## **Abstract**

Long-term Evolution (LTE) networks dominate the Indonesian telecommunications network over the times, according to the Communications and Information Technology, the development is up to 90%. devices that support wireless networks such as Wi-Fi technology with the 802.11 standard increase from the number of users, base stations and traffic. The use of Multipath Transport Control Protocol (MP-TCP) can increase throughput better than single path Transmission Control Protocol (TCP). MPTCP compliant devices make it possible to maximize network utility by up to 60% by using this interface. This study discusses the scalability and performance of congestion control algorithms balance linked increase (BALIA) and linked increase (LIA) on Long-term Evolution (LTE) and wifi networks on mobile devices with simple topology using MP-TCP congestion control. The parameter analyzed is throughput. Mininetwifi can simulate SDWN network. From the test results, it can be seen that BALIA can increase throughput by 206% or two times greater than LIA.

Keywords: multipath, multihoming, performace, LTE, 802.11