

### ITU / BDT- COE workshop

Nairobi, Kenya,

7-11 October 2002

### **Network Planning**

**Lecture NP-2.1** 

#### **Objectives and Structure of the Workshop**



### **Objectives of this Workshop**

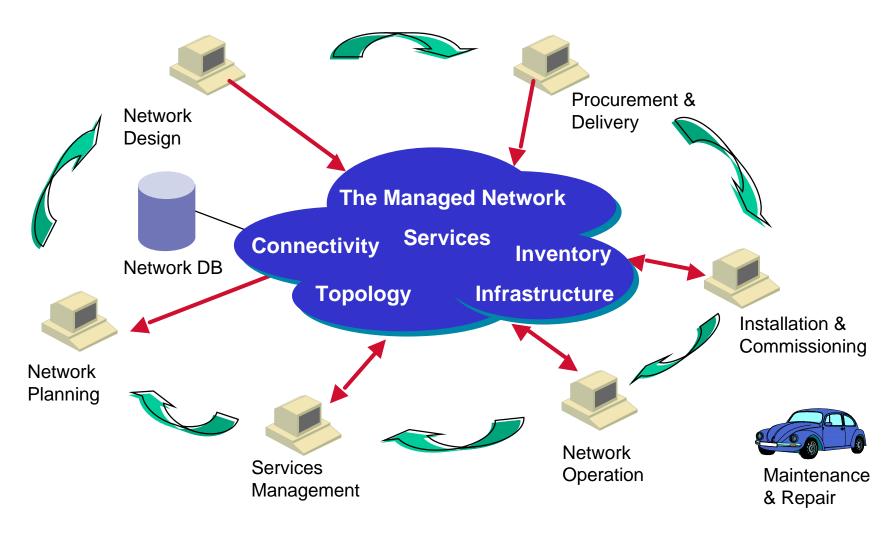
# This workshop aims at providing the PTO managers with expertise on Network Planning

#### 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



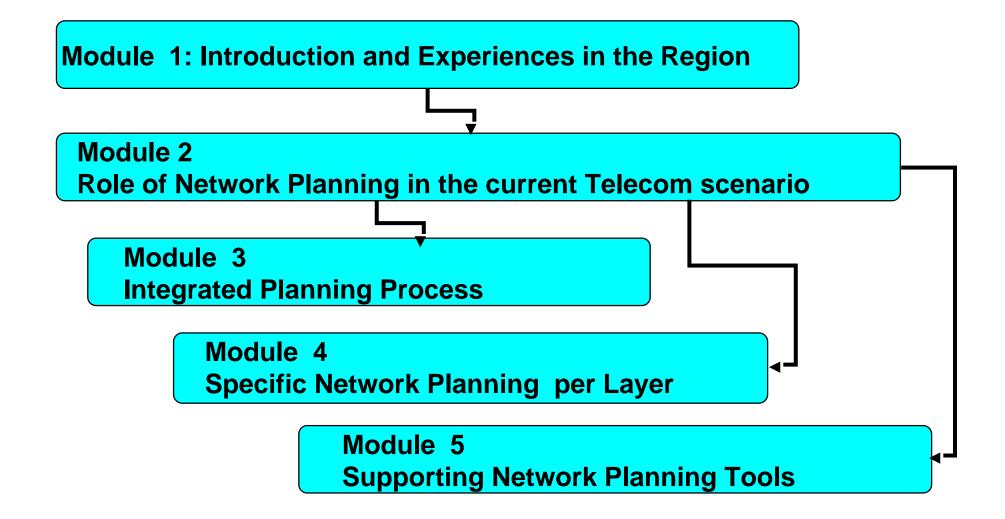


### Participants are trained:

- 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



# BDT - COE workshop on Network Planning: Structure





# 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 sesions
- Planning experience in the Region



#### **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 analise 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 switchingrouting 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