

ABSTRACT

Network planning of Fibre Optic as backbone represent one of way to support the technological growth, others this matter also can overcome the density trafik that happened at Digital Microwave transmission (GMD). Transmission Network of Singaraja-Kaliasem is Radio STI.CR 190, this peripheral often experience of the trouble especially toward Singaraja. This is caused by a experienced condition, specially upstate Bali have the topography area which have mounts, and weather changing

Network planning needs demand analysis and traffic analysis to each services (Voice, Telkomnet Instant, SPEDDY). Network of fibre optic between Kaliasem-Singaraja is planned to do to accommodate the requirement of canal capacities will up to year 2025. Transport technology STM-1 will be compared by STM-4 to determine the which technology more precise for the implementation. Analysis The Power Link Budget and Rise Time Budget ascertain whether configuration of implementation system have to accorded standard.

Canal capacity which is needed to plan network of fibre optic in Kaliasem-Singaraja link equal to 120 E1 which is converted in format STM 1 and STM 4. Pursuant to used amount core, available peripheral and availibility of amount canal hence applying use of system STM-4 more efficient from STM 1. Transmission technology used by Single Mode Fibre Optic, Transmitter is Laser and Receiver is PIN. Calculation of Power Link Budget and Rise Time Budget have to accorded standard level energy in receiver and rise time condition