

3G NETWORK PLANNING

Kieu Manh Tuan

Course and Major: QH2007I/CQ-D, Electronics and Telecommunications Technology

Abstract:

Techniques of WCDMA is to search for many years, has become popular and are the foundation of the next generation mobile communication 3G. WCDMA has become the target oriented field of mobile communications in the world. UMTS model is a standard of mobile information systems using the 3rd generation WCDMA technology as the background.

This thesis about the 3G network planning methods. Planning coverage and capacity. Fundamental task in 3G network planning process is to estimate total traffic in the cell. Planning coverage is usually based on some statistical parameters related to the radius of coverage, throughput ... Before, throughput usually used Erlang-B formula to estimate and about theoretical, Erlang-B formula only used for the channel network with major voice service. coverage of UMTS network is also dependent on the parameters radius and throughput .. but the UMTS network with data services is considerably if the throughput is estimated based on Erlang-B formula may lack precise, need consider the other direction. The final section focuses on the calculating in UMTS network planning process.

Keywords: *3G, network planning.*