Abstract

Latest wireless network technologies facing network capacity issue & not able to achieve its goal of delivering higher data rate due to poor indoor coverage issue. Femtocells are less expensive alternative for achieving high data rate and better indoor coverage. Femtocells are home base stations placed near to subscriber which supplements existing macrocell network. It normally has three different access modes called Open access, closed access & hybrid access mode. Call Admission control (CAC) in integrated macrocell-femtocell need special attention due to these access modes & used to ensure better quality of service for mobile subscribers. In this article, we will study registered users handoff call prioritization CAC policy. The proposed policy considers hybrid access mode for femtocell network and gives high priority to femtocell register user. It uses guard or reserved channel mechanism & buffer concept for call admission control. Comparison of handoff prioritized scheme (HPS) and non-prioritized schemes (NPS) & benefits of handover prioritized scheme over non-prioritized schemes are highlighted in this article.
References

7. Hamid Beigy, M. R. Meybodi, “A Two-threshold guard channel scheme for minimizing blocking probability in communication networks”, Received: March 4, 2003 – Accepted in Revised Form: June 10, 2004
14. Tijane Fatima Zohra, Badri Saadane Rachid, Mohammed Wahbi and Mbarki Samir, “Call Admission Control Scheme and Handover Management in LTE Femtocell-Macrocell Integrated Networks”, Computer and Information Science; Vol. 8, No. 1; 2015
16. Hamid Beigy, M. R. Meybodi, “A Two-threshold guard channel scheme for minimizing blocking probability in communication networks”, Received: March 4, 2003 – Accepted in Revised Form: June 10, 2004
17. Georgios I. Tsortopoulos, Dimitrios G. Stratogiannis and Eirini Eleni Tsortopoulou, “Call Admission Control in Mobile and Wireless Network” National Technical University of Athens Greece, Published on 2010-01-01
Handoff Prioritize Call Admission Control Policy for Integrated Macrocell-Femtocell Network

Index Terms

Computer Science  Wireless

Keywords

Call Admission Control, Handover Management, Femtocell network, Femtocell Access Modes.