

ABSTRACT

Some factors that cause the area in the village can not receive a signal or called the spot blank. An area that is hard to reach, expensive BTS builder costs, difficult accommodation to reach certain regions.

This final project implements the GPRS service using open source. As an alternative solution for villages/outputs that do not get a signal. Built a cellular network using OSMOCOM. The Methodologi used in this final project are: Conducting literary studies, analyzing device needs, designing and implementing system implementation and making reports.

The result of the GPRS service implementation runs on laptops with 4 core CPU's and RAM 8 Gigabyte . The result of the average Throughput 24,19 kbps of twenty test times The result of the average Delay of 1,108 Mili second with a total test of twenty times testing. The result of the average packet loss is 4.03%. Subscriber is successfully connected to the Internet.

Keyword: *Open Source, OSMOCOM, GPRS.*