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ABSTRACT

COMPARATIVE STUDY OF WIRELESS NETWORK PERFORMANCE  
STANDARDS TO STANDARDS IEEE 802.11n, IEEE 802.11g, IEEE 802.11b  
AND STANDARDS

By

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*The continued development of technology today, followed by developments in information technology, the use of cables for connecting personal computers (PCs), modems and printers in order to form a local network that popular with the term Local Area Network (LAN) turns out to need high cost. From research and development carried out by experts have now found a solution called a wireless LAN. In 1997, the IEEE took the 802.11 as the first wireless LAN international standard. Currently there are four variations of 802.11 standards, as follows: 802.11a, 802.11b, 802.11g, and 802.11n. IEEE 802.11n is a wireless networking standard to improve throughput over previous standards, such as 802.11b and 802.11g with an increased maximum rate. However, in order to prove the higher performance of the IEEE 802.11n standard we need to do an analysis of the standard network performance when run concurrently with standard IEEE 802.11b or IEEE 802.11g standards, since the number of users that use 802.11b and 802.11g technology are still significant.*

*Research is performed by measuring the throughput, delay and jitter when the IEEE 802.11n standard is run with the IEEE 802.11n, IEEE 802.11n standard is run with the IEEE 802.11b, IEEE 802.11n standard is run with IEEE 802.11g.*

*The use of IEEE 802.11n technology to the IEEE 802.11b and IEEE 802.11g wireless network standards can affect the value of throughput, jitter, and delay as the QOS network.*

*Keywords: Wireless, throughput, delay, jitter.*