

ABSTRACT

In order to provide the satisfied services for the bandwidth users, network provider need to pay attention about telecommunication infrastructures are offered for customers. The telecommunication infrastructure must be accordance with quality targets (error objective performance) and availability targets. Both target having references to the standardized recommendations by ITU to guarantee the transfer network performance to achieve the high quality content traffic.

The GMD SDH X-Kal EE link Banjarmasin-Pontianak is one of backbone or prime transmission link in Kalimantan. The Analyzing in this final is purposed to analyze if the existing links are still accordance with the standardized recommendations by ITU.

In this final job assignment the writer will analyze quality performance and availability performance of GMD SDH X-Kal EE Banjarmasin-Pontianak by using the existing infrastructure and be expected generally it has been accordance with ITU-R recommendations. Therefore, three link calculation will be selected to give representation for 22 transmission hops, they are link calculation for the longest path link (without any improvement space diversity system), link calculation for the path link with extreme obstacle (need passive repeater) and link calculation for the path link need the improvement by space diversity system.

There are several points are need to be analyzed, they are the performance operation calculation (the propagation analyzing of path link calculation), availability system calculation of GMD SDH X-Kal Banjarmasin-Pontianak and error objectives calculation of each hops although for International Gateway (IG) if system availability mulberries and error objectives mulberries will be considered with measurement result datas of periodic maintenance PT Telkom to know if the system is still suitable or not for transport network accordance with the standardized recommendations by ITU-R, G 826 (quality targets) dan F 1492 (availability targets).