

## VoIP Basics

Currently more and more telephony service providers are introducing Voice over IP (VoIP). Global deregulation of telephone markets allows telephone carriers to begin competition with cheaper IP carriers. New infrastructure allows operators to compete at a lower price and deploy new applications to their customers faster than they can do it using legacy equipment.

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Training method	Duration	Level
Lecture	1 day	Basic

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### Target audience

The course is intended for technical mobile network staff and their management who plan to or already work on introducing VoIP services and everyone interested in voice transmission over IP protocol technology.

### Training contents

- **Introduction**
  - PSTN telephony basics
  - VoIP telephony basics
  - Telephony signaling protocols
  - SS7 Protocol
- **IP Basics**
  - OSi Reference model
  - Internet Protocol
  - IP addressing
  - IP routing
- **VoIP analysis**
  - Delay
  - Jitter
  - Pulse code modulation
  - Voice compression
  - Echo
  - Packet loss
  - QoS
- **IP Signaling Protocols**
  - H.323 Protocol
  - SIP Protocol
  - Gateway Control Protocol
  - Diameter Base and Application

## Prerequisites

The participants should have a general technical knowledge about IP networks and mobile networks.