Communication Engineering (66867)

Presented By

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Chapter:1(Features of Communication Network)
(Lecture 1)

Introduction:

- A communications system or communication system is **a collection of individual telecommunications networks, transmission systems, relay stations, tributary stations, and terminal equipment** usually capable of interconnection and interoperation to form an integrated whole.

Different types of Frequency Bands:

Frequency Band Name	Acronym	Frequency Range
Medium Frequency	MF	300 to 3000 kHz
High Frequency	HF	3 to 30 MHz
Very High Frequency	VHF	30 to 300 MHz
Ultra High Frequency	UHF	300-3000MHz

Channel Bandwidth & Capacity:

Channel capacity:

Channel capacity is a maximum information rate that a channel can transmit. It is measured in bits per second (bps). ... Bandwidth can be considered as a subset of channel capacity term. When bandwidth is measured, the maximum volume of information that can be accurately transferred per unit of time is taken into account.

Channel Bandwidth:

Bandwidth refers to the data throughput capacity of any communication channel . As bandwidth increases, more information per unit of time can pass through the channel. A simple analogy compares a communication channel to a water pipe.