

A.V.C COLLEGE OF ENGINEERING
MANNAMPANDAL MAYILADUTHURAI

DEPARTMENT OF ECE
IN-PLANT TRAINING DETAILS
ACADEMIC YEAR 2018-2019

S.NO	STUDENT NAME	YEAR	COMPANY NAME	DURATION
1	P.DEEPISHKA	II Year	BSNL,Mayiladuthurai	4.12.18 to 8.12.18
2	S.DIVYA	II Year	BSNL,Mayiladuthurai	4.12.18 to 8.12.18
3	G.KRISHNAPRIYA	II Year	BSNL,Mayiladuthurai	4.12.18 to 8.12.18
4	N.LOGESHWARI	II Year	Kaashiv Infotech,Chennai	6.12.18 to10.12.18
5	R.NIVETHA	II Year	Kaashiv Infotech,Chennai	6.12.18 to10.12.18
6	S.KARTHICKRAJA	III Year	BSNL,Mayiladuthurai	18.6.18 to 22.6.18
7	N.DHANALAKSHMI	III Year	BSNL,Mayiladuthurai	18.6.18 to 22.6.18
8	AL.SOLAI	III Year	All India Radio,karaikal	4.6.18 to 8.6.18
10	S.VISHALATCHI	III Year	All India Radio,karaikal	4.6.18 to 8.6.18

S.P. ~~...~~
prepared by

S. Sivanar
HOD/ECE



A.V.C. COLLEGE OF ENGINEERING

Mannampandal, Mayiladuthurai

INPLANT TRAINING REPORT

SUBMITTED BY

P.DEEPSHIKA-II ECE

S.DIVYA-II ECE

G.KRISHNAPRIYA-II ECE

Bharat Sanchar Nigam Limited,

Mayiladuthurai



What is GSM?

If you are in Europe, Asia or Japan and using a mobile phone then most probably you must be using GSM technology in your mobile phone.

- GSM stands for **Global System for Mobile Communication** and is an open, digital cellular technology used for transmitting mobile voice and data services.
- The GSM emerged from the idea of cell-based mobile radio systems at Bell Laboratories in the early 1970s.
- The GSM is the name of a standardization group established in 1982 to create a common European mobile telephone standard.
- The GSM standard is the most widely accepted standard and is implemented globally.
- The GSM is a circuit-switched system that divides each 200kHz channel into eight 25kHz time-slots. GSM operates in the 900MHz and 1.8GHz bands in Europe and the 1.9GHz and 850MHz bands in the US.
- The GSM is owning a market share of more than 70 percent of the world's digital cellular subscribers.
- The GSM makes use of narrowband Time Division Multiple Access (TDMA) technique for transmitting signals.
- The GSM was developed using digital technology. It has an ability to carry 64 kbps to 120 Mbps of data rates.
- Presently GSM support more than one billion mobile subscribers in more than 210 countries throughout of the world.
- The GSM provides basic to advanced voice and data services including Roaming service. Roaming is the ability to use your GSM phone number in another GSM network.

A GSM digitizes and compresses data, then sends it down through a channel with two other streams of user data, each in its own time slot. It operates at either the 900 MHz or 1,800 MHz frequency band.

Why GSM?

The GSM study group aimed to provide the followings through the GSM:

