

3. **WHY DO RAILWAYS NEED MARKETING?**

It is an undeniable fact that railways worldwide are facing unprecedented competition from other transport modes, particularly from road transport. More than ever before, railways are being exposed to market forces and associated competitive pressures which threaten their long term survival. Their capacity to respond effectively to these forces depends mainly on their ability to transform themselves from the non-profit making agencies of government, which they have historically been, into vibrant, profit driven and market oriented commercial enterprises.

This transformation requires, among other things, a fundamental shift in the driving philosophy of railway organizations and their adoption of a marketing culture, systems and practices is a vital part of this process. ***It also requires a major change in the attitude and expectations of governments with respect to the future role of their railway organizations.*** There is a basic contradiction between requiring railways, on the one hand, to become commercial organizations, and on the other to continue, without explicit subsidy, the provision of loss making “welfare significant” services.

Among the more compelling reasons for the adoption of a market-led philosophy by railway organizations is the requirement, now increasingly being imposed on them by their owning governments, to reverse the declining trend in their net financial results. Closely linked with this requirement is the need for railway organizations to be able to respond effectively to competition which could, if allowed to go unchecked, drive down their net financial results to levels which would be politically unsustainable and might therefore lead to their demise. In this context, this section outlines the recent experience of some railway organizations of the ESCAP region.

3.1 **Reversal of Poor Financial Performance**

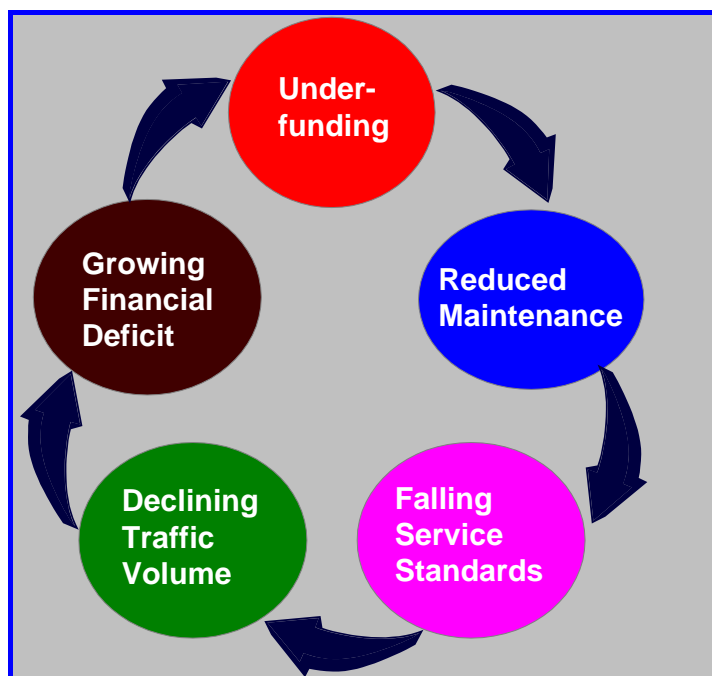
Very few of the region’s railway organizations currently generate sufficient revenue from their core transportation businesses to cover their operating expenses, and practically none of the region’s railway organizations generates a sufficient gross operating margin above the level of its operating expenses to provide for the renewal of its assets. Yet the governments of the region now demonstrate a tendency towards withdrawal of financial support for railways.

(a) ***General Statement of the Problem***

The dilemma faced by most of the railway organizations of the region, and of the world for that matter, is best understood by reference to what might be termed “*the vicious circle of railway underfunding*”. Figure 3-1 illustrates how this vicious circle works.

A widening negative gap between operating costs and revenues such as that experienced by a majority of the region’s railway systems can lead (and often has led) to a situation in which governments reduce the level of funding available to their rail systems for the maintenance of their track infrastructure and vehicle fleets at a level compatible with the provision of a safe, efficient, reliable and competitive transport service. This in turn leads to a deterioration in the condition of track, bridges, signalling systems, and of locomotive and

Figure 3-1 The Vicious Circle of Railway Underfunding



rollingstock fleets, resulting in high rates of equipment failure and the imposition of increasingly stringent speed restrictions on track and bridges, in order to arrest the decline in physical standards. The market response to falling standards of service is a withdrawal of business and reduced traffic volume, leading successively to: *declining revenue; further widening of the financial deficit; and further reductions in the railway budget.* In this way, the *vicious circle* is completed.

The problem of the non-availability of funds to support an acceptable level of maintenance (which might be perceived to be the root cause of the vicious circle) is often compounded by *capital starvation*, particularly of funds for railway capacity expansion

projects, the majority of which may be economically justified by comparison with alternative investment in less environmentally friendly transport modes.

