

# Communication System

ICT is an acronym that stands for Information and Communication Technology.

Information refers to knowledge obtained from reading, investigating, study and research.

Communication is an act of transmitting message.

Technology is the application of scientific knowledge for practical purpose especially in industry.

ICT can therefore be defined as the use of diverse set of technological tools and resources to communicate, create, disseminate, store and manage information. ICT also refers to technologies that provide access to information through telecommunications.

## Communication strategies in ICT

There are two types of communication strategies in ICT:

### 1. Synchronous communication

This is a communication strategy where all parties involved in the communication involved are present and available at the same time. E.g. online chat, video conferencing, etc.

### 2. Asynchronous communication

Asynchronous communication does not require that all parties involved need to be present and available at the same time. E.g. Discussion forum, Blogs e-group, etc.

## Types of ICT

The following are types of ICT:

1. Broadcasting
2. Telecommunication
3. Data network
4. Information system
5. Satellite communication

### Broadcasting

Broadcasting is the distribution of audio and video content to a dispersed audience via any electronic mass communication medium. Types of broadcasting include Radio broadcasting, Television broadcasting, Satellite TV system broadcasting and Webcasting.

### Telecommunication

Telecommunication is the transmission of information over significant distance, for the purpose of communication. A basic telecommunication system consist of three primary units; a transmitter, transmitting medium and the receiver. Types of telecommunication system include:

- o Public Switched Telephone Network (PSTN) – land line.
- o Mobile phone (GSM)
- o Circuit Switched Packet Telephone (CSPT)
- o Satellite Telephone
  - Fixed wireless Telephone

### Data Network

Data network is an electronic communication process that allows for orderly transmission and receptive of data only.

Types of data networks network include:

- **Personal Area Network (PAN).** It refers to interconnection of information technology devices or gadgets within the environment of an individual user (typically within 10 meters). PAN may be wired with computer such as USB and Fire wire. A wireless Personal Area Network (WPAN) can be made possible with network technology such as infrared Data Association (irDA) and Bluetooth.
- **Local Area Network (LAN).** A local area network is a computer network covering a small local area, like a home, office, or school.
- **Metropolitan Area Network (MAN).** MANs are large computer network usually spanning a large campus.
- **Wide Area Network (WAN).** WAN is a computer network covering a broad geographical area.
- **Internet.** The internet is a worldwide network of computers that share information

### Information Systems

Information system is an integrated set of components for collecting, storing, processing and communicating information. Types of informative system include Data processing system and Global positioning system (GPS) a satellite based navigating system.

### Satellite communication

A satellite is an object that moves around a larger object. Satellite communication, in telecommunication is the use of artificial satellites to provide communication links between various points on Earth. Approximately 2,000 artificial satellites orbiting Earth relay analogue and digital signals carrying voice, video and data from one or many location worldwide.

### **ACRONYMS TO KNOW IN ICT**

<b>Terms</b>	<b>Acronym</b>
PSTN	Public Switched Telephone Network
CDMA	Code Division Multiple Access
GSM	
CSPTS	
PAN	Public Area network
MAN	Metropolitan Area Network
LAN	Local Area Network
WAN	Wide Area Network
VOIP	Voice Over Internet Protocol
TCP/IP	Transmission Control Protocol/ Internet Protocol
GPS	Global Positioning System
POS	Point On Sale
ATM	Automatic Teller Machine
Wi-Fi	Wireless Fidelity