

Requirements from RPR For WAN/MAN Systems

David Zelig
Corrigent Systems
Davidz@corrigent.com



COS

- Multi service over RPR
 - 50m Sec protection
 - An option for no jumbo frames
- RPR should enable multiple COS
 - For example: Reduced set of DiffServ capability/802.1Q
- Higher layers mapping to RPR COS should be defined closely in the standard



Node Identification

- Per node (not per module)
- Fixed for node life
 - Same module is not always in the same node
- Should not prevent standard TE methods



OAM

- Carrier Class RPR maintenance
- Use of existing PHY layers
- PM
 - RPR PM counters
- Alarms
 - Specific RPR alarms definitions, e.g. Topology alarms



OAM (cont.)

- Tracing
- Detect mis-wiring
- Loopbacks
 - All traffic
 - Packets (connectivity)



Other Issues

- Topology
 - Pre-provisioning as option
 - Predictable behavior
 - Alarms
- Multi Service Transparency
 - No fragmentation Ethernet + RPR MAC + Delta length on ring (It does not mean you need a jumbo frame)



Proposed objectives

RPR should enable multi service

Option for jumbo frames

RPR layer PM and OAM