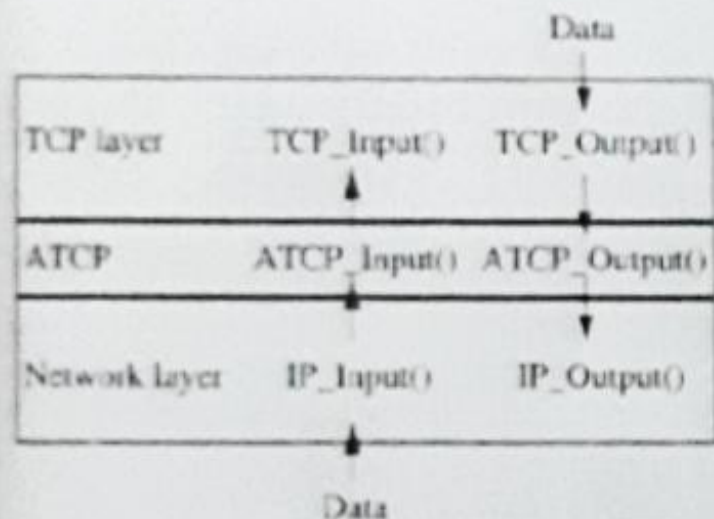
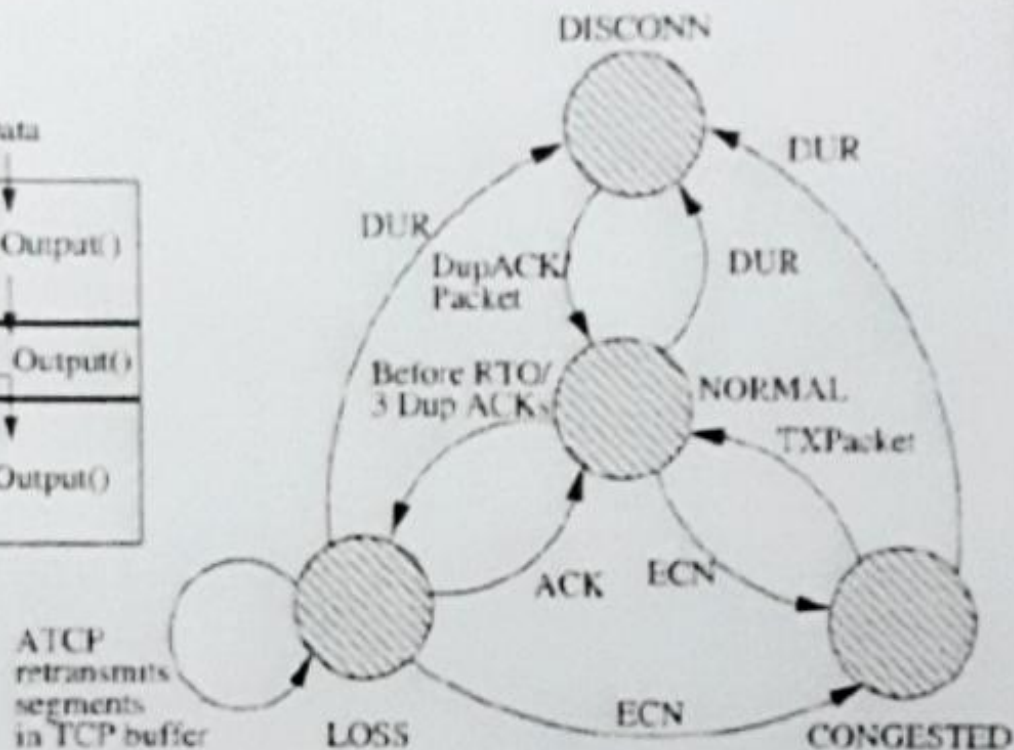


## Ad Hoc TCP (ATCP)

- uses a network layer feedback mechanism to make the TCP sender aware of the status of the network path
- Based on the feedback information received from the intermediate nodes, the TCP sender changes its state to the persist state, congestion control state, or the retransmit state.
- When an intermediate node finds that the network is partitioned, then the TCP sender state is changed to the persist state.
- The ATCP layer makes use of the explicit congestion notification (ECN) for maintenance for the states.



(a) ATCP thin layer implementation



(b) State transition diagram for the ATCP sender



TCP sender in persist state

DUR - Receive destination unreachable

TXPacket - TCP transmits a packet

**Figure 9.8.** An illustration of ATCP thin layer and ATCP state diagram.