

## **EXPERIMENT 1**

### **ITA0305-Mobile Computing For App Development**

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**1. Use Figma to create an interactive diagram illustrating the components of a basic cellular system.**

**Aim: -**

To create an interactive diagram illustrating the components of a basic cellular system

**Procedure: -**

1. open Figma
2. Create a new file
3. Select the Frames
4. Fill in the content that is required for presentation
5. Design Visual Elements
6. Make it Interactive
7. Add Annotations and Explanations
8. Incorporate Multimedia
9. Storyboard Animation
11. Review and edit the Prototype
12. Save and Share

**Design: -**

# Basic Cellular System

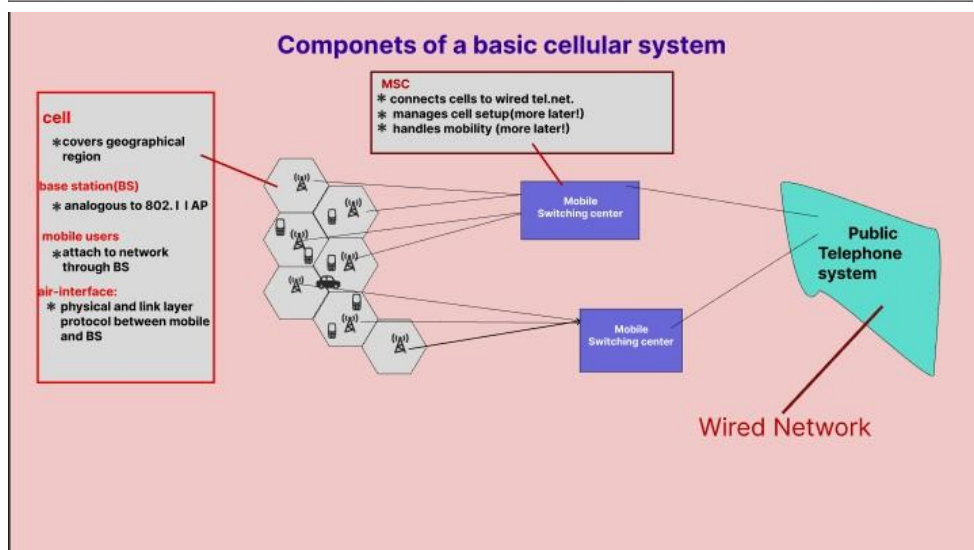
There are mainly two types of Basic Cellular System:

## 1. Circuit Switched :

In a circuit-switched system, each traffic channel is dedicated to a user until its cell is terminated.

## 2. Packet Switched:

In packet-switching, the packets are sent towards the destination irrespective of each other. Each packet has to find its own route to the destination. There is no predetermined path; the decision as to which node to hop to in the next step is taken only when a node is reached. Each packet finds its way using the information it carries, such as the source and destination IP addresses.



# Analog Circuit-Switched System

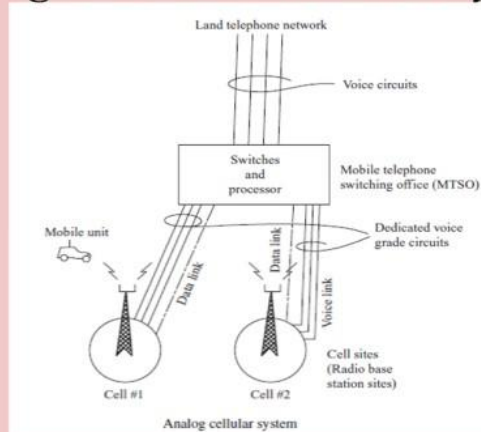
A basic analog cellular system consists of three subsystems:

1. A Mobile Unit

2. A Cell Site

3. A Mobile Telephone Switching Office (MTSO) with CONNECTIONS to link the three subsystems

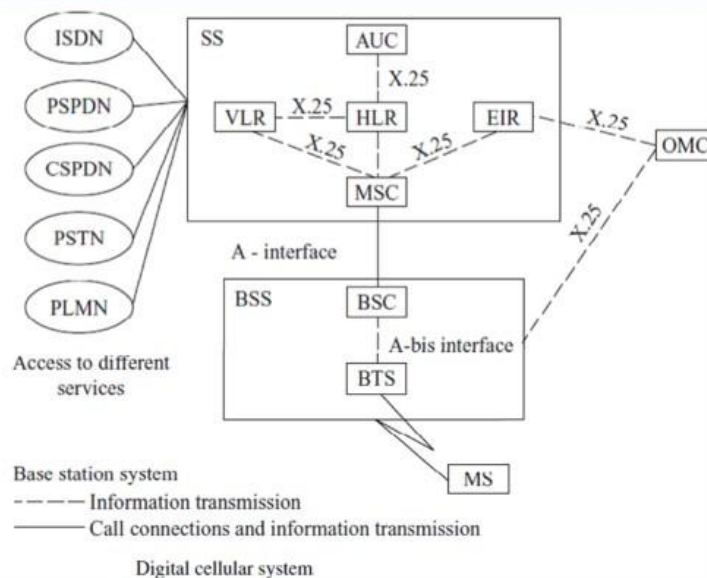
## Analog Circuit-Switched System



## Digital Circuit-Switched System

A Basic Digital System consists of four elements:

