ABSTRACT

Modern battlefields are complex network scenarios that cover different

network domains. These domains include different military entities such as allied

forces, movable objects, and so on. Therefore we need a system that can be used to

communicate between military elements ranging from voice communication to

controlling the running of an ongoing military operation.

The purpose of this study is to design and analyze the best communication

networks to be implemented in the military field. Where the field is a vital field that

requires connectivity and a stable and real-time network. Through this research,

the authors hope to create a communication system that can be utilized in various

regions and can provide information about the fighting that is going on through the

design of the Battlefield Management System network using the Multi Hop Wireless

Network. It is expected that this Battlefield Management System can meet the need

for information exchange, which is not only about voice communication between

military bases and supporting entities, but can also know what happens in a battle.

Keywords: *multi-hop*, *wireless network*, *ad hoc*, *BMS*, *mobile*.