第三代及系統後世代之無線通訊系統

動態品質通訊交遞演算法

研究生：蔡明原　　指導教授：黃經堯 博士

國立交通大學

電子工程學系　電子研究所碩士班

摘要

如何成功地完成移動中所產生的通訊聯結交遞程序，並且以最有效的系統資源來處理通訊連結交遞，是任何無線行動通訊系統的核心重點。因此，我們針對無線通訊聯結的交遞環境，並以通訊連結品質及系統雜訊干擾間的非線性自然特性為基礎，在 CDMA『分碼多工接取技術』系統下，開發『動態通訊品質多重斜率通訊交遞演算法則』，進行系統模擬驗證，分析新演算法的運作效能。

Dynamic Quality-Based Handoff Algorithms in Third Generation and Beyond Wireless Communication Systems

Student: MingYuan Tsai Advisor: Dr. ChingYao Huang

Department of Electronics Engineering & Institute of Electronics

National Chiao-Tung University, HsinChu, 2004

Abstract

In a wireless communication system, there exits a non-linear relationship among the connection quality, the overall interference level, and the required resources. To meet the handoff design challenges in 3G systems, in this thesis we demonstrate the need of having a flexible handoff control algorithm. The proposed multi-slope quality-based handoff control algorithms will be evaluated against other existing 2G/3G handoff algorithms on the performance of the connection quality, the forward-link power budget, the channel element usage, and the handoff frequency.

Acknowledgements

I would like to acknowledge the enormous help given to me in working on the thesis. I would like to thank ChangJui Chiang and Hong Hwi Ruan who are both junior members in my lab. I appreciate all members in my lab who are willing to discuss with me when I am confused in studying. Also specially thanks to ChingYao Huang, my advisor, for advising me and sharing his experience to me. As always, there is great appreciation to my family, who totally support me not only in the finance but also in my living attitude.

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