# *ABSTRACT*

*Shopping building is one of the buildings that have a high enough traffic density, so it needs to hold the renewal of cellular technology. And when it comes to installing a cellular network for the inside of the building, it is something that has become a topic of major concern for vendors or operators. Difficulties in licensing for building a cellular network within the building is inevitable, not to be added with the difficulty of hiring a multioperator antenna. So this Lampsite technology is a solution of the problem in addition to easy installation, in terms of antenna aspect does not need to share with other operators. This final project is done at Trans Studio Mall Bandung. So to overcome these problems, the need for conventional DAS transformation indoor building solution using lampsite technology.*

*Conventional DAS transformation indoor building solution by using lampsite technology in addition to repair existing cellular network, also functions to facilitate the operator in making mobile network in the building. The Final Project has 3 stages of checking the results of cellular networks before being transformed using the lampsite technology, checking the results of cellular networks after being transformed using lampsite technology, and the latter comparing and analyzing the results before being transformed using the lampsite technology with the results after being transformed using the lampsite technology. The parameters to be analyzed are RSL and SIR.*

*The result of conventional DAS transformation of indoor building solution at Trans Studio Mall by using Lampsite technology obtained RSL value for ground floor, 1 and 2 ie -21,63 dBm, -22,62 dBm, and -23,99. For SIR value obtained from the simulation on the ground floor, 1 and 2 that is 15.58 dB, 22.62 dB and 16.31 dB. From the simulation results obtained, conventional DAS transformation indoor building solution using Lampsite technology has fulfilled KPI (Key Performance Indicator) from Telkomsel operator.*



*Keywords: Lampsite, Coverage planning, Capacity Planning, RSL, SIR*