Marmara University, 2021

Wireless and Mobile Networks

Subject 13

Wireless Radio Systems

Mujdat Soyturk, Ph.D.
Associate Professor

INTRODUCTION

DECT TECHNOLOGY

Digital Enhanced Cordless Telecommunication

Digital Enhanced Cordless Telecommunication (DECT)

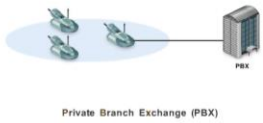
Digital Enhanced Cordless Telecommunication

European Telecommunications Standards Institute (ETSI)

Digital Enhanced Cordless Telecommunication

Digital Enhanced Cordless Telecommunication

Digital Enhanced Cordless Telecommunication



Private Branch Exchange (PBX)

Functional Components of a DECT Device

Description

Functional Components of a DECT Device

Fixed Part (FP)

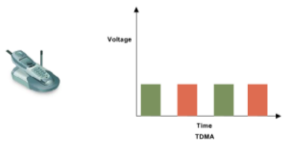
Consists of a Central System (CS) and Radio Fixed Parts (RFP). Each RFP consists of one or more Radio End Points (REPs) and each REP corresponds to one cell. The Central System is also connected to the PBX via an Interneworking Unit (IWU) that converts DECT signals into appropriate standards based on the connected PBX.

Functional Components of a DECT Device

Portable Part (PP)

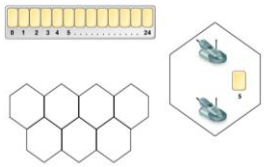
Includes the attached mobile terminals and consists of a Portable Radio Termination (PRT) module and an end system.

DECT Operation

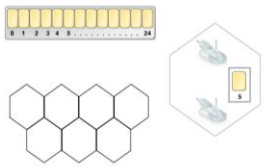


DECT Operation

DECT Operation

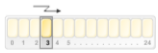


DECT Operation



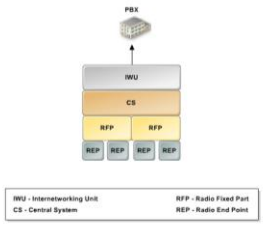
Choice of time slot depends on the quality of transmission

DECT Operation



DECT Operation

DECT Operation

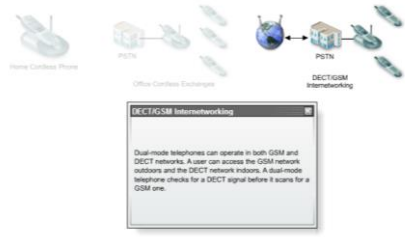


Application Areas of DECT

Application Areas of DECT

Application Areas of DECT

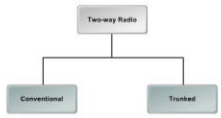
Application Areas of DECT



TWO-WAY RADIO SYSTEM

Two-Way Radio

Two-Way Radio



Frequency selection method

Benefits of Two-Way Radios

Benefits of Two-Way Radios

Two-way radios are useful in an emergency