International J. of Math. Sci. & Engg. Appls. (IJMSEA)
ISSN 0973-9424, Vol. 4 No. IV (October, 2010), pp. 335-353

ENHANCEMENT OF TRAFFIC IN TDMA BY DELAYING VOICE END USER

G. N. PUROHIT AND GEETANJALI SHARMA

Abstract

Many schemes have been proposed for co-existence and fair sharing of the available bandwidth between circuit switched voice and packetized data traffic. One popular scheme is based on delaying the last incoming acceptable voice call for a random amount of time and utilizing this time to service the accumulated data traffic to prevent excessive queuing delay in delivering the data traffic. This scheme is extended by delaying more than one call. In this paper we present a simple scheme delay of voice end user to the new originating calls over handoff calls in a two-dimensional traffic model. We calculate the forced termination probability of handoff calls and blocking probability of new originating calls. In this proposed model, our aim is to decrease the blocking probability and forced termination probability. Furthermore, the results are compared with the existing results.

Key Words: Delay of Voice End-User, Hando_ calls, newly originating calls, blocking probability, forced termination probability.