ABSTRACT

Construction of buildings Gateway Apartment Bandung have floors and walls made of concrete so to make the signal quality to be not optimal. This is the reason that make many users feel uncomfortable and satisfied with the existing internet service now.

One solution to overcome the problems in the Bandung Gateway Apartments is to build IBC (Indoor Building Coverage) so as to improve the signal received power HSDPA at Gateway Apartment Bandung g . For IBC planning HSDPA at Gateway Apartments Bandung using software TEMS Investigation 11.0.1 for doing walktest, RPS version 5.4 software to simulate the design so that it can be seen that the signal coverage can cover all parts of the apartment by doing three scenarios omni antenna position laying at Gateway Apartment Bandung building.

By calculating number of users in the building range from 5000 users, the design requires a large system capacity . The link budget calculation results obtained at 18.5353 m cell radius and cell area of 893.25 m2 . So as to producein a 100 cell / antenna in terms of calculation coverage and 99 cell / antenna in terms of calculation capacity . Mapping the primary scrambling code obtained 48 scrambling code corresponding to the number of cells / antenna contained in the apartment building . Therefore, the results can be said to be planning do result in changes RSCP , Ec / No and better throughput than before with the difference RSCP amounted to -35.8784 dBm , Ec / No amounted to -6.105 dB and throughputh amounted to 199.115 Kbps .

Keywords : HSDPA, Walk test, Indoor Building Coverage, Primary Scrambling Code.