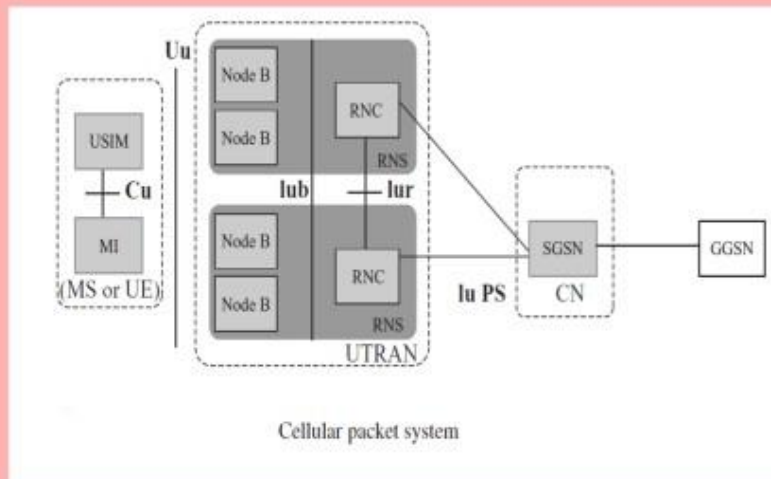
1. Mobile Station
2. Base Transceiver Station (BTS)
3. Base Station Controller (BSC)
4. Switching Subsystems



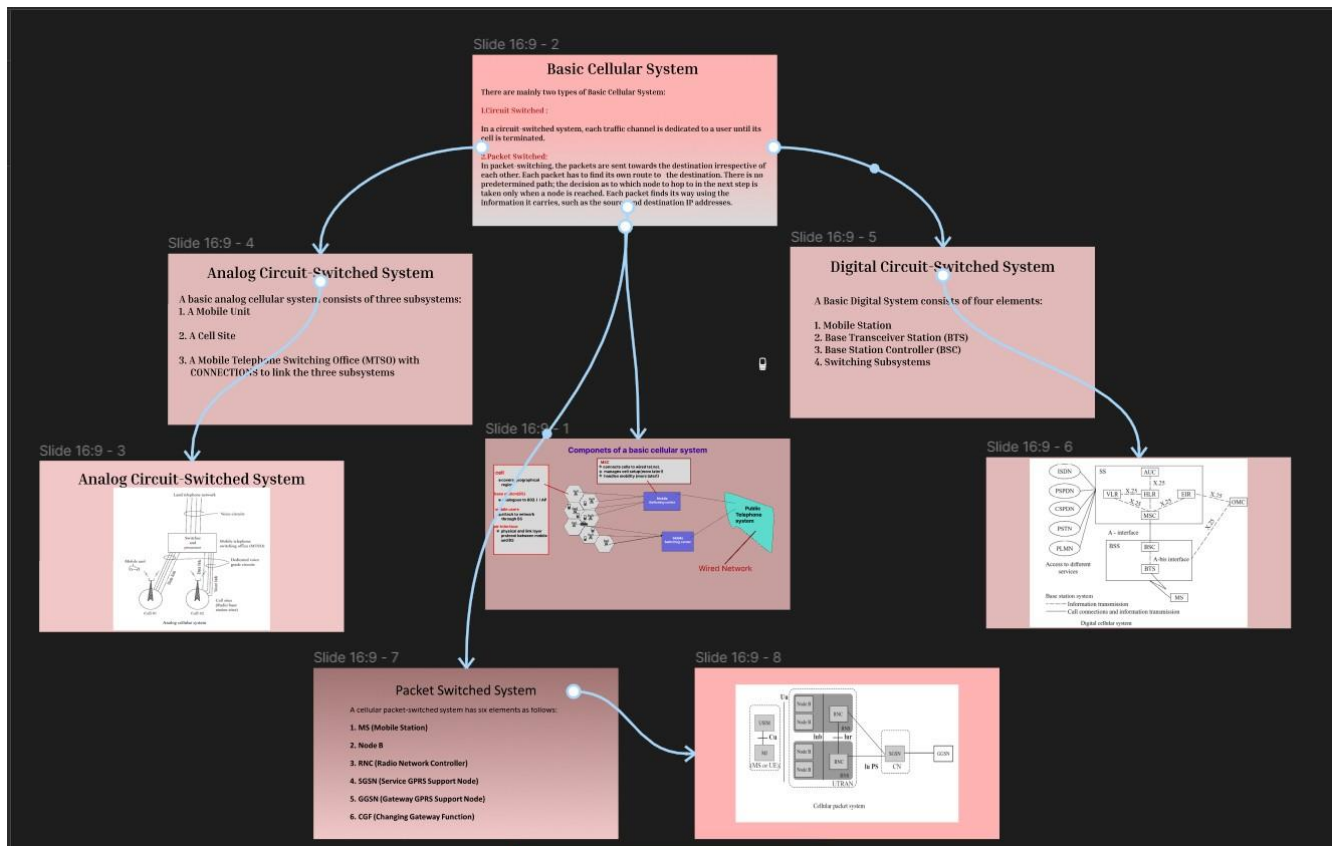
# Packet Switched System

A cellular packet-switched system has six elements as follows:

1. MS (Mobile Station)
2. Node B
3. RNC (Radio Network Controller)
4. SGSN (Service GPRS Support Node)
5. GGSN (Gateway GPRS Support Node)
6. CGF (Changing Gateway Function)



Prototype: -



**Result: -**

Hence an interactive diagram illustrating the components of a basic cellular system using Figma is created and executed successfully