## C 2.2 INTERURBAN ROADS AND INTEGRATED INTERURBAN TRANSPORT

Roads are fundamental for society and their development requires good cross sector coordination and cooperation.

The goal of transport planning is to support sustainable community development and the transport system in such a way that people and goods can travel as needed safely and economically. Client-oriented transport planning can integrate the various needs of clients and society in different types of travel environments. The purpose of this type of analysis is to ensure that all the main issues are included, that their links and contradictions are identified, and that the attention is turned from the construction of roads to people's everyday mobility needs and the transport needs.

A multi-stage principle is suggested as a general approach to develop the road transport system.

In the first stage, measures are sought which affect land use, traffic and transport needs and choice of travel mode in order to control traffic growth and its consequences. Greater focus needs to be directed towards creative methods that integrate the technically rational level with the political, strategic level.

Intermodal terminals play a critical role in permitting the most appropriate mode of transport to be used, combining the flexibility of road operations with the line-haul efficiency of rail transport. The integration of transportation modes is an important element of this stage.

In the second stage, measures are sought which enhance the use of the existing road network to keep transport route capacity utilized as fully as possible. In this stage, operational and access management will be important considerations:

- Operational Management is about using the infrastructure as efficiently as possible.
  Currently, most of this is accomplished by installing infrastructure on the road-way
  (such as signals, signs and other control devices) that relies on drivers responding
  appropriately. The natural extension to this trend is likely to involve taking
  information directly to the vehicle and possibly, ultimate control out of the driver's
  hands.
- Access Management is "the systematic control of the location, spacing, design, and operations of driveways, median openings, interchanges, and street connections to a roadway". Access Management aims to manage and mitigate the relationships of roadway operations and the side impacts through the control, design, and location of the interactions.

In the third stage, minor road improvement measures for solving the problem are studied. This stage comprises investments in the existing transport route network to improve safety, or load-bearing capacity, or modest traffic capacity enhancement.

Options in these first steps must be exhausted before resorting to improvements particularly those involving substantial investment

Only in the fourth stage are new investments and major renovations considered. This stage comprises projects for expanding the transport route network.

Public participation, the coordination of transport planning and land use and spatial planning as well as cooperation between the public sector and private interests needs, is essential in attempting to influence the demand for road transport.

Road administrations need to recognise their wider operational role, carefully planning their resource strategy and new skill needs.

## Recommendations

Interaction between the development of road and integrated transport and regional and land use planning requires more attention for the future. There is little point in adding new capacity if this is quickly absorbed with more movement and the congestion just returns to previous levels. The conventional sectorial system is not enough; smarter methods in transport planning are needed.

More focus needs to be directed towards creative methods; methods that integrate and create a bridge between the technical-economical issues and the political-strategic dimension. This is a field that needs to be developed in PIARC. It relates to emerging methods in business management, negotiations, decision-making, planning and design. It is a necessary complement to the sectorial analysis.