International Journal of Computer Networking,
Wireless and Mobile Communications (IJCNWMC)
ISSN(P): 2250-1568; ISSN(E): 2278-9448
Vol. 6, Issue 2, Apr 2016, 1-12

ROUTING PROTOCOLS IN WIRELESS SENSOR NETWORKS: A SURVEY

MOVVA PAVANI[1] & P. TRINATHA RAO[2]

[1]*Department of ECE, Faculty of Science & Technology, IFHE University, Hyderabad, Telangana, India*

[2]*Department of ECE, GITAM School of Technology, GITAM University, Hyderabad, Telangana, India*

ABSTRACT

Wireless Sensor Networks (WSNs) consist of a large number of sensor nodes capable of sensing, computation and communications. WSNs have become an effective and attractive choice for various applications because of low cost, ease of deployment, adhoc and multifunctional capabilities. Various protocols have specially designed for the Wireless Sensor Networks in terms of routing, power management and data dissemination. The focus of the various routing protocols might differ depending on the application and network architecture. In the proposed paper, an attempt is made to present the state-of-the-art routing techniques and the design challenges for various routing protocols in WSNs. The main focus is to discuss and evaluate the performance of different routing protocols with the help of important metrics and parameters. On the basis of simulated results from empirical study and literature review recommendations are made for better selection of protocol for the given design conditions.

KEYWORDS: WSN, Routing Protocols, Sensors, Energy Efficiency, Clustering, Wireless Communications

Received: Nov 24, 2015**; Accepted:** Feb 15, 2016**; Published:** Feb 20, 2016; **Paper Id.:** IJCNWMCAPR20161

Original Article