

论文

基于GoS的功率控制WCDMA系统呼叫准入控制算法

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摘要

该文提出的基于GoS的呼叫准入控制(GoS-CAC)算法的判决门限综合了多种因素:系统负荷、各业务服务质量(QoS)要求、信道质量、干扰水平、系统服务等级(GoS)以及用户的切换等等。GoS-CAC算法与功率/数据速率调节机制巧妙结合,具有判决速度快、精度高、门限自适应和简单易行等特点。仿真结果表明,与传统CAC算法相比,GoS-CAC算法的切换用户业务阻塞性能优约10%,系统GoS优50%左右,而中断性能优57%以上。

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GoS-Based Call Admission Control Algorithm for Power Controlled WCDMA Networks

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Abstract

The proposed Grade of Service based Call Admission Control (GoS-CAC) algorithm operates a threshold comparison, which integrates many factors that affect the decision accuracy of a CAC scheme such as system traffic loads, Quality of Service (QoS) requirements, channel quality, interference level, system GoS and user handoff, etc. The GoS-CAC algorithm cooperates subtly with a power/data rate adjustment scheme making able fast, accurate, adaptive threshold, simple and feasible decision-making about incoming calls. Simulation results show that the proposed algorithm outperforms traditional CAC schemes about 10%, 50% and above 57% in terms of handoff service blocking probability, system GoS and overall system dropping probability, respectively.

Key words [WCDMA](#) [Call admission control](#) [Power control](#) [Handoff](#) [Adaptation](#)

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