



English for Computer

By

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English for Computer
Communication(Topic 6)

Reference:

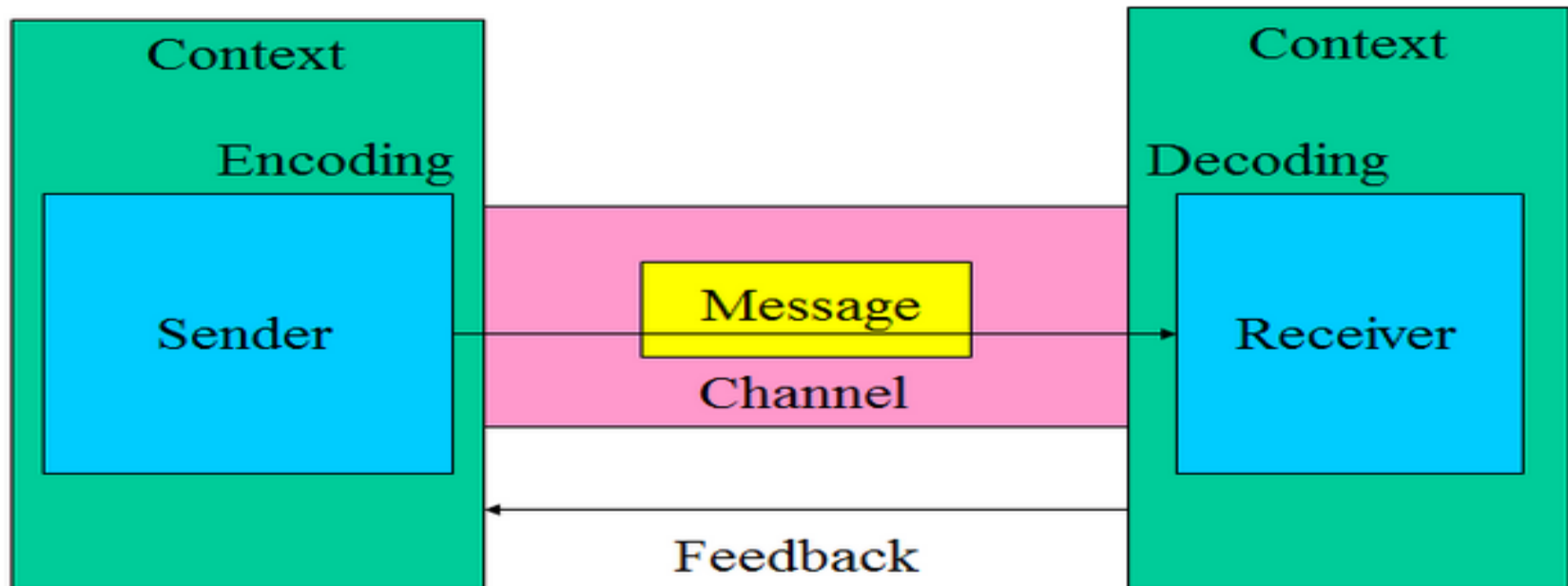
Basic English for Computing by Eric Glendinning, Oxford.

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Communication Elements:

Communication Model



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Communication Types

- 1- Fiber-optic Cable.
- 2- Earth-Satellite Transmission.
- 3- Telephone Wire.
- 4- Microwave Transmission.
- 5- Radio Transmission.

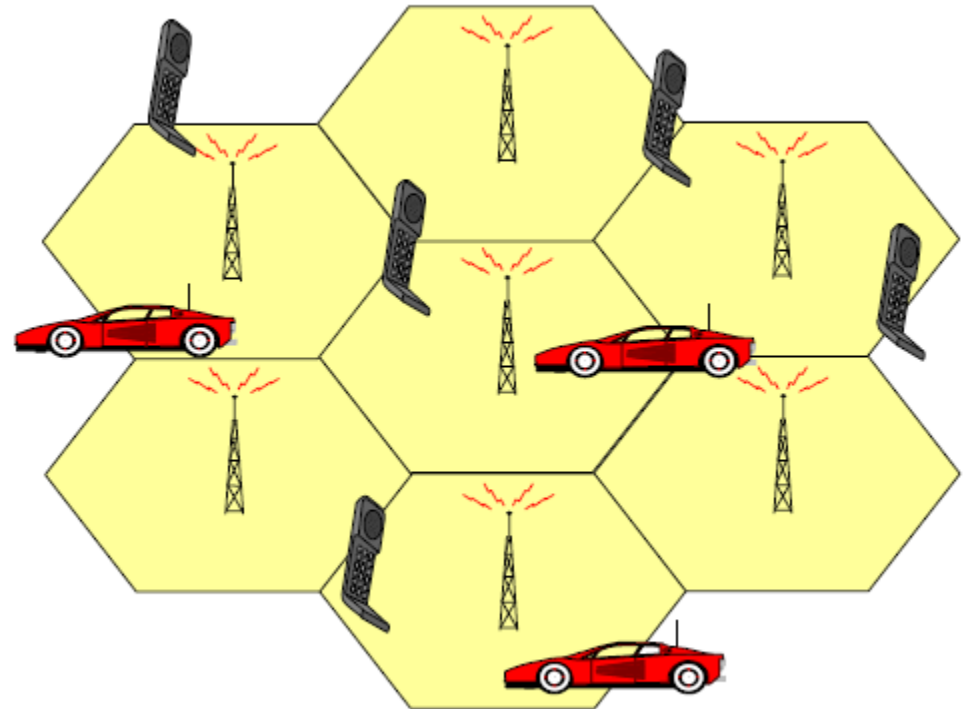
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Global System Mobile (GSM): Principle

