ABSTRACT

TESA 129 or “Telepon Sahabat Anak” is a local toll-free telephone service for children in need of protection, or are in emergency situations, as well as for children who need counseling. TESA was established by Memorandum of three Ministers (Minister of Social Affairs, State Minister of Women Empowerment and the Minister of Communications and Information Technology), PT. Telkom Indonesia and Plan Indonesia. On the basis of mutual agreement this service called “Telepon Sahabat Anak” or TESA 129, and housed at the Call Centre Ministry of Communications and Information Technology. TESA 129 call centers use five PSTN line connected to an IP PBX using FXO ports. Five incoming PSTN line will use one extension number that is 129. IP PBX is a server connected to the five operators using switches. The data taken in this call centre system including delay, jitter, packet loss, and throughput are used to determine the QoS of the call center. Results obtained from the VoIP server performance measurement namely delay and jitter values are not much different from the range 19 ms. Packet loss value measured at 0% and the throughput value measured here is directly proportional to the number of active operators. For the results obtained from performance measurement operator that is the value of delay are about 19 ms and jitter ranges between 15 ms-19 ms. Packet loss value measured at 0% and the throughput values measured here that the operator 101 has a level acceptance of the best bits.

Keyword : VoIP, call centre, IP PBX, FXO, IP Phone.