## ABSTRACT

Kawasan industri karawang is an area that is included in dense urban areas, looking for the population and number of industrial activity, the needs of network access is increased and cause the signal in this area is often impaired due to overload network traffic in this area. With the existing problems, obtained solutions to build BTS Hotel (microcell) in kawasan industri karawang.

The construction of BTS Hotel height of 20 meters in kawasan industri karawang using fiber optic as the transmission use whipped drill tecnology. Use Fiber optic as the transmission in BTS Hotel get loss of fiber optic 1.60 dB/m.

Based on the simulation results of the test drive, the construction of BTS Hotel earned better coverage area and eliminates dead zones and insufficient coverage and prevent overload of traffic, and it is solution of banning the construction of Conventional BTS (Macrocell) in densely populated areas like in kawasan industri karawang.

Keywords: BTS Hotel, Fiber Optic, Traffic