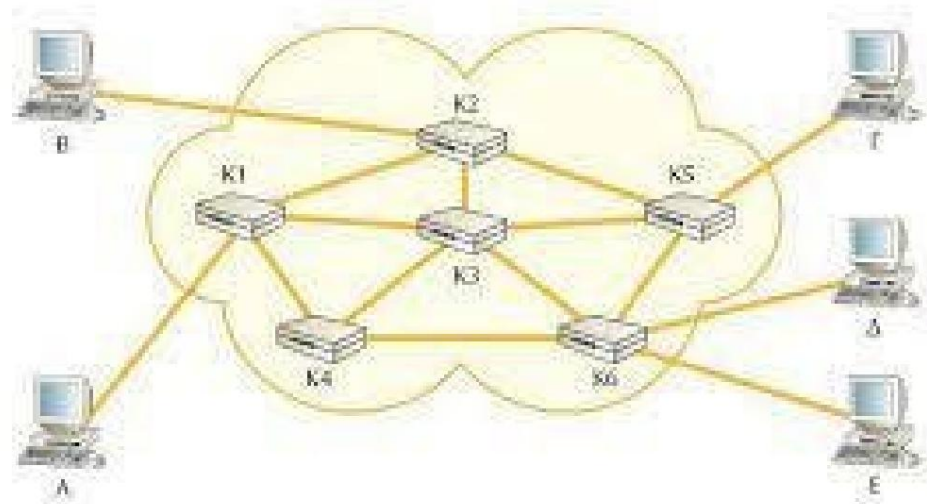
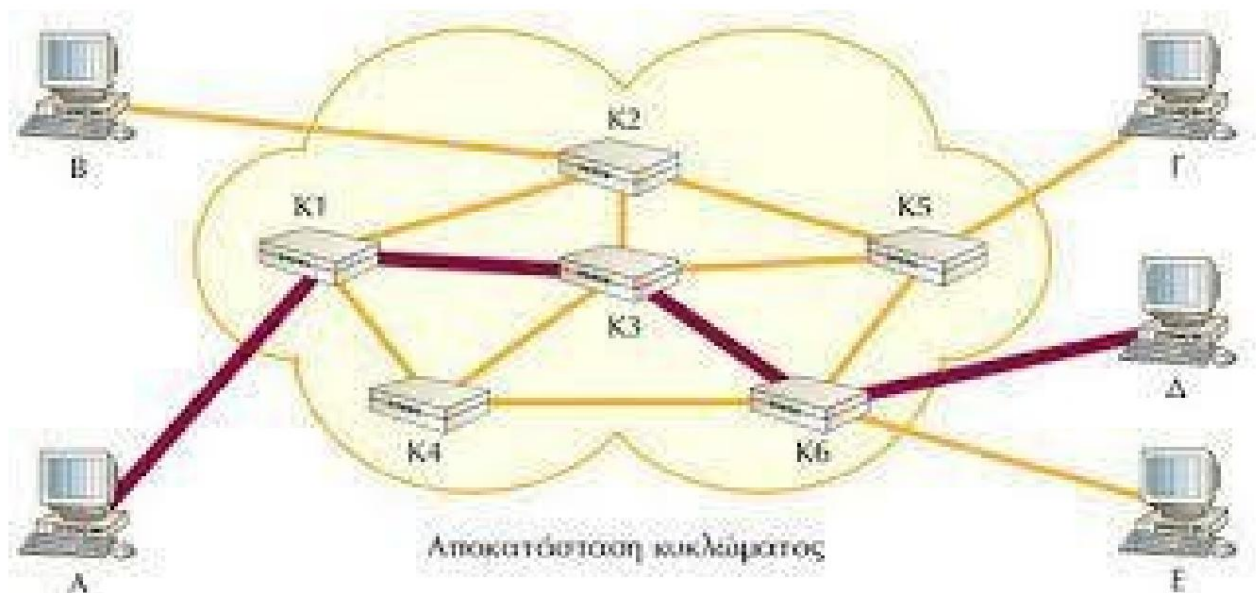


## TRANSMISSION NETWORKS: THEORY 2

**Switching networks - Packet switching**

**Σχήμα 1-9** Σε ένα δίκτυο με ταχυτήτες, η πληροφορία που στέλνει ένας σταθμός, πέραν από διαδοχικούς κόμβους του δικτύου, για να φθάσει τελικά στο σταθμό προορισμού

In packet switching networks the data before its transmission is divided into smaller parts called packets. At the destination node the original data is recomposed from the received packets. The method followed to transmit the packets is known as store and forward. Each node has a table that keeps where the packet came from and to whom it will forward the particular packet. According to this method, data/packets can be continuously sent to the network.

**Switching networks - Circuit switching:**

Data transmission is possible only by installing a physical link - circuit between the two nodes. The transmission is transparent, in the sense that the data does not undergo any processing while passing through the network. This circuit remains active throughout the communication of the nodes even if they do not change data. An example of such a network is a telephone network where two people want to communicate together.

Circuit switching was made for voice transmission. Until the connection is made with the number called by the user, that is, until the connection with the calling number is established, we have a different ringtone. It is the process that the call essentially searches to find available nodes to go to its destination. If it does not find the available nodes, then the call is rejected and the channel is released until the next call.