

### **ABSTRACT**

*This study discusses the comparison of Gressnet services (RT/RW Net Providers) with Telkomsel using the Quality of Service (QoS) and Quality of Experience (QoE) methods in the Limpakuwus area. The purpose of this study is to find out whether the presence of Gressnet can replace Telkomsel providers in Limpakuwus village. Telkomsel's Drive Test results produce an average RSRP of -83.7 dBm, RSRQ -10.15 dB and SNR of 1.05 dB. The results of the QoS measurement obtained the average value of Gressnet throughput of 240.18 kbps while Telkomsel was 166.9 kbps. The average packet loss value from Gressnet is 17.68% while Telkomsel is 30%. The average delay value, for Gressnet is 209.1 ms while Telkomsel is 555.8 ms. While the average jitter value for Gressnet is 239.9 ms while Telkomsel is 555.2 ms. Results of the Mean Opinion Score (MOS) for the service Gressnet package 1 Mbps fiber optic obtained a value of 71 scale 100, while and Telkomsel services in the same location amounted to 68 scale 100. The 2 Mbps fiber optic service obtained a value of 68 scale 100 while Telkomsel services in the same location amounted to 78 scale 100. The 3 Mbps wireless service obtained a value of 77 on a scale of 100 while Telkomsel's services at the same location were 60 on a scale of 100. Based on the results of QoS and QoE, it can be concluded that Gressnet services are superior to Telkomsel services for the Limpakuwus area.*

*Keywords : Quality of Service, Quality of Experience, MOS, Drive test*