

RPR: A View from the Market

**RPR Alliance
September 30, 2002**

What Analysts Are Saying

- “The Yankee Group believes that by the end of 2003, all of the major Ethernet switch vendors addressing the carrier market will embrace RPR as a method for offering IP networks SONET-like restoration and deterministic QoS. . .By 2003, the Yankee Group expects to see the rapid deployment and acceptance of 10-GigE and RPR in the metro.”

Yankee Group “Gigabit Ethernet in the Metro Market,” July 2001

- “The metro network is a new hot spot as increasing amounts of data are transported through metropolitan area networks and service providers and equipment vendors targeting this burgeoning opportunity proliferate. Although a number of service providers are implementing RPR-like solutions today, the standardization of this technology will result in more widespread adoption. With the RPR Alliance's commitment to promoting the standardization of RPR technology, the networking industry benefits from compatible solutions that are designed to deliver optimal network performance, quality of service, and resiliency.”

Kevin Mitchell, Infonetics Research

State of the Market

- Carrier spending drastically cut
- Spending on incremental upgrades that increase revenue
- Spending in the metro – “one of the few hotspots in the market” (Jim Duffy, *View from the Edge*)

RPR Fits This Market

- RPR designed to handle data traffic over current SONET/SDH infrastructure
- RPR gives carriers the ability to increase services/revenue with incremental purchases
- ...RPR is the technology perfectly positioned for the market environment
- ...if we can get the standard completed and equipment to the market quickly

Types of Deployment of RPR*

- RPR over TDM SONET/SDH rings
 - RPR (with Ethernet data services) over unused TDM bandwidth
- RPR over Ethernet physical layer
 - Greenfield deployments where there is no existing infrastructure – especially China
- Cable head ends
- Private campus networks
- RPR-only SONET/SDH rings
 - Light up new fiber pair in SONET ring bundle

*Pre-standard RPR solutions

Deployment of RPR*

- Bell Canada
- KDDI Japan
- MTS Communicatio
- Telus Quebec
- WorldCom
- Electric Lightwave
- Sprint International
- China Netcom
- Swedish University Network (SUNET)
- Danish Computing Center for Research and Education
- Henan Telecom
- Hangzhou CATV
- Eastern Multimedia Group CATV Network
- China Mobile

*Pre-standard RPR solutions

What Customers Are Saying

"Our customers can buy significantly more bandwidth for their networking needs, and in turn their IS/IT departments can completely redesign how they deliver business systems to their enterprise networks."

Bell Canada

What Customers Are Saying

You can integrate the voice and data, and you can vary the amount of integration. Now you have all your customers' telecommunications needs on one survivable, restorable, high-performance system.”

MTS Communications

What Customers Are Saying

"This solution also allows performance, scalability, and resiliency for customers connected via Ethernet technology. . . You don't need the layers that are offered by other vendors to offer high-speed, high-quality Internet connectivity over Ethernet in customer premises."

Ebone

What Customers Are Saying

“...enables us to respond very quickly to a customer request for additional bandwidth, without having to risk the quality and reliability of the services we offer them.”

Electric Lightwave

Making Money in this Market

- Making progress on the standardization effort is essential - cannot stretch the schedule
- Getting RPR equipment to the market is essential for our companies' revenue
- We DON'T need the most technically elegant solution
- We NEED a solution which is not overly complicated, that meets our Par & 5 criteria, and allows carriers to add services/value to their networks

How the WG got here

- Assembled the group from a variety of companies/applications/world views (bell-heads, dataheads)
- Proved to the IEEE that we deserved to exist
- Fielded a myriad of proposals
- Assembled an impressive list of carriers and incorporated their objectives into ours
- Distilled the many proposals into a single one
- Iterated through WG comment resolution 4 times
- Have now arrived at the point of last technical change
- ... we are on the right track, let's keep it up!

What You Can Do

- Continue with the great work being done on the standard
- Find errors or contention and report through the comment process
- Don't add new features or functionality
- Work out issues before going out for working ballot

What We Are Doing

RPR Alliance Initiative:

- Interoperability
- Business case development
- RPR in the enterprise
- Bridging implementation guides
- Carrier outreach