

## **141. ANALYSIS OF CO-OPERATIVE PACKET DELIVERY IN HYBRID WIRELESS MOBILE NETWORKS**

S.Prasitha ME (Communication Systems), B.Lavenya B.Lavenya(Asst Professor)

Department of ECE,AIHT, Anna University,Chennai, India

ahtisarp11@gmail.com, lavenya2305@gmail.com

Wireless network plays a vital role in delivering the packets to various destinations. The concept of co-operative packet delivery used in various communications such as mobile node to mobile node and base station to mobile nodes. The base station is acts as a traffic signal in order to provide communication between the nodes or vehicles. The data is transmitted to the nodes where the signals are available. The solution based on the co-operative packet delivery in hybrid wireless mobile network it reduces the delay of packet delivery delay. The solution is based on social network analysis. To identify which mobile node have strengthen to help other mobile node for data delivery in the same group or coalition. It is used to reduce the computational complexity of coalitional formation. The coalition formation introduces two solutions i.e. coalition structure and core. The distributed coalition formation algorithm which assures that stable coalitional structures can be attained. The payoffs are attained from the bargaining game are used to determine the solution of the coalition game in terms of stable coalition structure. A distributed algorithm is used to attain the solution of coalition game and a Markov chain based analysis is presented to evaluate the stable coalition structures attained from a distributed algorithm. A bargaining game is used to find the probabilities in the packet forwarding. At the end of the conclusion reduce the average delivery delay and transmission cost of the packet. The group formation will achieve higher performance when compare to mobile node acting individually. Keywords—Hybrid wireless network, social network analysis, co-operative packet delivery, coalition game, bargaining game, average delivery delay and transmission cost

*Journal of Science and Innovative Engineering & Technology*