

Internet is a daily tool for almost everyone. Technology provides us smaller portable devices with astonishing communication capabilities and enough battery lifetime. The situation has increased the demand of usage of mobile adhoc networks (MANETs) as access networks to Internet, as well as isolated networks. Routing is one of the most significant problems of the MANET's networks. Transport is too. AODV (Ad-Hoc On-demand Distance Vector) is one of the most relevant current routing protocols for ad-hoc networks. TCP is a modification of TCP adapted to MANETs. This document studies and quantifies the effect that AODV protocol causes in a real ad-hoc network performance, characterizing the different parameters of the network depending of the AODV configuration. The target parameters are bandwidth, latency, energy cost and reactivity after topology changes.

Key words: MANET, AODV, ATCP, routing protocol, transport protocol, real network measurements.