## *ABSTRACT*

*Radio LPPL Kandaga is the Soreang Local Public Broadcasting Institution (LPPL) of Bandung Regency that brings a new color to local information problems. But in its operations emitted through AM 810 Khz wave, it has a problem because currently the AM transmitter location is at the LPPL Radio Studio Kandaga page, close to offices, and residential areas. This gives rise to some unfavorable conditions, namely the emergence of the effects of radiation that can interfere with human health and interference with other telecommunications services. So we need a new radio link that can reduce the obstacles that occur at this time.*

*From the current condition of the plan, a tower will be built in a new location for the placement of AM transmitters by using radio link transmission as an access point for carrier signals which will be built at locations where the characteristics of the land are more feasible and safe for the environment. In this final assignment, the planning of Point to Point Link Radio is planned by using several frequency usage scenarios and several location scenarios to be the right choice for the establishment of AM transmitters in the new location based on the field data and device data used.*

*Based on observations and comparisons of the path profile for the best transmission trajectory to connect between Studio Radio LPPL Kandaga existing with latitude -7,025770 and longitude 107,525052 to prospective new AM transmitter locations, the location placement was chosen at TOL SOROJA latitude -7,0168 and longitude 107.53030 with an obstacle assumption of 20 m, which distance is 1.15 km, with the Fresnel area being obtained from the obstacle. In this link budget plan, the best frequency is chosen by using the 335 MHz frequency given a power transmitter of 30 dBm, the RSL (Received Signal Level) value from the calculation and simulation on pathloss design is -18,64485295 dBm with fading margins 62,36 dB and a reliability level greaten than of 99.99% and for the calculation of the area of transmitter coverage of LPLL Kandaga AM Radio with a radius of 31.1515 km so that it can cover the area of Bandung Regency and its surroundings with the recommendation of AM transmitter antenna height of 46.30 m.*



*Keywords: Point To Point Radio Link, Budget Link, Received Signal Level, Fading Margin, Radio LPPL Kandaga*