

What is advance LTE? briefly write about LTE advance architecture

↳ Long term evolution-advanced (LTE-advanced) is a cellular networking standard that offers higher throughput than its predecessors. Long term evolution advanced network can deliver up to 1 Gb per second of data.

↳ LTE Advanced is an evolution of LTE. and is the fastest and most advanced mobile technology in the world. LTE advanced provide higher download speed and also provide transmission of data at lower cost and less battery.

LTE Advanced ARCHITECTURE

There are three main components of LTE advanced architecture

- 1) The USER Equipment (UE)
- 2) The E-UTRAN

↳ The Evolved Packet Core (EPC)

↳ The USER EQUIPMENT (UE)

User equipment is any device used directly by an end-user to communicate. It can be handheld telephone, a laptop computer (equipped with a mobile) or any other device.

⇒ Mobile Termination (MT)

This handles all the communication functions.

⇒ Terminal equipment (TE)

This terminates the data streams.

↳ The E-UTRAN (The access network)

The evolved-UMTS Terrestrial radio access network is the air interface in the LTE cellular network.

The EUTRAN handles the radio communication between the mobiles and the evolved packet core.

The evolved base station called eNB. Each eNB is the base station that control the mobile in one or more cells. The base station that is communicating with mobile is known as serving eNB.

L) The evolved Packet Core (EPC)

The evolved packet core has contains few components such as Mobility management Entity (MME), Serving Gateway (SGW) and Packet Data network Gateway (PGW).

L) LTE Advanced features

- (1) Increased number of active subscribers
- (2) Improved performance at cell edges
- (3) Higher speed of downloading data.