

## ***ABSTRACT***

Growth which progressively mount communications request of celuler which quickly and practical, claiming existence optimalitation of entire network in improving service quality for every user. Where one of its yardstick is successfulness level in doing process of communications link user network GSM.

Successfull Level in doing call very influenced by process signaling from various element of network GSM. One of them is signaling between BTS with BSC. Geographical condition and also the area topology which do not support for condition LOS ( *Line Of Sight*), enabling use of satellite media as transmission channel between BTS with BSC or referred as BTS IDR ( *Intermmmediate Data Rate*).

Long trajectory factor at This BTS IDR cause to it lower efficacy in occupying available channel *SDCCH* which formulated in *SDSR* Influencing performance of network GSM, where also will show level of user satisfaction at the process of call setup.

This paper analyse *SDSR* which became of network of BTS *IDR* evaluated from facet of signaling *SDCCH* and create a optimation technique which can aplicated in improving *SDSR* by enlarging efficacy opportunity from each signaling flow of process of call setup between BTS with BSC. Where to analyse parameters *SDSR* covering *SD LOSS*, *SD BLOCKING* done pursuant to comparison of measurement data before with measurement data after above method applying

*STTTTELKOM*