

## ABSTRACT

RPR Network ( Resilient Packet Ring Network ) is a solution technology for MAN. This technology adopted surplus SDH Network where It is appropriate for ring configuration, self healing and Ethernet Network that it bases packet switching. So network send traffic effectively.

One of RPR Network surplus is able to protect fast in a few time about 50 ms. Process to protect is recovery connection use alternative link if there is fault location or node fail suddenly.

Algorithms of Protection in RPR Network are Wrapping Protection and Steering Protection. Process of Wrapping Protection is loopback traffic toward detection nodes away to other ringlet. Process of Steering Protection is reroute traffic so pass away from fail link.

Each of Protection Algorithm has surplus and weakness. If it is seen from Loss Packet so Wrapping Protection gives better contribution than Steering Protection moreover many of node condition, range of node further before, and a huge traffic opposite. For example : Rate Bit 2.5 Gbps ( STM – 16 ), 20 nodes. So loss packets are generated for Wrapping Protection 1.193 Mbit but for Steering Protection 7.41738 Mbit. If it is seen Reservation of Traffic both node nearness so Steering Protection gives better contribution. It is seen from RPR response that give a minimum traffic loss indeed not totally for 4,10, 20 node and Rate Bit 2.5 Gbit. It is different with Wrapping Protection give traffic loss effect in similar condition.