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The Implementation of Third Generation (3G) in Telekom Malaysia

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ABSTRACT

The mobile telecommunications industry has enjoyed an outstanding success over the last ten years and hopes to prolong it well into the future through the introduction of a third generation, Universal Mobile Telecommunication System (UMTS) - or 3G for short. 3G represent the migration from a telephony-centric to a data-dominated networking platform promising new multimedia and other, higher bandwidth wireless broadband service offerings. Third Generation (3G) mobile devices and services will transform wireless communications into on-line, real-time connectivity and will allow an individual to have immediate access to location-specific services that offer information on demand. The scope of the study revolves around several aspects of 3G technology. There are several aspects that are examined in this study: Mobile Communication Principles, Circuit and Packet Switching Principles, 3G Network Protocol, 3G Network Architecture/Configuration, 3G Quality of Service, 3G Securities, 3G Deployment around the world, various 3G Services that can be offered, various type of 3G Devices, 3G Benefits and the analysis of the new 3G setup in Telekom Malaysia in theory and practice. Since, the 3G technology is new, from my observation, there is no standard that governs the structure and application of 3G in Malaysia specifically. Hopefully, this paper will become an important reference and guidelines for telecommunication companies in Malaysia in general and specifically to Telekom Malaysia Berhad. Therefore, the implementation of 3G in Malaysia generally, will not only provide better telecommunication services to subscribers and return of investment to the company, indirectly this will also contribute to the development of telecommunication industry in Malaysia and support our country's economic growth.