

CURRENT SITUATION AND FUTURE PROSPECT OF TRANSPORTATION SECTOR IN LAO P.D.R.

Khammoune BOUAPHANH
Deputy Director-General
Transport Department,
Ministry of Communication, Transport,
Posts and Construction
Lane-Xang Avenue, Vientiane, LAO PDR
FAX: +856-21-412250

Souraxay PHOUMMAVONG
Chief
Railway Development Project
Ministry of Communication, Transport,
Posts and Construction
Lane-Xang Avenue, Vientiane, LAO PDR
FAX: +856-21-412250

abstract: Road maintenance depends obviously on a plan for major repairs and continuous maintenance for instance: yearly overall examination and daily routine operations respectively. It is also subjected to a good organisation structure that means the Ministry concerned should be a Department of Maintenance. In addition, the regulations should be reviewed and strictly enforced.

Road link between neighbouring countries plays an important role nowadays for facilitating freely the movement of good and people. However, a lot of questions have been raised by the transit countries that who is responsible for the maintenance and construction costs and what are the measures to be laid out for facilitation and road protection.

The problems of congestion, traffic noise, parking space, traffic accidents, pollution and visual intrusion of urban environment have been found in all developed countries due to the increase of population, urban building and systems and means of transport themselves as result of the lack of town planning and transport network. Besides that the coordinated use of transport means seems to be confused. To solve these crucial problems, not only considers the appropriate town planning and transport systems, but also have the coordinated use of private cars and public transport.

The most important infrastructure necessary for Lao National Development is Transportation. There are 4 Transportation modes namely water, railway, road and air for passenger and freight traffic. Unfortunately, the Lao People's Democratic Republic has no railway. The Road Systems is also very much undeveloped. Rivers and mountains dominate the topography. There are a lot of undeveloped hinterlands as mountains and plateaus cover well over 70% of the country. Therefore, the development of the transport System must be seen as an integral part of Lao National Development. The provision of transport is not a goal in itself, but necessary in order for the economic production and administration to function.

1. ROAD MAINTENANCE AND ORGANIZATION

1.1 Introduction

The rapid deterioration of the road network has in part been caused by the condition of the vehicles and the failure to observe technical specifications such as vehicles weight, axle load and speed.

1.2 Road Maintenance

For better preservation of the existing road infrastructure, the most urgent task would be the requirement of a plan for major repairs and continuous maintenance.

Road maintenance should include almost daily routine operations because the vegetation

grows fast and tend to extend to the shoulder of the roads, and together with the sand, obstructs lateral ditches and sometimes pipes and box culverts.

Maintenance should also include a yearly overall examination of the condition of the riding surface, the repairs of the potholes, the elimination or corrugations and periodic examination of the road structures, bridges and the like.

Rural feeder roads can be maintained and built in part by using local material and labor-intensive methods; villagers could be trained to perform some of the necessary tasks.

1.3 Road Maintenance Organization

Good maintenance depends on a good organizational structure. Within the ministry concerned should be a department responsible for the maintenance and rehabilitation of the national road network.

Such department should be provided with qualified staff, adequate financial resources and the appropriate equipment.

Besides that the regulations should be reviewed and strictly enforced.

2. CONSTRUCTION AND MAINTENANCE ROAD LINK BETWEEN NEIGHBORING COUNTRIES

2.1 Introduction

The physical movement of goods from neighboring countries through one or more countries raises the questions of who is responsible for the construction and maintenance of infrastructure, as well as for the operation of transport equipment and vehicles. Very often the transit countries are not ready to finance the construction and maintenance of transport facilities for the use of their neighbors, when these facilities will not profit them.

2.2 Road Construction and Maintenance Measure

The development and maintenance of appropriate land transport corridors are required for improve the transit transport of neighboring countries.

An effort should be made to find a satisfactory solution to this crucial problem. Appropriate arrangements could be worked out by which construction and maintenance costs would be shared by all parties concerned. Experience indicates that financing organizations generally deal only with the countries in which projects are located, but it should be possible to overcome this obstacles by providing the guarantees to both the transit and neighboring countries concerned.

