

ABSTRACT

To replace the burned copper network at Tanah Abang market, a new wireless network are going to be build. This network uses DECT (*Digital European Cordless Telephone*) system that provides excellent voice and data services, also mobility.

Based on common wireless system design, there are some steps to be done, such as survey, traffic analysis, propagation analysis, radio subsystem design, radio link design, and evaluation.

The result shows that this wireless network will have 14 cells to serve 6,752 customers which traffic are 200 mE. Antenna sectoring technique with different transmit power will be used to prevent huge intersection between cells.