

# XTRAN FOR NETWORK DESIGNERS

# **Course description**

# Target Audience

This course is only intended for partners of OTN Systems.

The target groups are proposal and project managers who need to design (i.e. plan) XTran-networks.

## Course Prerequisites

Basic knowledge of telecommunications (IP and WAN technologies) and electronics.

## Course Objectives

After the training, the students should be able to:

- describe the functionality of XTran and more specifically the application of its interface modules;
- o position XTran & MPLS-TP technology;
- know and use the main advantages of XTran to develop business in specific market segments.
- design an XTran-network, starting from the requirements and resulting in a Bill of Materials.

For the design of "IP-over-XTran" networks, we do refer to the advanced course "IP Design in XTran networks".

#### Exercises

Hands-on training is NOT included.

A demo of an XTran network is included.

Exercises to make BoMs (Bill of Materials) are included.

Case studies of proposals and projects are discussed.

## Duration

2 days

#### **Contents**

The course "XTran for (Sales) Managers" is part of this curriculum.

## XTran for (Sales) Managers

For more detailed information: see the description of this course

- o Introduction into MPLS-TP & XTran
- XTran Components
- o Tunnels & Services
- o TXCare

### XTran for Network Designers

### o Design of an XTran-network

In this chapter we will explain the workflow to design an XTran-network on the physical layer. Based on customer requirements, a design (hardware & topology) will be proposed.

#### SyncE

We will first discuss the purpose of SyncE and then how such a requirement can be implemented in an XTrannetwork.

- Avoid Single Point of Failures in your design
- o Priority Delay Bandwidth

We will discuss the different design options for these parameters and how these parameters may influence your design.

- XTran Dimensioning
- Case Studies