



Voice over IP (VoIP) DL TC77



Objectives:

Training of an installation and maintenance technician for IP telephony systems able to:

- know the principles, the standards and the devices normally used in the VoIP,
- install VoIP systems in existing IP networks,
- Perform the maintenance, the troubleshooting, the tests on VoIP systems.

Educational Path:

The Educational Path of the Training Package covers the following subjects:

- **Traditional telephony (PSTN) and Voice over IP**
Traditional telephony (PSTN), The transmission of signals on the telephonic network, Telephonic signalling, VoIP: introduction, Protocols, Pros and Contras
- **Traditional telephony (PSTN)**
The telephonic device, Speech encoding, Transmission and switch-over, User signalling, Signalling between centrals
- **VoIP: Introduction**
How VoIP operates, VoIP protocols, Encoding and compression, Signalling, Audio transport
- **VoIP: advanced features**
SIP protocol: structure and function, The delay in VoIP communication, VoIP quality of service
- **VoIP devices: Access gateway**
How VoIP operates, VoIP protocols, Encoding and compression, Signalling, Audio transport
- **VoIP Communication with Access Gateway**
Realisation of a VoIP system, Assigning telephone numbers, Routing table configuration, Setting 'voice' parameters



- **VoIP Signalling using a SIP Server**
Structure of the system, The SIP Server, Configuration of the SIP Server

Composed of:

DL TC77-VG: VoIP Gateway (Quantity two)

2 off analogue ports
Support for analogue telephones PSTN/PBX (FXS)
Protocols VoIP MGCP, H.323 and SIP
Network interface 10/100 base-TX
External power supply

DL TC77-PH: Analogue Telephone (Quantity two)

Display and keyboard
Internal memories
Line cable RJ11
External power supply

DL TC77-SW: Software with theory, questions, exercises, support programs

Based on Web technology
Theoretical lessons with questions
Practical exercises with questions
Support programs for testing and performing exercises