- 1- Tower.
- 2- MS.
- 3- Cell.

Transmission Principles



GSM Network Structure

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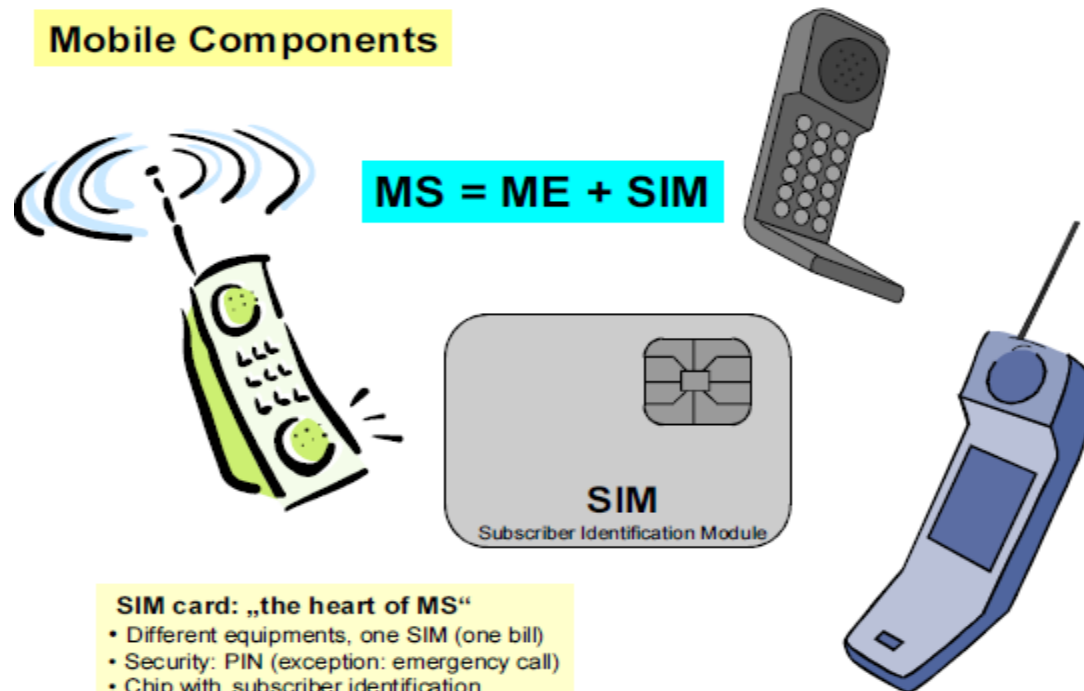
Global System Mobile (GSM): **Mobile Station**

MS: Mobile Station.

ME: Mobile Equipment.

SIM: Subscriber Identity Module.

