FCC Workshop
Global Broadband Connects the World

Jacquelynn Ruff
Vice President, International Public Policy & Regulatory Affairs

December 10, 2009

The Global Digital Economy

- **Networks and services are global**
  - Global fiber optic networks – IP connectivity – cross-border services
  - Global Digital Economy has thrived through commercial arrangements, private sector Internet governance mechanisms, and no legacy telecom regulation for the Internet
- **Global population 6.8 billion – 1.7 billion Internet users, 4.1 billion mobile phones, 1.3 billion fixed lines**
- **Global IP traffic expected to quintuple from 2008 to 2013**
  - Overall 40% CAGR 2008-2013, mobile data 131%, consumer 42%, business IP 33%
  - IP traffic is growing fastest in the Middle East and Africa, followed closely by Latin America
  - Key drivers are high definition video + high speed broadband penetration *****
  - Increasing customer-generated content
- **For every 10% increase in high-speed Internet access, economic growth rises 1.3% - even more in developing economies****
- **Multinational businesses that drive economic growth are expanding and rely on global connectivity**

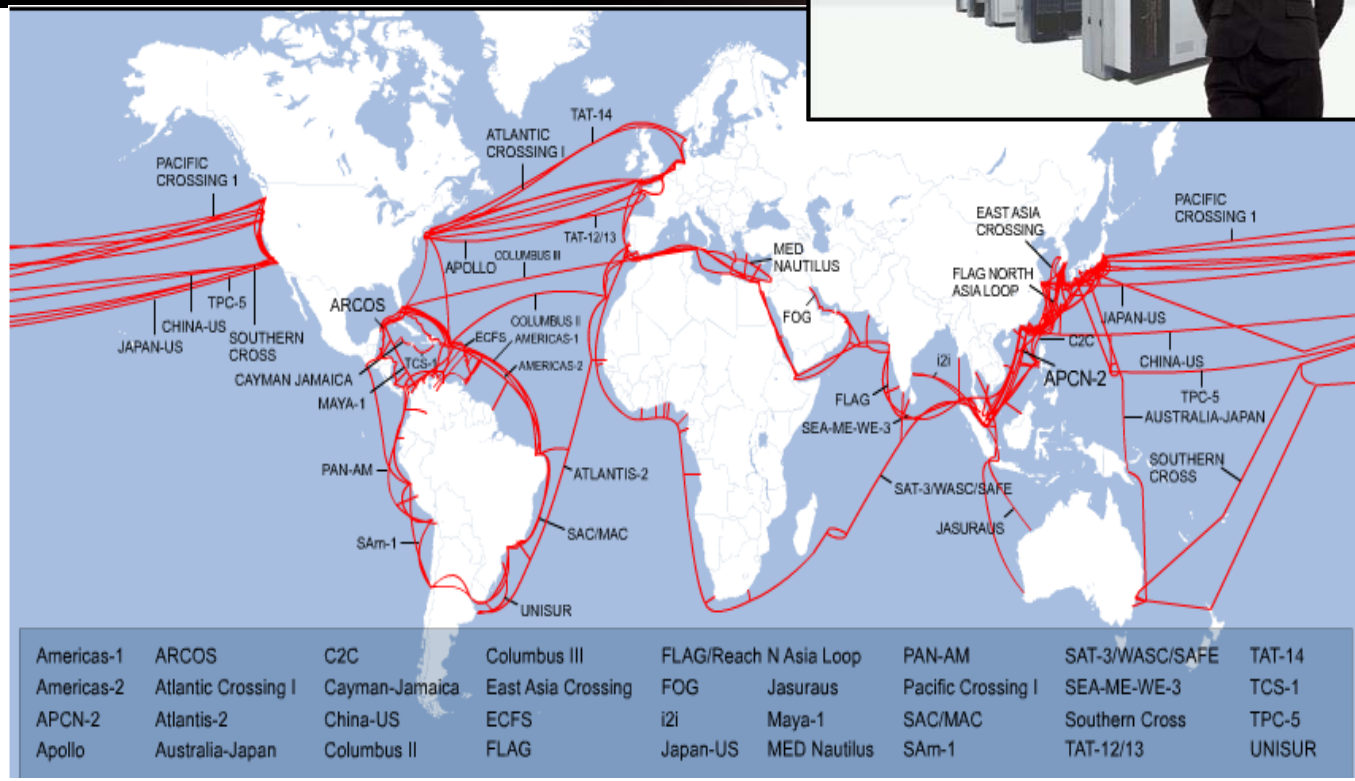
** Cisco 2009*
*** World Bank 2009*

Verizon's Global Broadband

Global Network **– more than 485,000 route miles**

Capacity on 80+ Undersea Cables **– spanning six continents**

Connecting People, Businesses, and Governments **- 97% of the Fortune 500 in more than 150 countries**