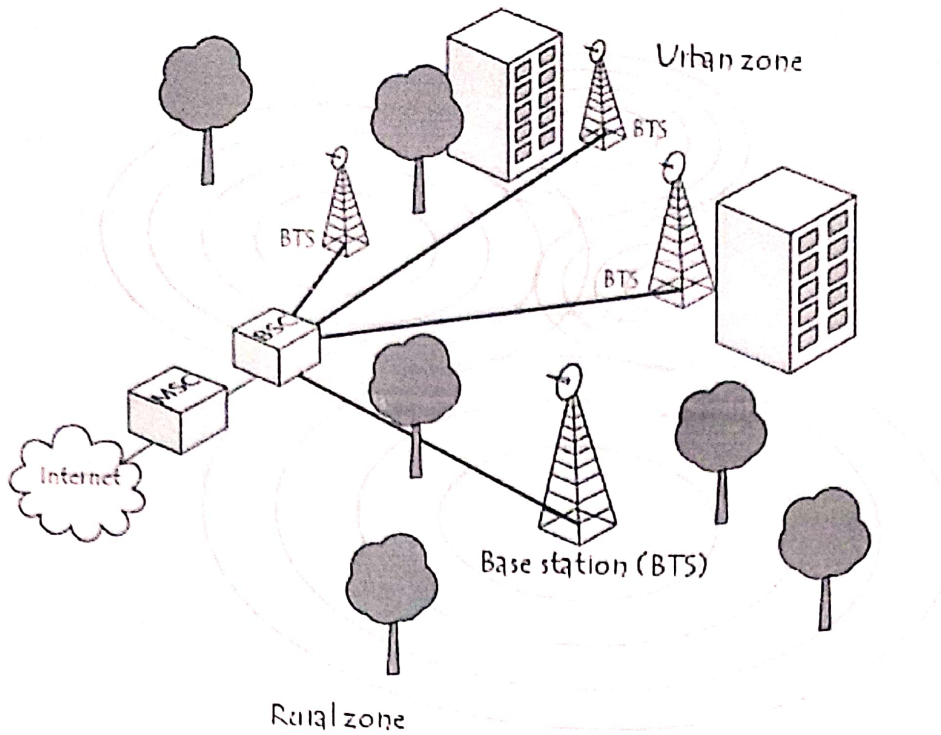
- Improved spectrum efficiency.
- International roaming.
- Low-cost mobile sets and base stations (BSs)
- High-quality speech
- Compatibility with Integrated Services Digital Network (ISDN) and other telephone company services.
- Support for new services.
- broadband is often called high-speed Internet, because it usually has a high rate of data transmission relative to dial-up access over a modem. In general, any connection to the customer of 256 Kbit/s (0.256 Mbit/s) or more is considered broadband Internet,^[1] but the low-end speed bar is continuously rising.



- There are many different technologies that enable broadband connection speeds. The most mainstream of these include fiber, cable, DSL, mobile broadband, WiMax, and satellite (see descriptions below). The competition among these technologies to offer broadband internet service exists primarily in providing "last mile" ^[2] service, because the major long distance wires that comprise the Internet backbone around the world are primarily made out of optical fiber. Some of these "last mile" technologies are poised to grow in adoption while others won't be able to compete in the long run primarily due to speed barriers. The ultimate goal for broadband providers today is to be able to offer voice, data, and video over one network which is known as a "triple play." Some companies are well positioned to do this, while others are not. Here's a look at these differing broadband technologies and the companies that will either win or lose the broadband services race.
- Broadband is often called high-speed Internet, because it usually has a high rate of data transmission relative to dial-up access over a modem. In general, any connection to the customer of 256 Kbit/s (0.256 Mbit/s) or more is considered broadband Internet, ^[1] but the low-end speed bar is continuously rising.
- There are many different technologies that enable broadband connection speeds. The most mainstream of these include fiber, cable, DSL, mobile broadband, WiMax, and satellite (see descriptions below). The competition among these technologies to offer broadband internet service exists primarily in providing "last mile" ^[2] service, because the major long distance wires that comprise the Internet backbone around the world are primarily made out of optical fiber. Some of these "last mile" technologies are poised to grow in adoption while others won't be able to compete in the long run primarily due to speed barriers. The ultimate goal for broadband providers today is to be able to offer voice, data, and video over one network which is known as a "triple play." Some companies are well positioned to do this, while others are not. Here's a look at these differing broadband technologies and the companies that will either win or lose the broadband services race.

BASE STATION

- The term "base station" was first used to refer to the towers you see on the side of the road that relay cell phone calls. These stations handle all cellular calls made within their area, receiving information from one end of the call and transmitting it to the other.
- In the computer world, however, a base station refers to the wireless access point for computers with wireless cards. It is basically a router that communicates with devices based on the Wi-Fi standard. Some common Wi-Fi configurations include 802.11b and 802.11g. Wireless base stations are made by companies such as Netgear, Linksys, D-Link, Apple Computer, and other manufacturers. Fortunately, as long as the hardware is based on the Wi-Fi standard, all wireless cards can communicate with base stations from any manufacturer.



What is mobile technology and what are the benefits?

