

ABSTRACT

The bandwidth in a communication channel is estimated by considering the occurrence of a retransmission timeout.

A mobile terminal obtains a measurement value of a round-trip time in a communication channel used for communication with a server and a measurement value of a packet loss ratio in the communication channel (S502 and S503). Then, the mobile terminal determines whether or not a retransmission timeout is occurring in the server (S504, S505, and S506). If a retransmission timeout is occurring in the server, the mobile terminal calculates an estimate value of the bandwidth in the communication channel by using a special throughput equation including a timeout time (S507). On the other hand, if a retransmission timeout is not occurring in the server, the mobile terminal calculates an estimate value of the bandwidth by using a normal throughput equation which does not include a timeout time.