2.3 Facilitation Measure

The facilitation measures for international movement of goods between counties encompass:

1) Rules and regulations on technical specifications for vehicles such as weight, dimension and axle load and infrastructure such as standard for roads and bridges on road safety measures and on driving standards.

2) Customs and border-crossing formalities such as custom inspection, custom bond for transit, custom sealing and insurance arrangements, which generally involve the preparation and submission of numerous documents, complicate transit operations between countries and increase delays at crossing points, the risks of damage and pilferage and direct and indirect transport costs.

3. THE GROWTH OF TOWN AND PUBLIC TRANSPORT SYSTEMS

3.1 Introduction

We can find concentrations of urban building and transport in all developed countries. There are a result of industrial and economic development, the progress of technology and civilization, the increase of population, urban construction and the systems and means of transport themselves.

A special problem created through this development was the problems of traffic congestion, traffic noise, parking space, traffic accidents, pollution and visual intrusion of the urban environment.

We also found that the segregation of residential and working areas means that two or more times every day a large proportion of working population must commute forwards and backwards between their homes and places of work. Commuter travel contributes very largely to the traffic problems in towns.

The solution of these problems depends quite clearly on being able to cope with these daily streams of commuters by means of appropriate transport facilities, in other words with a reasonable expenditure of time and money and with an acceptable effort on the part of individual. A large proportion of passenger traffic in the congested areas, both now and particularly in the future, must be directed to public transport systems in the interest of the traffic flows as a whole. Public transport must be developed and equipped in such a way that the public can consider it as an alternative to the private car.

3.2 Private Cars and Public Transport

1) The private cars allow door to door travel throughout all ramifications of the road network in the region. On the other hand the car is very wasteful of traffic space and in harmful in this sense, when it gives rise to bunched streams of traffic. It also represents a very high capital cost in relation to its unit of output.

2) The characteristics of public transport are exactly the opposite of those private car. Public transport is economical of space and the great capacity. It is therefore highly suitable for coping with large volumes of traffic. Investment and operating costs per unit of output are low. Public transport is however always a routed means of transport which unlike the private

car, serves an areas to a limited extent only.

3.3 Coordinated Use of Private Cars and Public Transport

The diametrically opposed operating characteristics of the two forms of transport call for totally different solutions from the town planning point of view also. The private car, because of its demands for space, and encourages decentralization, whereas public transport needs concentrations in order to ensure optimum use of capacity and economical operation.

Because of operating characteristics described above, it is desirable to coordinate private and public transport and to apply a division of labor to their use. The following form of division presents its self in this context:

1) It is the task of public transport to cater for the main flows of traffic in the built-up areas: there are primarily the flows running radially into the town centers. The transport network routing and provision of capacity must be planned accordingly. Subsidiary flows can be accepted by public transport, if this is economically feasible or justifiable in the public interest and the transport network can be extended to cater for them.

2) On the other hand, private means of transport should be used in every instance where economic use of public transport commensurate with capacity is not possible, and where the specific traffic advantages of the private cars are evident, i.e. principally in the outer suburbs of built-up areas. In these areas there may be merit in considering the private car as the only means of transport and encouraging its use accordingly.

For these reasons of capacity, speed, and punctuality, the rapid transit railway should be the form of transport used to serve the main traffic flows. The rapid transit railway should then be supplemented by the bus and the car. These supplementary systems will serve the subsidiary flows and to cater for distribution and feeder traffic from and to the rapid transit railways.

3.4 Station and Park and Ride Facilities

Station facilities must be provided for a combined bus-rapid transit railway system, and park and ride facilities for car-rapid transit railway system to allow car to be parked and the divers to transfer to the railway.

Park and ride should accordingly be understood not just as provision of parking space for cars but as a total system of measures and facilities designed to bring about a true partnership between private and public transport.

The development of P+R into an effective system, however, involves certain considerations in connection with town planning and land use, and extension of transport network, not to mention the layout and design of P+R facilities themselves, which will have to be taken into account by the town and transport planners.

4. LAO NATIONAL RAILWAY PROJECT

The Lao people's Democratic Republic (Lao PDR) is not only a landlocked country but also situated on a comparatively long and narrow peninsula with roughly 1900 km of distance from north to south. There was an ancient and abandoned railway system of 15 km of narrow gauge on Mekong island (Bane Khone) situated about 10 km upstream of Khone Fall near the Lao-Cambodia border, export and import items naturally have to suffer certain disadvantages from high transport cost before reaching destinations.