*Statistics as of 11/09

Recognizing Changing Global Market Realities:

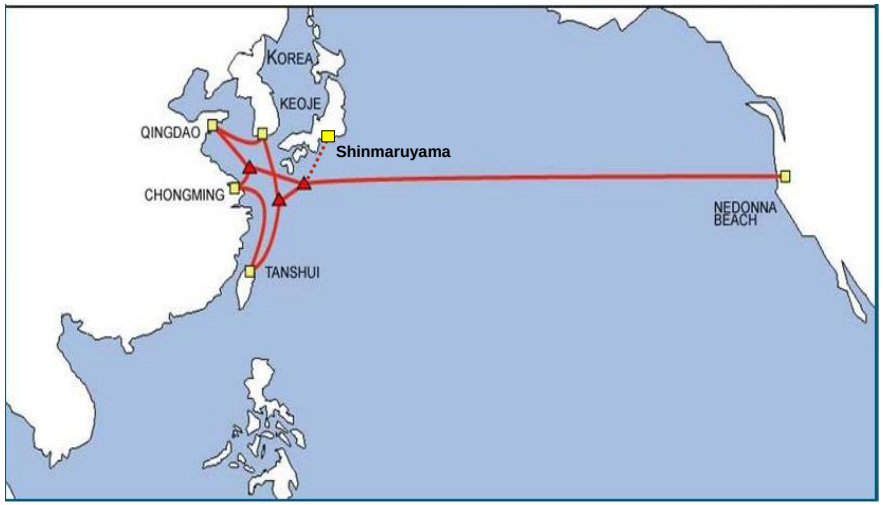
- Businesses and business users are becoming more geographically dispersed
- Worldwide, the mobile worker population will grow from 759 million (2006) to 1 billion (2011) *
- Our customers today require their services to: control costs, integrate multiple interfaces and applications, reduce environmental impacts

Worldwide Mobile Population 2007 – 2011 Forecast, IDC, December 2007

verizon

Trans-Pacific Express and Europe India Gateway – Benefits to Global Broadband

Trans-Pacific Express



- $500 million investment
- Verizon is U.S. member of 6 charter Consortium
- Active September 2008
  - Initial Capacity: Up to 1.28 Tbps
  - Design Capacity: Up to 6 Tbps
- Expansion to Japan planned

