

ABSTRACT

The border area is a special area, because there will be a conflict between the two areas which are part of the border. One of the border areas in Indonesia is Batam, which is directly adjacent to Singapore. In the telecommunication sector, need a design that telecommunications customers residing in the border areas can still be served and does not interfere with tissue from other areas. And to support foreign travelers also needed better technology.

In this final project calculations LTE planning in Batam and Singapore boundaries in order to serve customers who are crossing the border areas. the design of LTE is using capacity planning and coverage planning.

The parameters analyzed in this research include the number of cells. By using the planning coverage obtained nine cells. While using the obtained five cells capacity planning. Therefore the chosen planning with capacity planning by considering the number of users who are focused on specific areas, namely the path of the ship.

Keywords: LTE, Capacity, Coverage.