

ABSTRACT

The development of telecommunications networks is rapidly growing. The needs of these smartphone users really want mobile data access that is very much, especially LTE (Long Term Evolution) technology. Due to the COVID-19 outbreak, therefore, it is necessary to take action to prevent further spread, including through WFH (Work From Home). The implementation of WFH, conducted online, caused communication traffic to increase significantly, especially in some areas. The increase in traffic causes overload conditions, especially data needs on 4G LTE network cellular technology. So that efforts are needed to improve network quality so that data service needs are network performance optimization. After optimization, throughput value has increased significantly in the microcell value obtained has met the KPI standards set.

Keywords : 4G LTE, Microcell, Cell Splitting, SINR, RSRP, Throughput.