N. AMERICA

Chicago
Dallas
Los Angeles
New York
Silicon Valley
Washington DC

EUROPE

Amsterdam
Frankfurt
Geneva
London
Munich
Paris
Zurich

ASIA-PACIFIC

Hong Kong
Singapore
Shanghai*
Sydney
Tokyo

N. AMERICA

Atlanta
Chicago
Dallas
New York
Philadelphia
Phoenix
Pittsburgh
San Francisco
Tampa
Toronto
Washington DC

SWITCH AND DATA DATA CENTERS

N. AMERICA

Nashville
New York
Philadelphia
Phoenix
Pittsburgh
San Francisco
Tampa
Toronto
Washington DC

Equinix and Switch and Data have entered into an Agreement and Plan of Merger which is expected to close, subject to regulatory approval and closing conditions, in 2010.

FIBER-OPTIC SUBMARINE CABLE SYSTEMS

Map depicts in-service and planned international and U.S. domestic cables with a minimum capacity of 5 Gbps after full upgrades. Intra-European cables in the North and Baltic Seas are not depicted. In-service cables included have an announced Ready for Service (RFS) date by December 31, 2009. Planned systems are cables under construction or those that are scheduled to enter service by 2012. Map does not depict proposed cables that have not announced landings or configuration. Cable routes are stylized and do not reflect physical cable location.

CONSTRUCTION COSTS

The boom and bust cycle of the submarine cable industry is particularly evident when examining the amount of capital spent on new submarine cable systems over the past several years. In 2001 the cost of all new submarine cable systems entering service was nearly \$13.5 billion. In contrast, developers spent only a little more than \$1.6 billion on all cables entering service from 2004 through 2007. The large number of new systems under construction portends a considerable rebound in the value of new cables entering service in coming years. TeleGeography estimates that approximately \$5.5 billion worth of new cables could enter service between 2010 and 2011.

LIT SUBMARINE CABLE CAPACITY

Capacity figures denote lit capacity at the end of the respective year. For systems configured as self-healing or collapsed rings, lit capacity is based on the sum of both halves of the ring. Intra-Asia capacity includes cables with landings in both Hong Kong and Japan. Trans-Pacific capacity excludes Southern Cross and Telara Endeavour. Trans-Atlantic capacity excludes Atlantis-2. Europe-Asia capacity reflect available capacity between the Middle East and Europe and excludes Europe-Asia capacity routed via Russia or the U.S.

GLOBAL LIT SUBMARINE CABLE CAPACITY

The first intercontinental telephony submarine cable system, TAT-1, connected North America to Europe in 1958 and had an initial capacity of only 440 kbps. Since then, total trans-Atlantic cable capacity has soared to over 13 Tbps in 2009. In recent years, the annual growth of lit trans-Atlantic capacity has slowed, while the growth rates on the intra-Asian and Europe-Asia routes have increased rapidly. *Used International Bandwidth by Country (Gbps) measures the amount of capacity deployed by carriers, ISPs, and enterprises to carry Internet, voice, and private network traffic across international borders.

HOW IS CAPACITY USED?

Submarine cable operators light turn on capacity on their systems to sell bandwidth to other carriers. "Purchased" capacity also includes bandwidth put into service for owner-operator use, albeit not strictly "sold." "Used capacity" includes circuits carrying Internet, private network, and switched voice traffic. Carriers purchase a striking amount of capacity beyond the amount consumed by traffic, mainly to hold in reserve for restoration and redundancy—this constitutes "purchased" but "unused" capacity. Contract structures, upgrade lead times and market inefficiencies also contribute to the gaps between purchased, lit and used capacity. For example, in 2009 on the trans-Atlantic route, 78 percent of the bandwidth was purchased, while used bandwidth accounted for only 34 percent of lit capacity.

LIT VERSUS POTENTIAL CAPACITIES

Since 2002, the share of potential capacity that is lit has increased on major undersea cable routes in 2009 as the capacity of existing systems was boosted. Even with these upgrades, less than 30 percent of potential capacity has been lit on major undersea routes, with the exception of the Europe-Asia—which has 72 percent of its potential capacity lit.

STM-1 PRICE TRENDS

Submarine cable capacity is sold to a wide variety of customers including telecommunications carriers, Internet service providers, enterprises, and governments. While the sales of high-capacity optical wavelengths and long-haul Ethernet capacity have become more common, nearly all cables sell circuits based on Synchronous Digital Hierarchy (SDH) standard such as STM-1 (155 Mbit/s). The historical price comparison presented below shows median STM-1 monthly lease prices, exclusive of installation fees. An STM-1 circuit frequently is the Minimum Investment Unit (MIU) for capacity purchase on submarine cables.

SUBMARINE CABLE CAPACITY

NOTES: Cables shown include international and U.S. domestic submarine cables in-service as of year-end 2009 with a maximum upgradeable capacity of at least 5 Gbps. Intra-European cables are excluded. Figures denote capacity in unprotected terms.