An Adaptive Network Dimensioning Approach For The Universal Mobile Telecommunication Systems (UMTS)

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Telecommunication carriers and Internet service providers (ISPs) are developing new Cellular services to support the mobile customer. Cellular technologies continue to evolve very faster and supported by new technologies in the Third Generation of Cellular Systems (3G) and the Fourth Generation of Cellular Systems (4G) such as Universal Mobile Telecommunications System (UMTS).

This paper presents an empirical study to adaptively designing a UMTS based Cellular Systems considering the users traffic types and densities. Experimental results were conducted and promising results were obtained.

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