

## **ABSTRACT**

To increase quality of indoor cellular receive signal level, each telecommunication operator in Indonesia has to improve indoor signal quality. But new problem came when each operator will build indoor celluler network is uneffectivity and unefficiency both of from internal or external from building owner.

For realizing efficiency and efectivity of indoor access coverage so it need a good multioperator indoor planning which is can be accessed by all operator at the same time by using one distribution antenna system (DAS) network. On this final project author make planning and implementation of inbuilding system coverage multioperator case study Taman Palem Mall at West Jakarta. Planning and implementation consist of coverage commitment, indoor antenna layout, wiring diagram, power link budget, BTS sectorization and coverage prediction. Author analizes traffic demand and BTS channel capacity, link budget, multioperator combiner system, coverage simulation and RF BTS parameter analyzing.

Analization result of planning and implementation show that planning can fill requirement key performance indicators from design aspect, coverage and installation so this planning of inbuilding coverage multioperator can be a guide and technical recommendation for multioperator indoor planning at the next time.