

ABSTRACT

HSDPA is an evolution of the W-CDMA standard and designed to enhance the data transfer rate 5 times higher. The Central Government of Banten Province as an office area that require large data services and high speed to be able to support the activities in the region. In order to serve customers well, it is needed good coverage cell. It is necessary for network planning in an environment using HSDPA technology, so as to improve the quality of data services.

In this final project discussed HSDPA network planning in the Central Government Offices of Banten. In order to determine the existing condition, drive test done using TEMS 8.0.4 software. Parameter to consider is the RSCP, E_c / N_0 , and throughput. Furthermore, the plan includes, link budget, coverage area, the propagation model 231-hatta cost estimates and the number of users needs to be able to know the radius of the site, the number of cells, and the number of node-B so that all users can be covered by the HSDPA network. Planning is also simulated in software atoll to see the area that has been covered and the level of resources received by the user.

In the final stage it can be concluded that this Final results obtained in the HSDPA technology planning in the Central Government of Banten. By calculating the total area of 25.2 km², with 4488 people then this plan produces 14 cells with 5 node-B, with radius 0,974km, and the average RSCP at - 69,88 dBm. The results have been obtained showing better quality than the existing condition obtained when drivetest.

Keyword : **coverage, planning, HSDPA**