

ABSTRACT

In Buaran Station, every day dispatched 56 Commuter Line trains and 58 Commuter Line trains are arriving. Based on the "Volume Revenue Passenger Commuter Line Buaran Station Data" in October 2014 obtained from PT KCJ there are at least 20 029 people every day are using Commuter Line. And many of them the Commuter Line users are accessing the internet using their smartphones while waiting to arrive at the destination station. Based on results of experiments accessing the internet on the Commuter Line train found the fact that it takes a long time to open a web page, sending chat messages and download speed between Buaran Station to Station Klender Baru too slow, so that can lead to unhappy customers and could result in consumers switching to another mobile operator.

Network performance analysis is based on drive test measurement data. To help analyze the measurement data are used TEMS software. TEMS software is a software that helps engineers to view and process data drive test results.

After optimization of the network, there is an increase in the value of RSCP (received power level) of 5.85 dBm and RSSI value increase of 5.36 dBm. With the increase of RSCP and RSSI like that makes the performance improvement E_c / N_0 (channel quality) of 3.15 dB. With increasing E_c / N_0 cause an increase in throughput performance of 164 kbps to 532 kbps. With a 532 kbps of throughput are in accordance with KPI standards from X operator at 500 kbps of throughput.