



# AIUB DSpace Publication Details

**Title:** Issues of Long-hop and Short-hop Routing in Mobile Ad Hoc Networks: A Comprehensive Study.

---

**Author(s) Name:** Mohammed Tarique, M Anwar Hossain, Rumana Islam, C Akram Hossain

---

**Contact Email(s):** chowdhury.akram@aiub.edu

---

**Published Journal Name:** Netw. Protoc. Algorithms

---

**Type of Publication:** Journal

---

**Volume:** 2 Issue 2

---

**Publisher:** N/A

---

**Publication Date:** 2010/7

---

**ISSN:** 1943-3581

---

**DOI:** 10.5296/npa.v2i2.430

---

**URL:** [https://www.researchgate.net/profile/Mohammed-Tarique-2/publication/266219909\\_Issues\\_of\\_Long-Hop\\_and\\_Short-Hop\\_Routing\\_in\\_Mobile\\_Ad\\_Hoc\\_Networks\\_A\\_Comprehensive\\_Study/links/555d822b08ae6f4dcc8c39b4/Issues-of-Long-Hop-and-Short-Hop-Routing-in-Mobile-Ad-Hoc-Networks-A-Comprehensive-Study.pdf](https://www.researchgate.net/profile/Mohammed-Tarique-2/publication/266219909_Issues_of_Long-Hop_and_Short-Hop_Routing_in_Mobile_Ad_Hoc_Networks_A_Comprehensive_Study/links/555d822b08ae6f4dcc8c39b4/Issues-of-Long-Hop-and-Short-Hop-Routing-in-Mobile-Ad-Hoc-Networks-A-Comprehensive-Study.pdf)

---

**Other Related Info.:** 107-131

---



## AIUB DSpace Publication Details

### Abstract:

One of the fundamental problems of Mobile Ad hoc Networks (MANETs) is to determine whether it is advantageous to route packet over many short-hops or a few long-hops. Short-hop and long-hop routing issues have been investigated in the literatures since the early days of MANETs. Maximization of network throughput was the main focus of these works. But the maximization of network throughput is not the only issue of MANETs. There are other important issues of concern including overhead control packets, energy consumption, connectivity, shadowing effects and packet delay. All these issues have been investigated in this paper. Network Simulator (NS-2) has been used to create and simulate MANETs to investigate these issues. The main objectives of this paper are as follows (1) to find the merits and de-merits of short-hop and long-hop routing schemes,(2) to come up with a guideline so that one can choose an appropriate routing scheme for MANETs, and (3) to open up new area of researches for further investigations on the issues discussed in this paper.