

ABSTRACT

Users cellular communication it requires an increased a good quality of network to serve the needs of the users. But there are differences of cellular network quality indoor and outdoor who dominance of the quality indoor less better than with outdoor, as in the case of the building Telkom Applied Science. This is because constructed and material of the building Telkom Applied Science causing the quality of signals indoor less than maximum. So it made a complaints from the users because they felt no satisfied with the services.

To solve this problem need for development IBC (Indoor Building Coverage) in the frequency WCDMA to fix a signal of received at the faculty applied science telkom university .In planning ibc it uses software tems investigation in doing walktest before to know the parameters RSCP , Ec/No and throughput before done the planning, determine the device active and passive in the building with comparing between capacity planning and coverage planning , and did the simulation assignment device active and passive appropriate wiring used with uses software rps 5.4 to know the parameters RSCP and Ec/No in the building after done planning .

By calculating large of the building 2426 m² and the number of users as many as 1718 , then through calculation link a budget using multiwall cost of 231 was obtained the number of antenas that is required in planning is 18 cell/antena .Based on the results simulation obtained RSCP -74 dBm until -77 dBm and obtained the Ec/No -8 dB until -12 dB .By comparing with a standard KPI HCPT operator with simulated results show that the planning according the standard of operators .

Keyword. WCDMA, IBC (Indoor Building Coverage), Walktest Before, Capacity Planning, Coverage Planning