

A novel traffic control in ATM-based wireless networks

Abstract

In this paper, we investigate the performance of a new traffic control scheme in a hybrid CDMA/TDMA multiuser receiver system. The ATM traffic cells are distributed between the two TDMA slots according to the traffic statistical changes, whereby the cells received in the first slot shall be detected using the decorrelator multiuser receiver. On the other hand, the conventional (single-user) receiver is used to detect the cells received during the second slot. The proposed approach shows less sensitivity in terms of BER to the traffic changes compared with the conventional system