

## **Case Study Assignment: Exploring Field Test Mode on Smartphone**

### **1.Device Types Covered:**

- Android Devices (General)

### **2. Key Information to Collect:**

- IMEI Number (International Mobile Equipment Identity): 868905064462030
- MAC Address (Media Access Control address) : 74:c5:30:87:c7:2f
- IP Address (Internet Protocol address): fe80::b489:a4d:2821:e558
- Network Operator/Brand (Name of the cellular provider) :Airtel
- Network Type (4G LTE, 5G, etc.) : 4G LTE
- Signal Strength (Measured in dBm) : 32.28 Mbps
- Download/Upload Bandwidth (Physical channel configuration and speed)
  - DL Bandwidth (kbps): 14
  - UL Bandwidth (kbps): 14

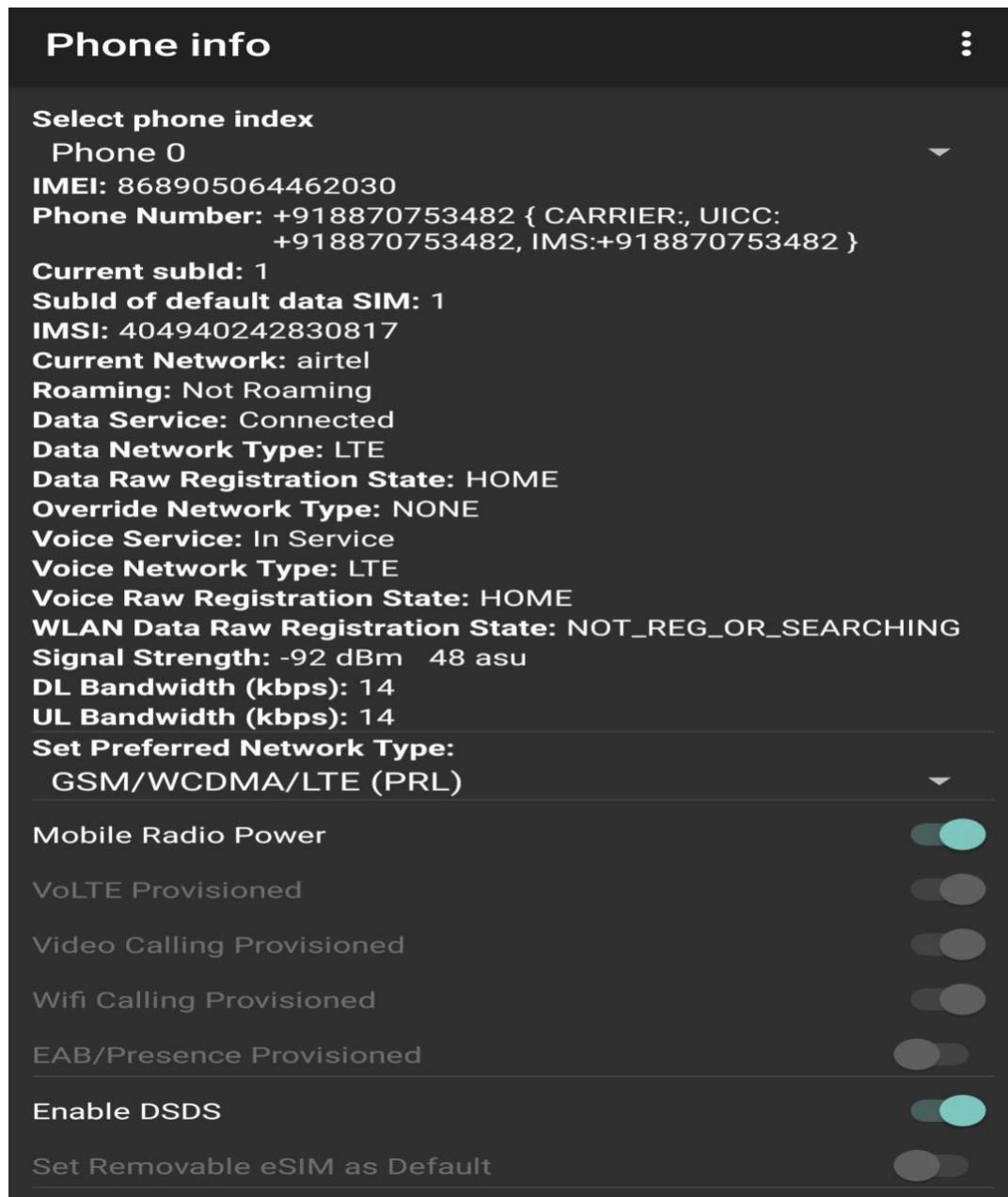
### **3.Explanation of IMEI ,MAC ,IP**

IMEI (International Mobile Equipment Identity): This is a unique number assigned to every mobile phone. It's mainly used to identify and track a specific phone, especially when it's stolen. It helps mobile networks keep track of which devices are using their services.

MAC Address (Media Access Control): Every device that connects to a network, like your phone or computer, has its own MAC address. This is a unique code that helps a router or switch know which device it's talking to on a local network. It's important to keep track of who's connected and allows for security control.

IP Address (Internet Protocol Address): This is the address your device gets when it connects to the internet or any network. Think of it like the device's online postal address. Without it, your device wouldn't know how to send or receive data from websites or other devices on the network.

#### **4.Screenshot of Testing:**



## Phone info



### RUN PING TEST

**Ping Hostname(www.google.com) IPv4:** Unknown

**Ping Hostname(www.google.com) IPv6:** Unknown

**HTTP Client Test:** Unknown

**Data Sent:** 549132 pkts, 130533502 bytes

**Data Received:** 1859296 pkts, 2153462318 bytes

**Number of PPP Reset Since Boot:**

**Voice Call Status:** Idle

**Message Waiting:** false

**Call Redirect:** false

**Cell Info Refresh Rate:**

Disabled

**LTE Physical Channel Configuration:** {{mConnectionStatus=PrimaryServing,mCellBandwidthDownlinkKhz=10000,mCellBandwidthUplinkKhz=2147483647,mNetworkType=LTE,mFrequencyRange=MID,mDownlinkChannelNumber=2147483647,mUplinkChannelNumber=2147483647,mContextIds=[6700, 6902],mPhysicalCellId=400,mBand=1,mDownlinkFrequency=-1,mUplinkFrequency=-1}}

### All Cell Measurement Info:

LTE	SRV	MCC	MNC	TAC	CID	PCI	EARFCN	BW	RSRP	RSRQ	TA
R+P	404	94	55357	16448	400	39294			-116	-19	8
N			65535	26843	401	390			-89	-12	
N			65535	26843	401	1615			-97	-12	
N			65535	26843	192	39294			-117	-19	
N			65535	26843	192	39150			-119	-14	
N			65535	26843	400	39150			-121	-20	

