Communication supporting base station project briefing

Why do we need a base station?

Technological advancements: The New technologies result in evolved base stations that support upgrades and enhancements such as 4G,5G and beyond,its providing faster speeds with better bandwidth. Emergency services: They provide access to emergency services,so that in case of emergency,people can call through their mobile phones.

What is a base station?

What is Base Station? A base station represents an access point for a wireless device to communicate within its coverage area. It usually connects the device to other networks or devices through a dedicated high bandwidth wire of fiber optic connection. Base stations typically have a transceiver,capable of sending and receiving wireless signals;

Why are base stations important in cellular communication?

Base stations are important in the cellular communication as it facilitate seamless communication between mobile devices and the network communication. The demand for efficient data transmission are increased as we are advancing towards new technologies such as 5G and other data intensive applications.

What is a use case for a base station?

One such use case is the use of deployable base stations in the form of UAVs or drones. UAVs offer the flexibility and readiness to handle network issues like unexpected outages or a sudden temporary surge in traffic.

Which base station is a candidate for downlink transmission?

When a downlink communication is triggered by an uplink message,all surrounding base stationsare a candidate for downlink transmission. Core network run cognitive algorithm to select the best base station for each downlink message (see Fig. 5-12).

What are the properties of a base station?

Here are some essential properties: Capacity:Capacity of a base station is its capability to handle a given number of simultaneous connections or users. Coverage Area: The coverage area is a base station is that geographical area within which mobile devices can maintain a stable connection with the base station.

Web: https://edukacja-aktywna.pl