

## ABSTRACT

Mobile-8 represents one of cellular operator using previous technology CDMA 2000 1x use CDMA IS-95. CDMA 2000 1x representing development from system of CDMA IS-95 with existence shown by make-up of service in the form of data packet. Component of CDMA 2000 1x almost equal to system of CDMA IS-95, only need enhanced : PDSN ( Packet Data Serving Node), AAA ( Authentication, Authorization, and Accounting), router, firewall, and also Home Agent.

BSC is a part from architecture of network CDMA which accountable for controlling all BTS ( Base Transceiver Station) what reside in its coverage area and also arrange route of data packet from BTS to Packet Data Serving Node (PDSN) or on the contrary and also trafik voice base on TDM from BTS to Mobile Swicthing Centre ( MSC) or on the contrary

Research of network performance of CDMA 2000 1x performed at BSC Mobile-8 Bandung which is handle 17 BTS gone the round of Bandung region and its surroundings. Standard performance parameter of the desired and perceived are Access Failure Rate (*complete call* at direction of originating and Terminating) > 98 %, Dropped Call Ratio < 2 %, Frame Error Rate ( FER < 5 %, and Handoff > 70 %. Pursuant to research result obtained by FER 4,96 %, Dropped Call Ratio 0,54 (originating) and 0,26 (terminating), Handoff > 99 %, and also Complete Call Ratio 50,37 % (originating) and 77,7 % (terminating). There are problems at process access (Access Failure Rate) what because of BTS overlap, for that need made a change by setting BTS.