سامية محمد مصطفى

شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

سامية محمد مصطفى

شبكة المعلومات الجامعية

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

سامية محمد مصطفى

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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سامية محمد مصطفى

بالرسالة صفحات لم ترد بالأصل

Tanta University
Faculty of Engineering
Dept. of Electronics and
Electrical Communications Eng.

Channel Assignment in Mobile Radio Networks

A thesis Submitted in Partial Fulfillment for the Degree of

Master of Science

By

Heba A. El-khobby
(B. Sc)

Supervised by

Prof. Mostafa M. Abdel-Nabi
Dept. of Electronics and Electrical
Communication Eng.
Faculty of Eng., Tanta University

Prof. Mostafa A. Nofal
Dept. of Electronics and Comm. Engineering
Faculty of Electronic Eng.
Menoufia University

Dr. Salah A. Khamis
Dept. of Electronics and Electrical
Communication Eng.
Faculty of Eng., Tanta University

B

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Faculty of Engineering
Dept. of Electronics and
Electrical Communications Eng.

Thesis : Channel Assignment in Mobile Radio Networks

Student : Eng. Heba Ali El-Khobby

Degree : Master of Electric Engineering (Electronics and Electrical Communication Eng.)

APPROVED BY:

Prof. Ibrahim M. El-Dokany
El-Dokany

Dept. of Electronics and Electrical
Communication Eng.
Faculty of Engineering
Menoufia University

Prof. Said M. Elnoubi

Dept. of Electronics and Electrical
Communication Engineering
Faculty of Engineering
Alexandria University

Dr. Mohammed E. Nasr
M. Nasr

Dept. of Electronics and Electrical
Communication Eng.
Faculty of Eng., Tanta University

Tanta University
Faculty of Engineering
Dept. of Electronics and
Electrical Communications Eng.

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Supervisors

Prof. Mostafa Abdel-Nabi

Dept. of Electronics and Electrical Communication Eng.
Faculty of Engineering
Tanta University

Prof. Mostafa Nofal

Dept. of Electronics and Communication Engineering
Faculty of Electronic Eng.
Menoufia University

Dr. Salah Khamis

Dept. of Electronics and Electrical Communication Engineering
Faculty of Engineering
Tanta University

To

My parents, my brothers, and my great pioneer Prof. Mostafa Nofal.

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Abstract

Overlapping coverage of nearby base stations is exploited in order to improve the performance of microcellular mobile radio networks. A teletraffic model is developed and the performance is analyzed for the network scenarios when overlapping coverage is and is not utilized. Furthermore, handover priority policies are considered in the analysis. The grade of service of the network is gauged in terms of the estimation of call blocking rate as well as handover failure probability. Numerical results are obtained through analytical as well as simulation modeling as possible and good agreement is achieved. The results dictate the exploitation of the overlapping coverage as alternative routes in order to improve the network performance and increase its capacity.

TABLE OF CONTENTS