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شبكة المعلومات الحامعية

# بسم الله الرحمن الرحيم



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شبكة العلومات الحامعية



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





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# جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

# قسو

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



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تحفظ هذه الأقراص المدمجة يعيدا عن الغيار



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شبكة المعلومات الحامعية



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

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#### To

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

#### **NOTE ON PUBLICATION**

Paper title: "Teletraffic performance analysis of mobile radio networks with overlapping microocells"

Authors: Salah Khamis, and Heba El-Khobby

A paper is accepted for publication in the proceeding of Alexandria Engineering Journal.

A paper is accepted in the proceeding of the 10th International Conference on Aerospace Sciences & Aviation Technology, Military Technical College, Kobry El-Kobbah, Cairo, Egypt, May 13-15, 2003.

#### **Acknowledgements**

First of all, priase and thanks to God for every thing occured or to be occured in my life.

To all who helped me directly or indirectly in bringing this thesis to light, I send my great appreciation and gratitude to all of them, with special regards to:

Prof. Mostafa Abdel-Nabi, for his guidance, indispensable help and continuos encouragement.

**Prof.** Mostafa Nofal, who taught, helped and encouraged me a lot through out the days of work on the thesis, until I reached the desired standard. I can not fulfill him his true rewards. It has been a privilege to work close to them. He strongly supported me, spending very much time supervising me step by step, and overcoming any obstacles that faced me.

Dr. Salah Khamis, for his generous experience, helpful advises and guiding suggestions.

All thanks to their great support and careful valuable revision of the thesis.

#### **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.

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