## **ABSTRACT**

IT Telkom is one of place campus where have broad of area. After had done walk test for XL signal at all IT Telkom area, indicated that signal condition at IT Telkom very bad. This effect condition by shadowing from BTS XL to IT Telkom Building.

For repair it needed something solution so condition signal at IT Telkom become good again. One of that solution is by build IBC. In addition IBC real any other solution that is repeater. Repeater solution was not do because the number of peoples at IT Telkom and site plan building development at IT Telkom. From that blind side, choice of solution for repair condition signal at IT Telkom by IBC building.

For IBC building at IT Telkom use fiber optic network. In addition fiber optic the materials and components consist of BTS equipments, combiner, splitter, tapper, feeder, connector, jumper, antenna indoor, dummy load, master unit, remote unit, etc. The result of IBC planning consist of Drive Test Before, Coverage Commitment, Scematic Diagram, Power Budget Calculation, Layout Antenna, and coverage prediction.

Key point : IBC, 2G, 3G, walk test, coverage commitment, Schematic diagram, power budget calculation, layout antenna and coverage prediction.