Ethernet Networking
Ideas for Today & Tomorrow

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April 23, 2008
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Ethernet Services
Balanced Ethernet Product Portfolio

- **E-LAN Metro**
  - Local/Regional
  - Government, Education, Healthcare
  - VoIP
  - Collaboration
  - Multi-site connectivity
  - Cost efficiency
  - Easy to manage

- **EVPL - Metro**
  - National Large/Medium enterprises, Finance, Healthcare
  - VoIP/Video
  - Collaboration
  - Any-to-any connectivity between multiple-sites
  - Classes of Service

- **VPLS**
  - International Large enterprises
  - Finance, Services
  - Convergence
  - VoIP/Video
  - Financial data
  - Multiple-locations to interconnect
  - Global reach

- **EVPL**
  - Healthcare, Finance, Media, Manufacturing
  - Bandwidth
  - Data Center connectivity
  - Customers with small number of sites to interconnect
  - Dedicated bandwidth

- **EPL**
Multiple Ethernet Services to be delivered over a single Ethernet Access connection
Verizon Business uses Converged Packet Architecture to support Multi-service Ethernet Access
VLAN tagging is used to provide traffic separation

Benefits:
- Reduced intervals when adding new services to an existing connection
- Streamlined customer cost (single CPE device)

* Public IP available on the same UNI in 2H2008
Sample Customer Network Connecting Diverse Locations: Drivers and Constraints

**Networks Today:**
- Support high bandwidth options for: regional, National and global networks
- Enable collaboration
  - Telemedicine
  - Electronic Medical Records
  - Education & Training

**Current Customer Challenges**
- Timeframes
- Cost

![Network Diagram](attachment:network_diagram.png)

Key:
- LATA Boundary
- IP, Ethernet or Optical
- Access loop
Verizon Metro Ethernet Services
After Optical Enhancements

Hypothetical Network
Using:
- NG SONET
- Optical Transport Access

Key Distinctions:
- Reduced Costs
- Efficiencies in the local loop
- Either or both options may be available

- IOF charges eliminated (up to 20 miles)
- Ethernet “loops” ride optical transport
Future Ethernet & Value Added Items Under Consideration

**Network**
- Alternative “wired” access – Optical and/or Copper
- Ethernet over Wireless
  - Point to Point
  - LTE
  - Etc

**Value Added Service Evolution**
- Campus Applications
  - Multi-media locker – Collaborative content
- WAN & Application Optimization – Add’l Capabilities
- Computing and Software as a Service – Add’l Capabilities

**NOTE:** All items on this slide are purely under review and should not be construed as future offerings.