

ABSTRACT

VoIP technology already widely used. VoIP technology is predicted to soon replace analog technology, it is reinforced by the emergence of NGN-based VoIP to replace PSTN analog.

Call center is a requirement for intansi or company that wants to give satisfaction to their customers or partners. ITTelkom as one of the educational institutions in Indonesia should have a call center is ready to deal with the change from analog phone to a VoIP-based phone.

Inside there are several VoIP signaling, among others, SIP and H.323, with the assumption that the latest is the best writer chose SIP as the signaling. Another case with signaling, codec selection is very influential on the quality of VoIP, because each codec has different characteristics in different and not necessarily suitable for all networks.

With the above reasons the author conducted an analysis of several codecs ie, GSM, iLBC, and G.711 which will be used in applications VoIP-based Call Center. From the analysis it can be concluded that all codecs have the estimated value of nearly the same MOS, iLBC codec is slightly superior. In addition, iLBC codec not overload the network, because it only uses bandwidth smaller than the other codecs, this character may be in accordance with call center applications on ITTelkom environment.

Keywords: VoIP, Call Center, Codec.