

## ABSTRACT

Various advances have occurred in the world of telecommunications in the past few decades, one of them is a network technology. To build a LAN network, a telecommunication engineer can use the wired usage method, wireless usage method, or both. The author conducted the case study of QoS parameter analysis in Telecommunication Engineering Academy of Sandhy Putra Jakarta due to the instability of internet connection when students use the internet services provided by their college. *Request Time Out* (RTO) indicator often shows up when connection instability occurred resulting in data service request delays. From the data obtained for the results of network analysis using LAN cables, it can be concluded that the best time to conduct the test is during the rush hours of users accessing the internet both using and without using *bandwidth management* method. It is due to reason of 1 client was in poor condition which is not in accordance with TIPHON standard. and when quiet testing 3 and Test 4 is in bad condition because of the three parameters do not comply with the TIPHON standard. The research results showed that of analyzes using wireless networks, it can be concluded that in general it is in accordance with the TIPHON standard, only 1 client in test 4 that is in poor condition does not comply with the TIPHON standard. So the use of Wireless transmission media is better than the use of LAN cable transmission media.

**Keywords: QoS, Bandwidth Management, Wireshark, Video Streaming.**