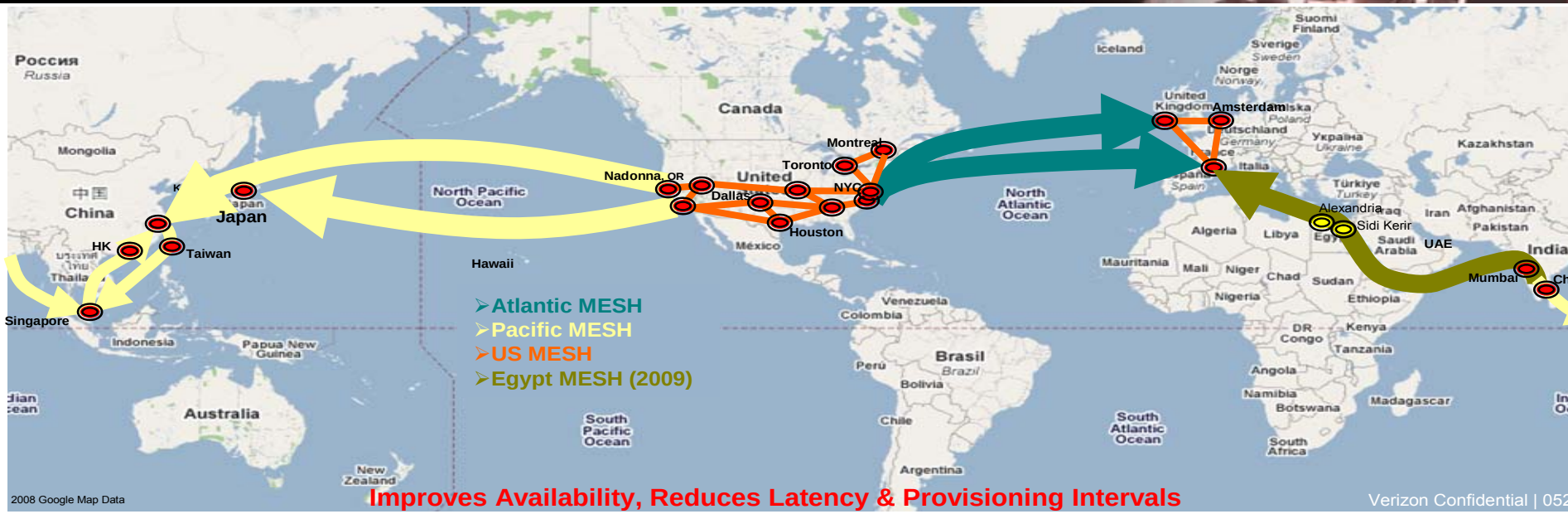
Europe India Gateway

- Links Europe, Middle East & India
- Improved cost structure in Middle East & India
- Telecom Egypt to support Middle East Mesh for restoration – EIG and SMW-4
- Landings in 13 countries
- Ready for service expected in July 2010

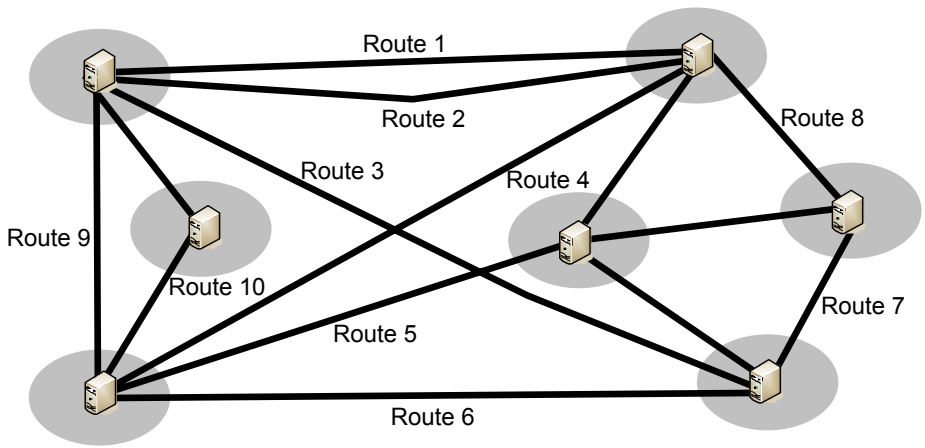
Increasing Capacity … Improving Quality and Stability

- **Meet the dramatic increase in customer demand for IP, data and voice communications between the U.S. and other countries**
  - With the increasingly global economy, demand for international bandwidth has soared over the last few years
    - There has been steady growth in global traffic – doubling every 7 years
    - The Asia-Pacific region is the fastest growing – over 25% per year
    - Between 2005 and 2006, international bandwidth provisioned for Internet grew by 73% on the U.S.-China route, by 25% on the U.S.-Taiwan route, and by 75% on the U.S.-Korea route
- **Increase the competitive supply of bandwidth on global routes**
- **Enhance service quality for customers**
  - Reduced latency, faster provisioning for enterprises, greater ability to manage Internet security (5 billion potential threats detected daily by Verizon)
- **Improve the resilience and redundancy of communications**

Verizon Global Mesh



- **Restoration: Mesh networks intelligently utilize all available network routes**
- **7-way route diversity in both Atlantic and Pacific Regions**
- **Extend mesh into Middle East through deployment of two diverse nodes in Egypt in 2010**



Public Policy Issues

- **Deployment and availability**
  - Public policy environments that enable investment and innovation
  - Competitive cables, landing stations, backhaul opportunities
  - Effective regulatory practices
  - Ability to maintain and repair cables efficiently
- **Adoption**
  - Ability for all players to use capacity, without foreign investment limits
  - Flexibility for IP-based services, including VoIP
  - Optimization of economic value of enterprise services
  - Ability to provide security, enhanced service quality, converged services
  - Development of additional demand drivers in energy, healthcare, education
- **FCC international role**
  - Promote enabling environments for investment and innovation outside the US
  - During regulatory exchanges and technical assistance, and policy engagement in multilateral organizations