Mobile Components



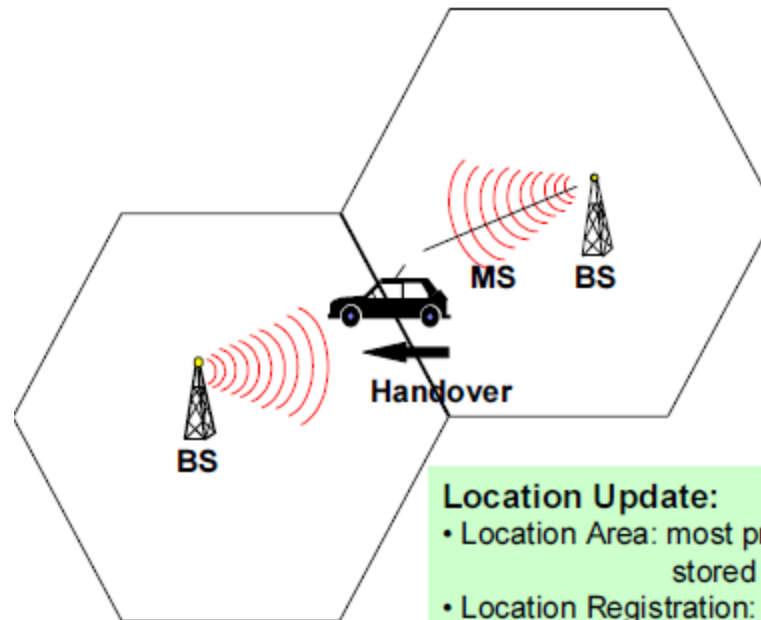
SIM card: „the heart of MS“

- Different equipments, one SIM (one bill)
- Security: PIN (exception: emergency call)
- Chip with subscriber identification, security algorithms, personal phone book,...

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Global System Mobile (GSM): Handover.

Roaming, Location Update
& Handover



Location Update:

- Location Area: most precise location information stored in the network
- Location Registration: initial registration
- Location Update: update of registration



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Global System Mobile (GSM) :

Nomenclature

1- MS (Mobile Station) = ME (Mobile Equipment) + SIM (Subscriber Identity Module).

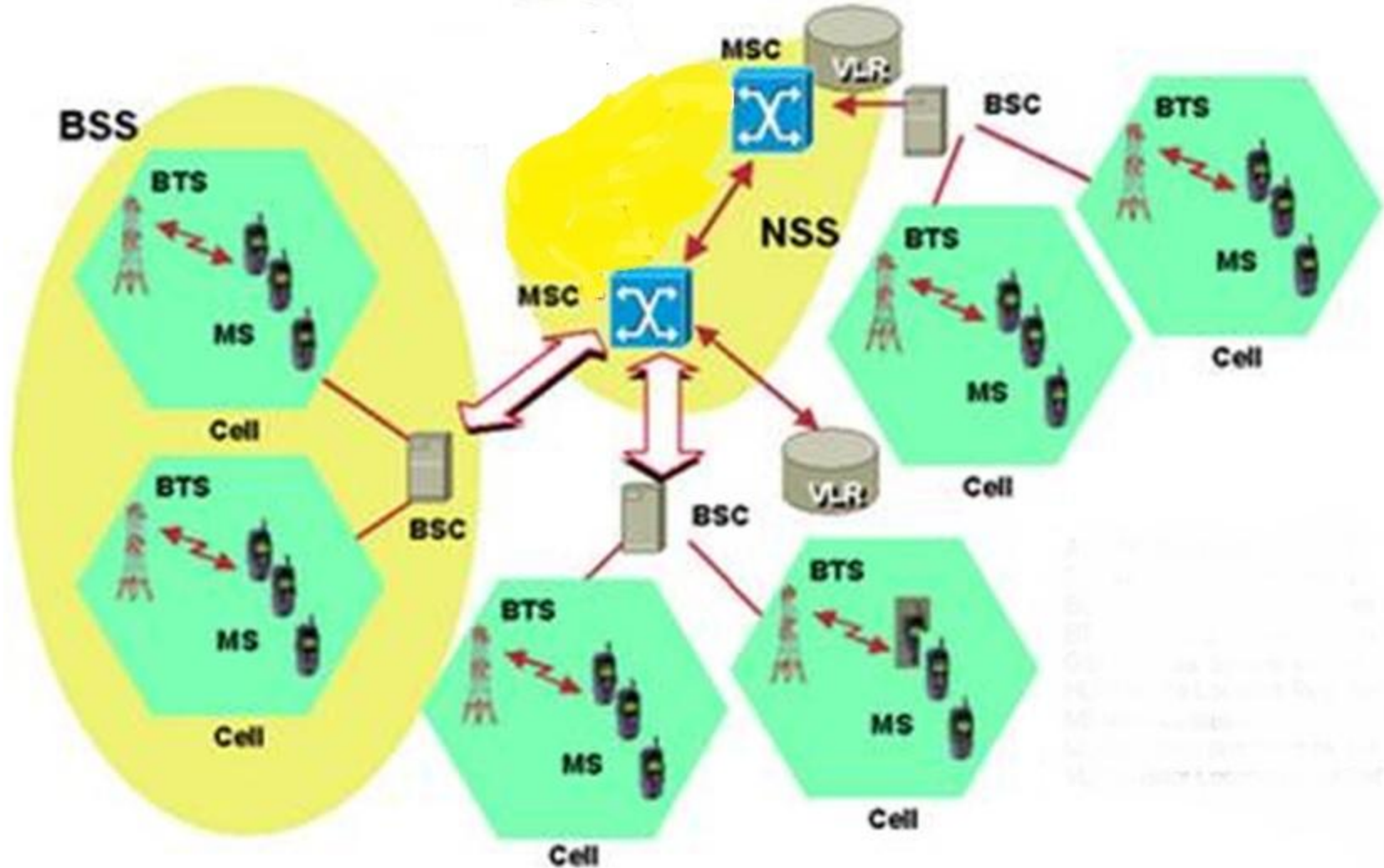
2- BSS (Base Station Subsystem) = BTS (Base Transceiver Station) + BSC (Base Station Controller).

