



ITU Role

ITU has supported exchange of experience between countries

TCDC-Technical
Cooperation
between Developing
Countries

Commenced with
support for
PLANITU

Cooperation
between Indonesia
and Vietnam in 1999
and 2000

Network Planning and
Network Strategy
Workshops in Bangkok
and Hanoi in 2000 and
2001

Extended to include
Papua New Guinea
and Thailand in
2000



Focus

ITU emphasis is on human capacity development

- ◆Sharing knowledge and information exchange and experiences
- ◆Building a pool of expertise in network planning
- ◆Especially for assisting the development of computer tools
- ◆Voice and non-voice demand forecasting
- ◆Voice and non-voice traffic forecasting
- ◆Design of packet, transmission, access and mobile networks



Lessons learned - Management Issues

- ◆Fundamental to success is the support provided by top management
- ◆Move into computer-assisted network planning must fit the management strategy
- ◆Must be in-step with the overall development and expansion of telecommunication services
- ◆Management support must be backed by financial support to provide equipment and training
- ◆Training in-depth is necessary to go beyond initial transfer of expertise



Lessons learned - Operational Issues

- ♦ Formation of groups is important - multi-discipline teams
- ♦ Groups should be formally structure and organized - Network Planning Centre
- ♦ Centre provides core of expertise - focal point for dissemination of information support for training
- ♦ Experts engaged as part-time lectures for training programmes
- ♦ Experts trained trainers to take on more advanced topics in specialised courses



Lessons learned - Human Resource Issues (A)

- ♦ Training should include hands-on experience of planning actual networks
- ♦ Training should be undertaken by group of engineers/planners
- ♦ Group members should have defined responsibilities- forecasting, data collection, mapping etc.
- ♦ Group working helps to stimulate and motivate individual members and enhances quality of results
- ♦ Trained group of engineers/planners should assist other groups to design networks -internal consultants



Lessons learned - Human Resource Issues (B)

- ♦ Group of engineers should assist training centre to produce curricula, syllabi and training materials
- ♦ Group should be kept together long enough to build and maintain expertise
- ♦ Learning -by-doing environment created in which real work forms the basis of learning environment
- ♦ Environment created that stimulates creativity and the satisfaction of getting results
- ♦ Keep the groups motivated when promotion or career development moves some group members



Lessons learned - Technical Issues

- ◆ Provision of user friendly hardware and software technically matched to the needs of the network
- ◆ members of the group should understand the function of the software and be able to ask questions of vendors, suppliers and consultants, who install, maintain and operate the systems
- ◆ The planning methodology is important to understand



Lessons learned - Restructuring Issues

- ◆ Companies change over time-organizations are changed and restructured
- ◆ Business practices are transformed to meet new demands for increased efficiency and effectiveness
- ◆ Network Planning methods should be able to survive changes in the organization



Lessons learned - Future Issues

- ◆ Network Planning teams should be staffed to be able to keep up with changes in the technology that influence the network environment
- ◆ Skills should be developed in IP, ATM, SDH, WDM, optical fibre, WLL and other networks
- ◆ Skills should be developed in forecasting and dimensioning methodologies
