

## ABSTRACT

In a cellular communication system a lot of problems on third generation technology, one of which is interference. Interference caused by many factors, one of which is the use of the same frequency. Symptoms of interference is difficult not to be associated with mobile telecommunications technology. Strong interference levels can lead to a decrease in QoS (Quality of Service) and will have a major impact on the services provided to the customers, if not quickly addressed would harm the operator and the user.

In the process of handling external interference, the authors use customer complaints as a reference for interference, then continued using RTWP and throughput parameters to determine the quality of the network. Search for the cause of interference using Spectrum Analyzer, Bandpass Filters and Yagi Antenna.

After handling the external interference in Kebon Jati area of Bandung, for 6 cell affected by external interference is back to normal according to the standard KPI PT.Indosat with an average value of RTWP of  $-94.103$  dBm be  $-78.132$  dBm and the average value of the throughput of  $500$  kbit / s be  $1032$  kbit / s, so the quality of the 3G network in the region back to normal.

**Keywords:** Eksternal Interference, RTWP, Throughput