**3- NSS (Network Switching Subsystem)
MSC (Mobile Switching Center)**

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Global System Mobile : GSM Parts (GSM block Diagram)

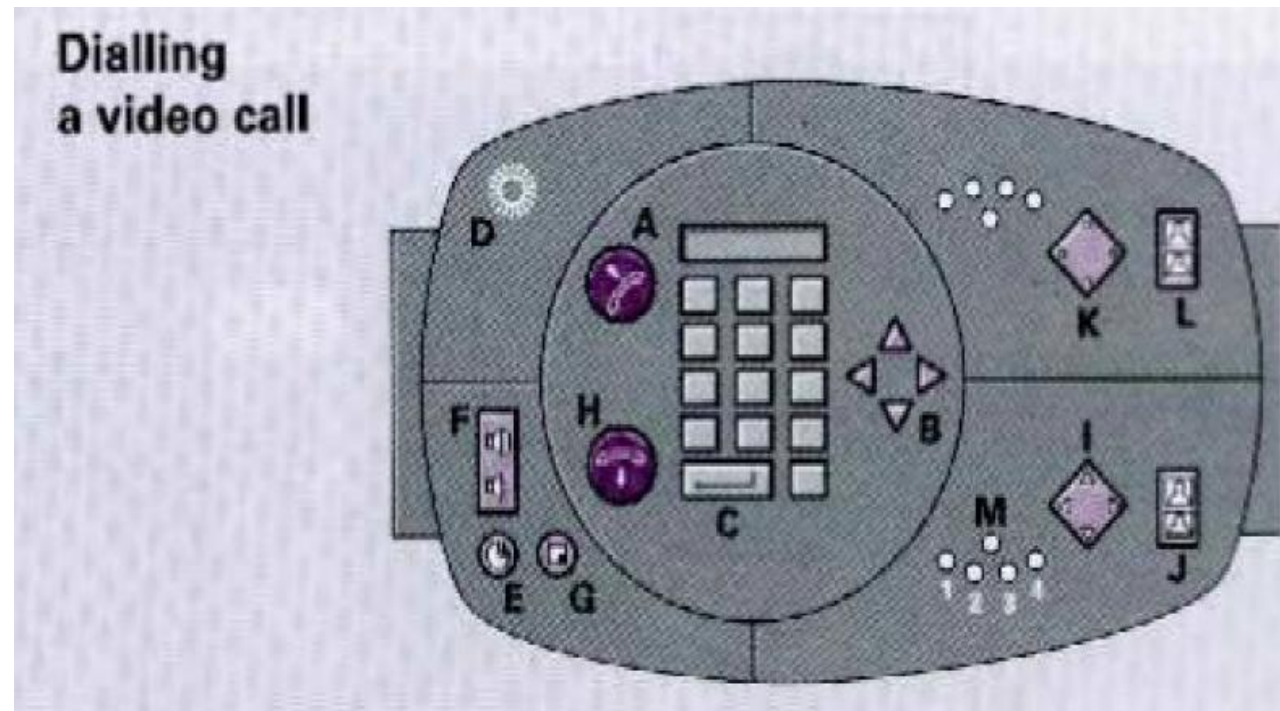


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Video Conference: it is type of communication that used to exchange **voice** and **image** among the communicated parties.

Figure below is a video conferee device that contains:

- 1- E: Mute.
- 2- F: Volume.
- 3- G: not to see your picture.
- 4- H: hang up the line
- 5- A : Call Starter.
- 6- C: Keyboard.
- 7- K,I: moving camera.
- 8- L, J: zooming image In and out.





Question

1. Try to think other organization providing a computer communication to exchange information at your region?.
2. Students in another country want to study the same computing course as yours without coming to your country. What communications links could your college or university use to make this possible?.
3. What are the basic communication parts?.
4. GSM stands for _____.
5. Draw a GSM block diagram.