
Erratum

For the article, "On Optimal Design of Multitier Wireless Cellular Systems" (*IEEE Communications Magazine*, vol. 35, no. 2, February 1997, pp. 88-93), the authors wish to add the following clarifications:

A user attempts to connect by requesting a channel. While in connection, the status of the user alternates between the "busy" and the "idle" states. We label the fraction of the time the user spends in the "busy" state as $1/\eta$. In this paper, we assumed that $\eta = 9$.

Upon handoff of a call, the system attempts to identify a channel that is not being used at that time. If one is available, the call becomes associated with that channel for the duration which is the shorter between the following two times: the residual call duration and the time till the next handoff. If no channel is available at the handoff instance (i.e., at least one user is in the busy state on each one the channels) the call is declared dropped. Note that a channel can, therefore, statistically multiplex a number of users. The arbitration of the access to a channel by the users associated with the channel is performed by the base station. (This access control mechanism was inspired by the PRMA protocol.) Upon call arrival, if there is no available channel in the current cell, the call is considered blocked.

Thus the actual holding time of a channel is *approximated* by Equation (9) in the article:

$$\mu_i^{total} = \mu_i(1 + \eta h_i) , \text{ with } \eta = 9.$$