ABSTRACT

Mobile-8 is a new telecommunications company getting management permit as a mobile cellular operator. Mobile-8 use technology CDMA 2000 1X, which product are Fren. Fren cellular card attend with more clear voice quality and the tired data speed 153,6 kbps and also the broader mobility ability without expense roaming charge.

If MS (Mobile Station) conducting an originating call, then the call flow process is : MS send voice signal to BTS (Base Transceiver Stations) in traffic channel, then BTS send call set up request to BSC (Base Station Controller). There are TCB (Transcoder Bank) block containing vocoder (voice transcoder) channel in BSC. TCB process vocoding voice signal, and send it to MSC (Mobile Switching Center), then forwarded to PSTN.

At begining, the method used in traffic mapping at vocoder channel in BSC (Base Station Controller) is random method, but in this time used mapping method. The different between those method are mapping of MLINK channel in MSC and the number of frame error when searching an empty channel in BSC. This matter determining the level of blocking call.

With used method in this time, we can analyze the performance of mapping method pursuant with data. Then, coducting the examination from influence parameter that is average load. So that we can analyze the vocoder channel in BSC using mapping method are effective or not.

Keywords : CDMA, MS, BTS, BSC, MSC, PSTN, TCB, MLINK, vocoder channel