

## ABSTRACT

Today, the needs for mobile communication service increase tremendously. Mobile phone cell deployment has brought people to be able to communicate with anyone, anytime, and anywhere without any restriction to place and time anymore.

In order to enhance the mobile communication services, the operator as a service provider needs to develop its existing network. The development especially intends to extend the coverage area of service and to enhance the performance of mobile cellular network in this area.

This final project discusses about design analysis for picocell indoor based on traffic needs and propagation on first floor Bandung Super mall (BSM).

The result of this analysis are : traffic demand in first floor Bandung Super Mall (BSM) which is 1,890,225 Erlang and radius which is 14,33 meter. And need eight antenna. The position of antenna (first antenna in Metro department store, second antenna – seventh antenna in corridor, eighth antenna near to doorway).