

ABSTRACT

GPRS has been being implemented by PT. Telkomsel as a data packet service to fill the demand of increasing data communication service. The implementation of GPRS in PT. Telkomsel is done by allocate 3 timeslot in 1 sector for GPRS, where 2 timeslot is Switchable and another one is reserved timeslot. The affect of timeslot allocation is decreasing of existing network performance level.

The analysis is done by evaluating of parameters network performance changes level. The parameters that are affected is TCH Blocking and Call Success Rate while other parameters that are not affected is dropped call, handover failure rate and call set up failure rate. The monitoring is done at the time before GPRS implementation and after GPRS implementation in Srigading's Site at PT. Telkomsel.

From the evaluation result of data statistic is found that the GPRS implementation in PT. Telkomsel does not affect very much to existing network performance. The monitoring result of some parameter from network performance indicate that for GSM 900 system does not occur increasing of TCH Blocking level for each sector or Zero increasing. Whereas in DCS system the significant increasing of TCH Blocking is occur in sector 3 about 0,51 %, that is 0,04 % before GPRS implementation and 0,55 % after GPRS implementation while CSR level in sector 3 DCS is decreasing equal to 0,24 %.. The affect for other parameters of performance is too insignificant, indeed almost nothing.