Mobile technology is exactly what the name implies - technology that is portable. Examples of mobile IT devices include:

- laptop and netbook computers
- palmtop computers or personal digital assistants
- mobile phones and 'smart phones'
- global positioning system (GPS) devices
- wireless debit/credit card payment terminals

Mobile devices can be enabled to use a variety of communications technologies such as:

- wireless fidelity (Wi-Fi) - a type of wireless local area network technology
- Bluetooth - connects mobile devices wirelessly
- 'third generation' (3G), global system for mobile communications (GSM) and general packet radio service (GPRS) data services - data networking services for mobile phones
- dial-up services - data networking services using modems and telephone lines
- virtual private networks - secure access to a private network

[Handwritten signature]

It is therefore possible to network the mobile device to a home office or the internet while travelling.

Benefits

Mobile computing can improve the service you offer your customers. For example, when meeting with customers you could access your customer relationship management system - over the internet - allowing you to update customer details whilst away from the office. Alternatively, you can enable customers to pay for services or goods without having to go to the till. For example, by using a wireless payment terminal diners can pay for their meal without leaving their table.

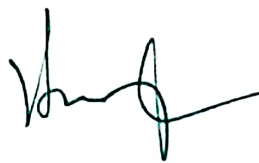
More powerful solutions can link you directly into the office network while working off site, for instance to access your database or accounting systems. For example, you could:

- set up a new customer's account
- check prices and stock availability
- place an order online

This leads to great flexibility in working - for example, enabling home working, or working while travelling. Increasingly, networking 'hot spots' are being provided in public areas that allow connection back to the office network or the internet. The growth of cloud computing has also impacted positively on the use of mobile devices, supporting more flexible working practices by providing services over the internet. For more information see our guide on **cloud computing**.

Drawbacks

There are costs involved in setting up the equipment and training required to make use of mobile devices. Mobile IT devices can expose valuable data to unauthorised people if the proper precautions are not taken to ensure that the devices, and the data they can access, are kept safe. See our guide on **securing your wireless systems**.





BSNL

Connecting India
Faster

BHARAT SANCHAR NIGAM LIMITED

(A Govt. Of India Enterprise)

CRDA SSA, KUMBAKONAM - 612 001.

CERTIFICATE

Certificate No. 40

This is to certify that Divya S B.E. II E.C.E

..... Student of A.V.C College of Engineering

..... Mayiladuturai

has undergone "Fundamentals of Telecom" in our Organisation from.....

..... 04-12-2018

to.....

08-12-2018

at

Kumbakonam / Mayiladuthurai / Nagapattinam / Karaikkal.

Station : Mayiladuturai

Date : 08-12-2018

मंडल अभियंता (शहरी)
DIVISIONAL ENGINEER (URBAN)
बी.एस.एन.एल / BSNL
मयिलाडुतुरै / MAYILADUTHURAI



BHARAT SANCHAR NIGAM LIMITED

(A Govt. Of India Enterprise)

CRDA SSA, KUMBAKONAM - 612 001.

CERTIFICATE

Certificate No. 41

This is to certify that*Deepshika. P. B.E. II E.C.E.*.....

..... Student of *A.V.C. College of Engineering*

..... *Mayiladuturai*

has undergone "Fundamentals of Telecom" in our Organisation from.....

..... *04-12-2018* to *08-12-2018* at

Kumbakonam / Mayiladuthurai / Nagapattinam / Karaikkal.

Station : *Mayiladuturai*

Date : *08-12-2018*

मंडल अभियंता (शहरी)
DIVISIONAL ENGINEER (URBAN)
श्री.एस.एन.एल / BSNL
मयिलादुतुराई / MAYILADUTHURAI



BHARAT SANCHAR NIGAM LIMITED

(A Govt. Of India Enterprise)

CRDA SSA, KUMBAKONAM - 612 001.

CERTIFICATE

Certificate No. 39

This is to certify that G. Krishnapriya B.E, II E.C.E.....

..... Student of A.V.C College of
..... Engineering, Mayiladuthurai.....

has undergone "Fundamentals of Telecom" in our Organisation from.....

..... 04-12-2018..... to..... 08-12-2018..... at

Kumbakonam / Mayiladuthurai / Nagapattinam / Karaikkal.

Station : Mayiladuthurai

Date : 08-12-2018

मंडल अभियंता (शहरी)
DIVISIONAL ENGINEER (URBAN)
बी.एस.एन.एल / BSNL
मयिलादुतुरै / MAYILADUTHURAI