

Overview in Data and Telecommunications – a Basic Introduction for Non-Technicians, Technical Newcomers and All Technically Interested People

**T**he world of data transmission, within the last few years, has been grown up to a most important sector of the economy with high dynamic and huge market potential. Nowadays, caused by the internet boom, no one can escape discussions regarding data and telecommunications – neither in professional nor in private environments.

In particular, the "non-technician" rather often is facing "insurmountable technology walls" which hinder from access to key words like "MAC", "TCP/IP", Convergence of Networks", "Triple Play", "Optical Fibres", "LAN", "MAN ", "WAN" and more.

Consequently, this seminar has been created to overcome those "hurdles" and to allow an easy access to this fascinating multi-medial world of telecommunication. Technologies and services of data and will telecommunications be vividly discussed and clearly presented. An extensive glossary includes plenty of terms regarding all covered technologies and brings clearness into the multitude of abbreviations and terminologies. Posters various technology summarize the highlights and helpful "Pocket Guides" complete the rich seminar material.

# Contents

- Users, network operators, providers and services
- Regulatory bodies and authorities
- Components: transmitter, receiver, mux and demux, repeater
- Terminating equipment: functions and features, performance
- Networks structure: home, access, LAN, MAN, WAN
- Transmission media: copper, optical fibre, air, first mile
- Data transmission: modem, fixed line, packet oriented system
- Switching: technology & features
- Telephone system: POTS, ISDN
- Transport technologies: PCM, PDH, SDH, DWDM, CWDM
- Fiber Optics: basics
- Ethernet: basics
- LAN components: cabling, hub, switch, router
- IP network: the internet @, TCP/IP
- Next Generation Network (NGN)
- Voice over IP (VoIP)

# **Course objectives**

The participant, at the end of the course, has a fundamental knowledge of various technologies and basic applications in data and telecommunication.

### **Target group**

Non-technicians and any interested newcomers who want an easy and clear approach and an entry into the world of communication techniques and their terminology.

### **Prerequisites**

General interest in technical knowledge.

#### **Seminar info**

- Duration 2 days, from 9.00 to 16.30 h
- Date, location and price on request or see under www.viavisolutions.com/
- On-site or customized seminars on request

#### Contact

Fax +49 7121 86 2145 Tel +49 7121 86 1657 seminars.europe@viavisolutions.com

# EMEA EDUCATION SERVICES