

## ABSTRACT

Adjacent Satellite Interference (ASI) is one of type interference related problems satellite communications able to degrade link quality of satellite communications. ASI problem will only happened when same operation frequency, same polarization, overlapping footprint, and separation satellite too near. One of cause ASI problem is misspointing.

Separation between Satellite Telkom 2 and Thaicom 1 at orbit according to minimum standard given ITU-T that is  $2^\circ$ . Because separation between two satellites very small so that misspointing cause ASI problem. One of them solution to avoid is determination area where if earth station installation in that area so that needed precise accuracy. Determination critical area use method comparison sidelobe level ITU's minimum and sidelobe level real depend on delta azimuth-elevation maximum is topocentric degree.

In final project, determination and perception to area with some value delta azimuth and elevation and analysis impacts generated by delta azimuth and elevation.

This final project shows contour map delta azimuth and elevation very small will cause happening ASI problem so that precise accuracy when pointing antenna earth station to satellite wanted. Observed parameter in this final project base on ITU-T.