The first major span across the Mekong River, the Australian donated Friendship Bridge is due to in April 1994 and will link the northeastern Thai town of Nongkhai with Vientiane. The bridge is made of reinforce concrete and is 1,278 meters. There are two, four meters wide road traffic lanes and two, one and half meter wide sidewalks on either side. It also has space for a rail track between the road traffic lanes. With the bridge and rail weather highway in northern Lao PDR to be completed by 1995-96, traveling by road from Singapore through Peking will be possible. With the completion of railway link on the middle strip of the Friendship Bridge according to the initial phase of this project, an overnight express train for passengers between Vientiane and Bangkok will also be realistic.

The important objective of the Lao National Railway Project is to conduct and operate a rail transport system for passenger and freight traffic in the Lao PDR. As it is already pointed out that for the best interest of internal economic development of the country, the Lao National Railways should concentrate efforts on freight and passenger services in the north-south direction. However, as the Lao PDR is right at the center of Golden Economic Quadrangle, it also should plan for international connections to Thailand, China, Myanmar, as well as Vietnam for the growing international tourist traffic as well as for through export trade. (See Fig. 1)

There are 03 possible routes to Thailand namely Huay Xai (Lao PDR) to Chiang Kong (Thailand). Even Thailand offers bridge at Huay Xai and Japan offers bridge at Savannakhet, there is no other choice better than Vientiane-Nongkhai railway crossing as state Railway of Thailand already has railway terminal at Nongkhai (Thailand). (See Fig.2)

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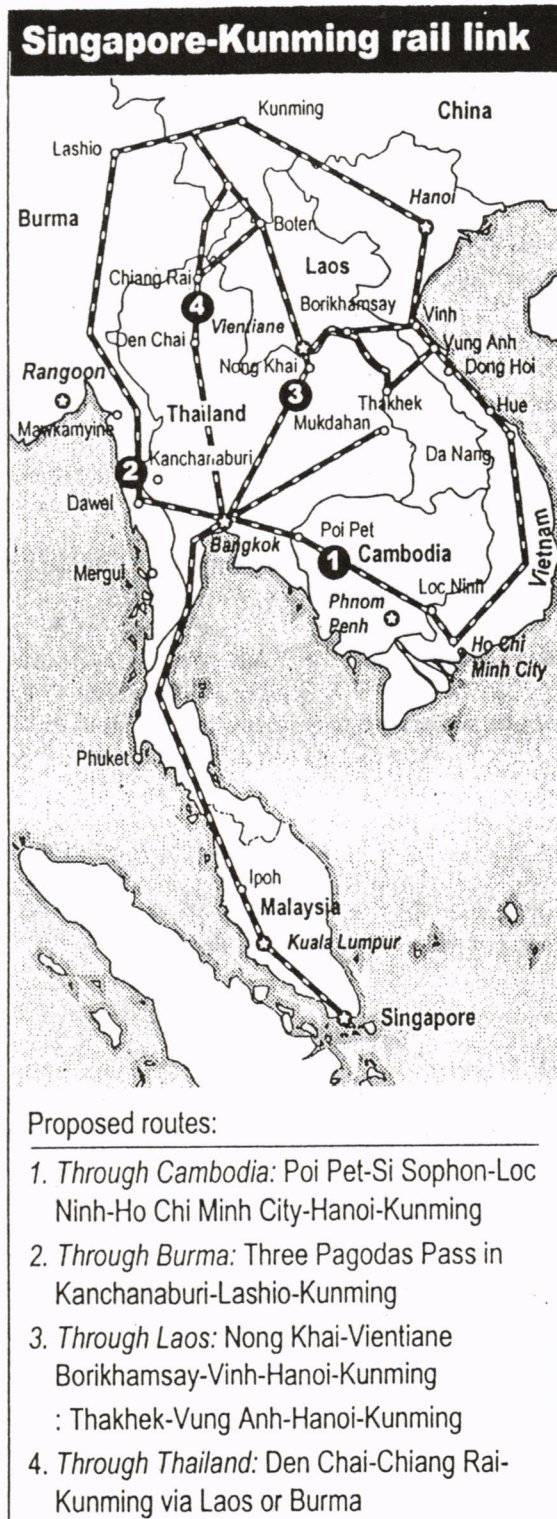


