



## ITU / BDT workshop

Warsaw, Poland,

6 – 10 October 2003

### Network Planning

Lecture NP-2.1

### Objectives and Structure of the Workshop



### Objectives of this Workshop

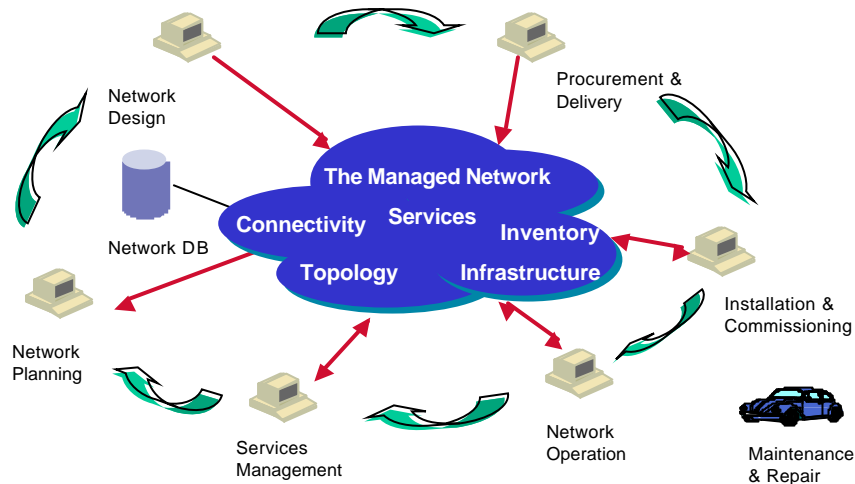
This workshop aims at providing the PTO managers with expertise on Network Planning

The main objectives are :

- to enhance the operational practices with a more **strategic and business-oriented** approach.
- to help the decision making in the **selection of appropriate solutions** for network deployment and operation.
- to analyze most adequate **tools** to support and optimize the overall process.



## Network Planning Role within the network lifecycle



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Lecture NP -2. 1 - slide 3



## Participants are trained :

- to **analyse-benchmark** the initial network situation
- to **define** an overall planning process
- to carry out **services- demand forecasts**
- to analyse network **alternatives and evolution**
- to **define** proper techno-economical plans based on business feasibility and given quality
- to **analyse** role of network planning tools in the planning and operational process

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Lecture NP -2. 1 - slide 4



## BDT workshop on Network Planning: Structure

Module 1: Introduction and Experiences in the Region

Module 2  
Role of Network Planning in the current Telecom scenario

Module 3  
Integrated Planning Process

Module 4  
Specific Network Planning per Layer

Module 5  
Supporting Network Planning Tools

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Lecture NP -2. 1 - slide 5



## Module 2.1 Introduction

**Objectives:** *Introduce participants, experiences, organization of the workshop and key content*

- Objectives of the workshop
- Participants representation and expertise
- Content and organization of the sessions
- Planning experience in the Region

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Lecture NP -2. 1 - slide 6



## **Module 2.2:** Role of Network Planning in the current Telecom scenario

### **Objectives:**

*Define main characteristics of the network planning with today's technologies and uncertainties*

- What requirements are frequent to analyse and define Network evolution
- What main solutions and architectures are available and/or in development
- How to better map solutions to each geo scenario
- Different time scales and missions for the plans
- Impact of the competition and importance of strategic planning and business plans



## **Module 3:** Integrated Planning Process

### **Objectives:**

*Main focus is the definition of basic activities needed in an overall planning as an integrated process to ensure efficiency:*

- Analysis of different geo- scenarios, measurements and data gathering
- Forecasting of expected services, traffic and revenues as a function of competition and regulation
- Technical network design and dimensioning for a given quality of service
- Main methodologies for network solution costing and optimization
- Analysis of Business plans feasibility and investment plans



## **Module 4**

### **Specific Network Planning per Layer**

#### **Objectives:**

*This module focuses on methods required to perform specific network planning activities per network layer and solution*

- **Methods for service forecasting and traffic matrix projections considering voice and data classes**
- **Methods for the design/dimensioning/optimization of the switching-routing layer**
- **Methods for the design/dimensioning/optimization of the transmission layer**
- **Methods for the design/dimensioning/optimization of the control, signalling and management layer**



## **Module 5:**

### **Supporting Network Planning Tools**

#### **Objectives:**

*This module provides a summary of tools and related methods to support the planning process in an efficient way:*

- **Defines different tool categories as a function of the network coverage and degree of detail**
- **Summarises the inputs, outputs and functionalities for the most frequent tools in the market and the related network layers**
- **Presents specific tools by the corresponding development companies with particular application cases**