

ABSTRACT

One of the favourite service that is given to the customer of traditional SS7 network is SMS. On several operators, the traffic growth of data service is so significant which is not only lead to benefit but also loss; traffic of service it resulted makes traditional SS7 network overloaded. Beside, the fast increasing rate of mobile and even fixed wireless access user also contributes dramatically on SMS traffic volume. Without capacity expansion of SS7 network, data traffic growth will influence the operation of traditional network

One solution provided to solve that problem above is by using Sigtran technology; a standard protocol developed by IETF (International Engineering Task Force) which can send Signaling System No 7 (SS7) traffic over IP network (SS7 over IP). By using this technology, it is hoped that will be able to act as medium to migrate Signaling System No 7 on telecommunication technology of signaling network to IP domain network system

On this minithesis, the application of SS7 over IP, using the M2PA link between SG and GSMSC. The bandwidth it about 715,41 kbps. It is provide to stream of income sms traffic from CDMA network to GSMSC. While the M2PA link between GSMSC and SG at GSM network side, use 1049,96 kbps. The link from CDMA network to SG still use SS7 konventional, it is about 12 SDL. To support this design, we choose Signaling Gateway produced by Intel, Intel Netstructure SS7G22. The alteration on this design result some different on the scenario of SM flow on the system

Keyword : Sigtran, gsmc,sms