Figure 1 Singapore-Kunming Rail Link

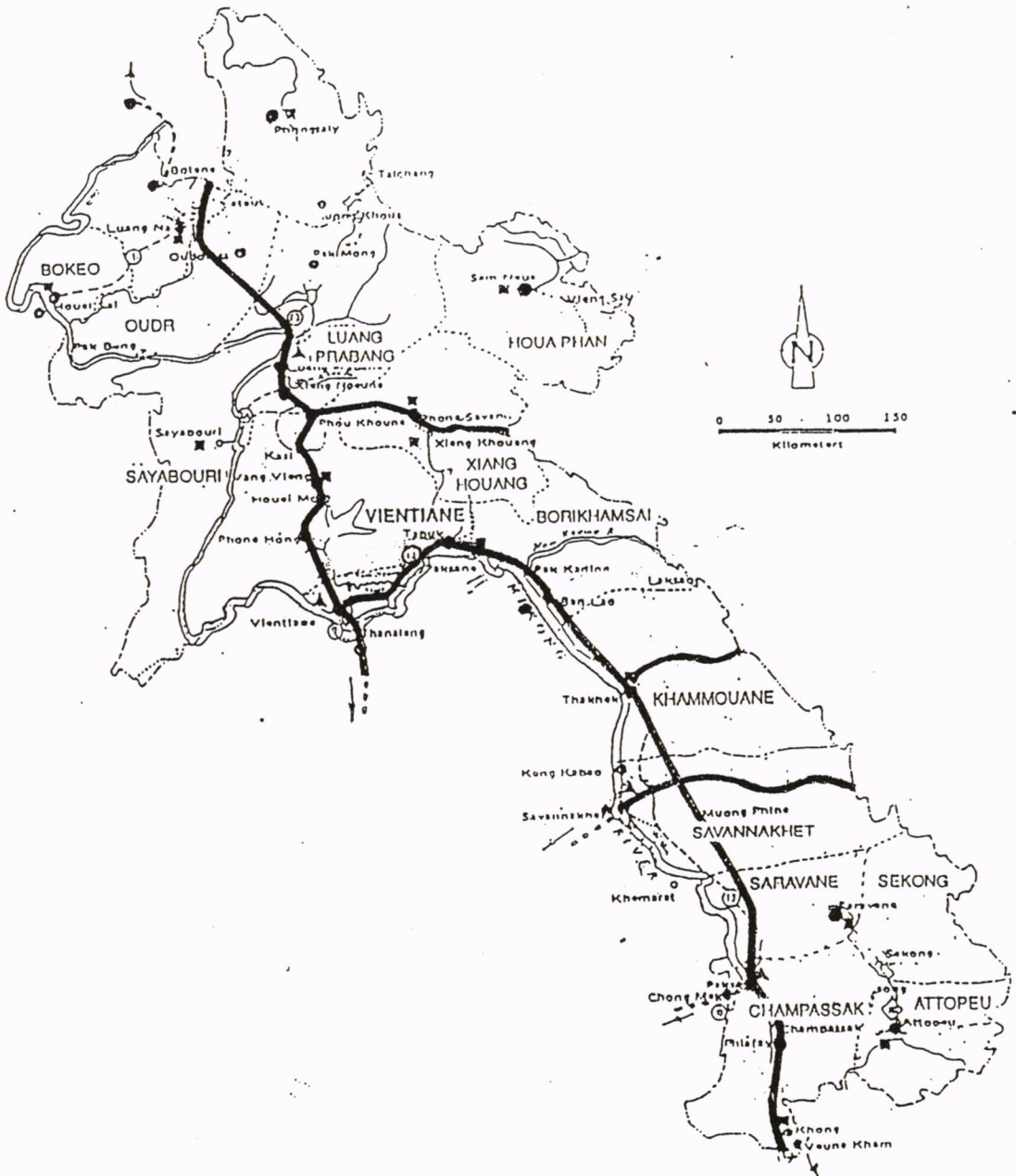


Figure 2 Indicative National Railway Network