ADHOC NETWORK COMMERCIAL APPLICATIONS

With the large number of small size gadgets also as advancement in remote communication, the ad hoc networking is picking up exertion with the large number of far reaching applications. Ad hoc networking can be utilized whenever, any place with restricted or then again no correspondence framework. The first framework is extravagant or irritating to utilize. The ad hoc network architecture can be utilized continuous business applications, corporate organizations to expand the efficiency and benefit.

The ad hoc networks can be arranged by their application as :

- Mobile Ad hoc Network (MANET) which is a self-organizing infrastructure less system of cell phones communicated through remote connection.
- Vehicular Ad hoc Network (VANET) utilizes vehicles as nodes in a network to make a mobile network.
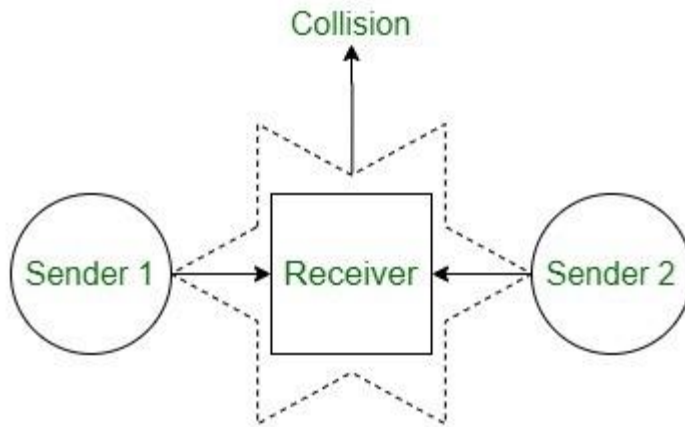- Wireless Sensor Network (WSN) comprises of independent sensors to control the ecological activities.

Usages of Ad-Hoc network :

- **Military –** An ad hoc networking will give access to the army to maintain an network among all the soldiers, vehicles and headquarters.
- **Personal area network (PAN) –** It is a short range, local network where each nodes are usually related with a given range.
- **Crisis Condition –** Because it is fairly easy to create it can be used in time of crisis to send emergency signals.
- **Medical Application –** It can use to monitor patient.
  - **Environmental Application –** It can be used to check weather condition, forest fire, tsunami etc.

Problems : There are several problems that Ad Hoc network faces –

- Limited wireless range

- Packet losses

- Energy conservation because of limited batteries.

- Low-quality communications.

- Hidden-node problem creates collision if two device try to communicate with same

receiver.

- Exposed-node problem.

- Lack of security

- Addressing and service discovery

- Multicasting

- Deployment Considerations