CHAPTER 7

APPLICATIONS

7.1 APPLICATION OF MULTIPATH SWITCHING ZONE TRAVERSAL (MSZT)

7.1.1 Provincial level

Provincial level is best suited for multipath routing. Adhoc networks can be established an instant connectivity between the multimedia networks using the personal laptops, palmtops or notebook pc. This application is used for video conferencing.

7.1.2 Disaster relief

This specific application is well suited for multipath routing concept. This protocol works well for disaster like flood, earth quake, etc. Multipath routing protocol helps in rescue operation. All the gathered information can take a multipath forwarding to reach the exact destination.

Emergency response for chemical technology: MSZT is suited for emergency response application when the threshold level of the chemical goes high and emergency alarm signal will be sent to avoid chemical explosion.
7.2 APPLICATIONS OF ZONE PARTITION ROUTING BASED ON ONE-HOP VARIANT (ZPROHP)

7.2.1 Tracking

Tracking is a well known application suited ZPROHP approach. Vehicles are monitored in the particular zone using the global position system at regular intervals. All the gathered information is forwarded to the sink node using this algorithm in an efficient manner.

7.2.2 Emergency response

ZPROHP approach is used to find solution to emergency applications. Emergency response includes the rescue operation of the people. Sometime it may need to take place under damaged communications. The nodes which uses GPS in every zone, will identify the people in need of rescue.

7.2.3 Military Environment

ZPROHP approach is suited for Military environment. Here the soldiers can perform communication from the common place tower. Also this technology helps in maintaining information among the soldiers. This communication is performed in the specific zone and often uses global positioning system to keep track of the soldier’s activity and pass those information to the end node or sink.
7.3 APPLICATIONS OF CLUSTER DIFFERENTIAL ZONE PARTITIONING (CDZP) APPROACH

7.3.1 Personal area networking:

CDZP routing is well suited for personal area networks. PAN networking is a short range communication networking. Users are grouped as clusters with the cluster heads in the middle. All the users are connected to the cluster head and with the intranet communication, two or more cluster heads can communicate with each other in order to share information.

7.3.2 Collaborative work:

The collaborative work is often used for business environment. Sometimes, the necessity arises to interact with the outside environment than the inside environment. For such communications it is not possible to have outside meeting directly at all time to communicate and share information. All the nodes are formed as clusters which follows the CDZP to share information.

7.3.3 Real time productivity automation:

CDZP algorithm is suited for red time productivity. One of the real time automation includes juice bottle filling. If the juice exceeds the threshold limit, then monitors or client sends an error report to the heads. Product manufacturing at different places are reported to the cluster heads and these cluster heads in turn communicate with the external node.