Source and Sink

A source can be defined as a sensor node present in the network in order to provide the information. Sink can be defined as a node where information is required. A sink can either be a sensor network, or a sensor/actuator node or it can even be a node/entity outside the network.

2. Single Hop Versus Multi Hop Networks

Single hop is a network where various sensor nodes are connected to a single sink node. This type of network is simple and beneficial because it provides direct communication between a source and a sink. The main drawback of single hop network is that it covers only a limited distance, because of which it is quite difficult for it to be used in wireless sensor network. The reason is, wireless sensor networks cover a lot of ground, whereas the single hop network do not have the capability of covering large area.

To avoid this drawback of single hop network, multi hop networks can be used. This network uses relay stations along with data packets which help in taking multiple hops from source to a sink. In addition to this, it also improves the energy efficiency of communication. The multi hop networks which operate in the fashion of store and forward are only considered for this purpose. A node in this network need to receive the packet correctly and then forward it to its destination. Some approaches which are innovative might accomplish the reception of erroneous packets. Therefore, such type of cooperative relaying techniques are not much used.

Multiple Sinks and Sources

In WSN, if there exist multiple sensor nodes and multiple sinks then it is referred to as multiple sinks and multiple sources. The most difficult job is that all the sources must send information to all the sinks present in the network. For instance, in WSN, there are numerous application executing on different devices which require multiple sinks in order to connect. The major use of multiple sink is done in distributed network data mining by the researches.