

ABSTRACT

Basically, the concept of mobile services is to offer the same service as what the mobile services offer to fixed phone users, with additional capability of being mobile or wireless from one place to another place without any cutting off connection. Mobile user needs sophisticated solution to keep the service working continuously at the network.

In a row with the expansion of the existed telecommunication services nowadays, and lots of features where all users hope the provider of kinds of them (means the operator) could give maximum service, then accordingly the operator is supposed to give the best service to the users. But in the implementation there are still many Base Transceiver Station (BTS), especially Global Service for Mobile (GSM) network on which there are several flaws either the signals and the coverage area, or both the slot time and handling the traffic matters.

This final project purposes to present the study and analysis of BTS at the Gajah Mada Park where it is the one of BTS with heavy traffic because its location is in the middle of the city and the local area is used to be the medium of refreshing and sports. Analyzing does concern with the calculation of link budget power and traffic parameters for voice, those are ASR, MHTS, OCC and drop ratio. Result of the computation of the link budget and traffic analysis shows the mean of ASR reaches 84.57%, mean of OCC under 40%, and the drop ratio at 0.9%. These values are far under the measuring rod based on what the operator has determined.