

ABSTRAC

The growhting of telecommunications technology currently rapid growth due to the varied needs of the services. Consequently, the cover area required to cover areas around the world. In that regard, and with some of the advantages it has, the selection of appropriate satellite technology perceived as the best solution to support global coverage.

Considering the importance of satellite usage, then many countries in the world put their satellites on orbit geosyncrhonus for communication purposes. This causes the capacity tobecome overcrowded.

ITU as a regulatory union of telecommunications that governs world have been recommended that the normal distance between two adjacent satellites range from 2 – 4 deggre to avoid interference. Therefore focus on this final project to discusses how the close of minimum distance between two satellites with overlapping coverage (satellite Telkom 1 and Telkom 2) with consideration of carriers interferenced. The data carrier is simulated and analyzed is located at transponder carrier Telkom which emit most of 2048 Kbps, 64 Kbps, 512 Kbps, 8448 Kbps and with QPSK modulation and FEC $\frac{3}{4}$, from a wide range of variation in the importance of the difference of carrier interferenced to the minimum acceptable distance is 1.36^0 with the carrier to interference $(C / I) = 22.69903297$ dB ,which means that there are safe or are above the C / N required is 22.62 dB.

Keyword : ASI, Carrier to interference, Topocentris angle, Geocentric angle.