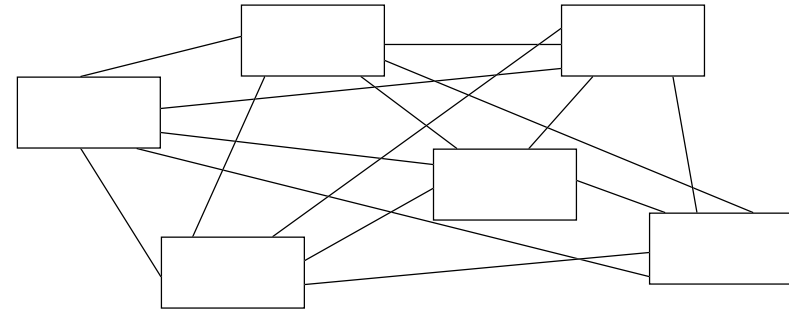# Other Network Topologies

- Fully connected networks

- Hubnet

- Satellite/Microwave networks

- Radio networks
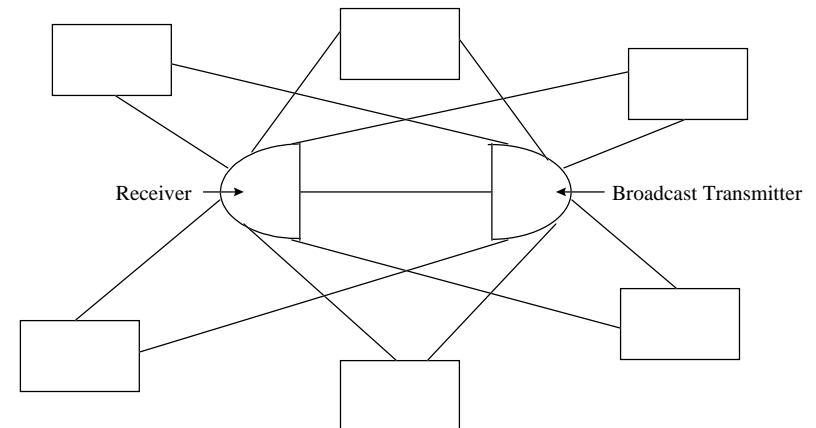
Fully Connected Network

Hubnet

- Hub in two parts (transmit and receive)

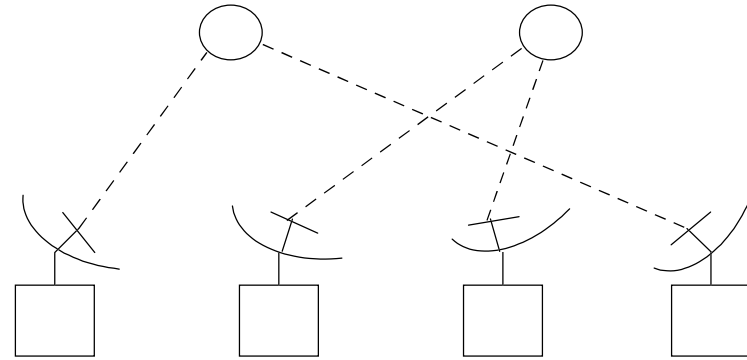- All equipment connected to both parts

- Broadcast

Hubnet

Receiver →   ← Broadcast Transmitter

Satellite Networks

- Equipment connected by microwave beams

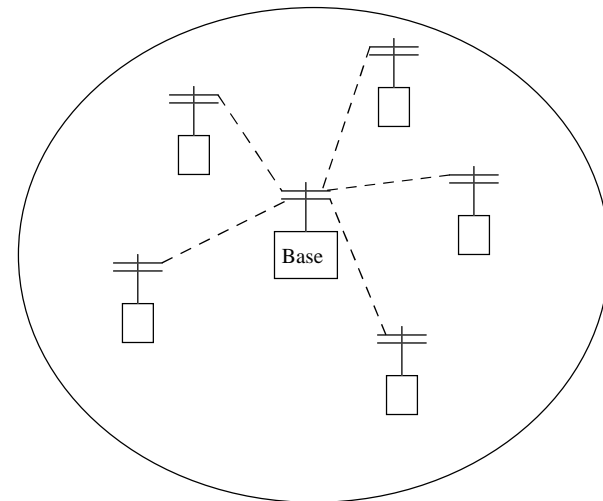- Data modulated onto the microwave beam

Satellite Network

Radio Networks

- Equipment connected by radio waves

- Data modulated onto radio waves

Radio Network

Media Access

- LAN users share common media

- Need to decide who has 'right of way'

Carrier Sense Multiple Access (CSMA)

1 Look to see if the media is in use, if so back to 1

2 Transmit information

3 Back to 1

CSMA with Collision Detection (CSMA/CD)

1 Look to see if the media is in use, if so back to 1

2 Transmit data

3 Look to see if a collision has occurred, if so

transmit JAM and delay

4 Go back to 1

Token Passing

- Logical ring links all DTEs connected to media

- Token passed around the ring

- Kept by a DTE that wishes to transmit data

- Token passed on when data transmitted

Slotted Systems

- Ring initialised to contain a fixed no. of bits

- Ring split into slots of a fixed no. of bits

- DTEs wait for an empty slot and put data in for

  transmission