



**RESEARCH ARTICLE**

# RELATIVE INVESTIGATION OF OLSR, TORA AND GRP ROUTING PROTOCOL USING OPNET

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***Abstract— A MANET network is a group of sensor nodes with wireless communication competency. Each node acts as router in the network. There are a number of issues which affect the reliability of Ad-hoc networks and limit their viability for different scenarios; lack of centralized structure within MANET requires that each individual node must act as a router and is responsible for performing packet routing tasks; this is done using one or more common routing protocols across the MANET therefore the routing in MANETs is a key issue. The node mobility is the major reason behind changing topology. In this paper routing protocols TORA, OLSR and GRP for mobile ad hoc network are compared on the basis of delay, network load and throughput. This comparative study shows that OLSR outperforms the rest of three protocols in terms of delay, network load and throughput.***

***Key Terms: - MANET; OPNET; TORA; GRP; OSLR; LOAD; THROUGHPUT; DELAY***

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Full Text: <http://www.ijcsmc.com/docs/papers/July2013/V2I7201363.pdf>