

## ABSTRACT

HSDPA Quality of service depends on its performance. Performance Analysis of HSDPA on Excelcomindo Node B, which is Bandung ITB Node B, will be done in this final project. Quality of Service Parameters that affect HSDPA performance are accessibility, retain ability and integrity. These final projects analyze Quality of Service from statistical and drive test data. Several parameters that have been analyzed are throughput and traffic based on KPI, such as RRC Success Packet Data HS Drop Ratio, HS Accessibility including radio parameter RSCP.

Statistical analysis shows that Node B ITB *packet drop* had high value. Sector I had 26.37 %, Sector II had 22.5%, and sector III had 24.44 %. These data indicate a higher value above KPI Standard from operator is  $\leq 2\%$ . Mean of *HS Accessibility success* are 79.72 % on Sector 1, 85.90 % on Sector 2 and 85.80 % on Sector 3. These averages indicate *HS Accessibility success* value below HS Accessibility success target which is  $\geq 98\%$ . Other parameter such as *RRC Success* has a good performance.

Based on drive test measurement, mean of throughput had an expected value which is  $\geq 384$  kbps. When RSCP receiving level decreases, throughput mean value was standard range, which is  $\geq 384$  kbps. These conclude that HSDPA performance was good when receiving radio performance decrease.