(b) The Problem as Experienced by Railways of the Region

A recent review by ESCAP of the profitability of some 16 railway systems of the Asia-Pacific region, out of a total of some 30, indicated that only five of these systems generated sufficient revenue to cover their operating costs, and one of these five was able to achieve an operating surplus only after the inclusion of profits made on its real estate transactions.³

Here the following definitions apply:

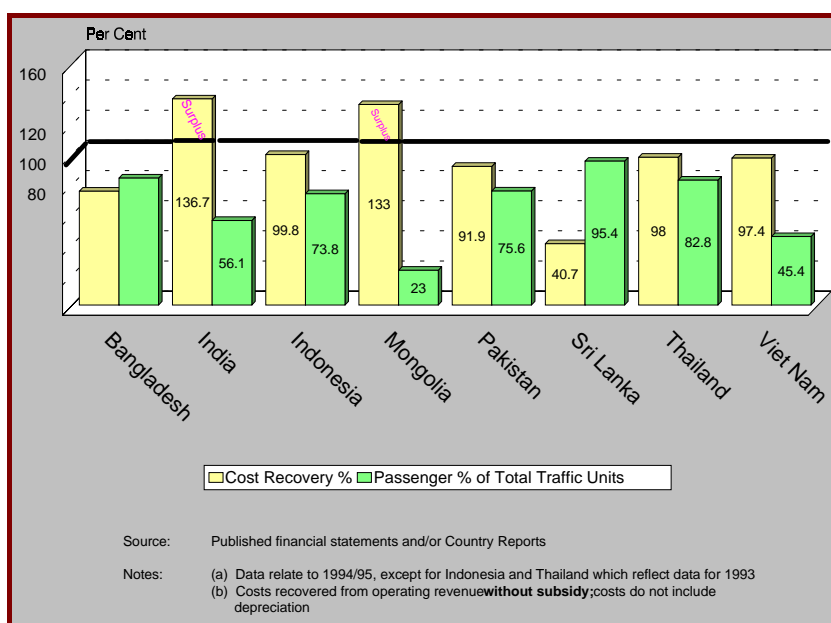
- ◆ **Revenue** is gross receipts of income from railway operations, including the core transportation business as well as other business, such as commercial property development. It excludes income from other sources, such as interest on investments or sale of redundant assets, as well as any subsidies paid to compensate the railway for the provision of unprofitable services.
- ◆ **Operating costs** are the working expenses of the railway, net of depreciation allowances and interest paid on loans. Typically, working expenses are

³ ESCAP, *Review of Developments in Transport, Communications and Tourism in the ESCAP Region, 1995* (ST/ESCAP/1620)

incurred in the payment of wages and salaries and in purchases of fuel and consumable materials for operation and maintenance of railway assets.

Of a total of 12 railway organizations visited during the course of ESCAP missions and/or supplying Country Papers for the Railway Marketing study, detailed financial results were available for eight - Bangladesh, India, Indonesia, Mongolia, Pakistan, Sri Lanka, Thailand and Viet Nam (a ninth railway organization, the Malaysian railway, supplying data only in index format). Figure 3-2 shows, for these eight railway organizations, the percentage recovery of operating costs from revenue against the proportion of total traffic units (passenger km plus freight net tonne km) attributable to passenger traffic. Such a comparison was made in order to demonstrate a link between a railway organization's profitability and the share of passenger traffic in its total traffic task. In general, the cost recovery ratio will be low when the passenger traffic share is high, and vice versa, owing to the fact that passenger fares are usually strictly controlled or capped by governments, whereas freight tariffs are not.

Figure 3-2 Profitability and Passenger Share of Total Traffic, Selected Railways of the ESCAP Region



Of the eight railway organizations for which financial data were reviewed, only two, India and Mongolia, achieved an operating surplus (excess of revenue over operating costs), yet in both cases it can be, and is, argued that this achieved surplus is insufficient to provide for an adequate rate of asset renewal.

In the case of India, while the surplus of revenue over operating costs is nearly 40 per cent, the government requires the payment of a dividend out of net revenue. In 1994/95 (the year to which the reviewed data relate), payment of this dividend, amounting to the equivalent of US\$ 490 million, reduced the surplus to only 25 per cent above the level of operating costs, which was insufficient to sustain investments in the capacity expansion projects needed to maintain Indian Railways' market share.

In the case of Mongolia, the addition of depreciation allowances to operating costs would result in a reduction in the surplus of revenue over operating costs from 33 per cent to only 0.5 per cent, and even then there is insufficient provision to permit replacement of life expired assets at an acceptable rate.

The remaining six railway organizations do not generate sufficient revenue to cover even their working expenses and hence are wholly reliant on government financial support for asset renewal.

Data supplied by the Malaysian Railway in index format suggest that the level of cost recovery for that system stands at 107 per cent after an allowance for depreciation and at 120 per cent without. However, after removal of income and costs for non-core business (mainly commercial property), it may be inferred from the data supplied that cost recovery would stand at only 96 per cent after an allowance for depreciation and at 109.6 per cent without - suggesting that the profitability of the railway is heavily dependent on its non-core business.⁴

The inverse relationship between level of cost recovery and the share of passenger traffic in the total traffic task is borne out in the case of 6 of the 8 railways reviewed, India and Viet Nam providing the two exceptions.

In the case of India, while passenger traffic accounts for more than half the total rail traffic units, the revenue generated by the railway exceeds the level of operating costs by almost 40 per cent. In fact, the results for India obscure the reality that there is a substantial cross subsidy between freight and passenger traffic, which is addressed in the feature box (box I).

In the case of Viet Nam, the reverse applies, in that passenger traffic comprises less than half of the total traffic units, yet overall cost recovery stands at slightly less than 100 per cent.

The results for Viet Nam reflect poor profit performance in both the passenger and freight traffic sectors. This has been a result of the recent transformation of the national economy from central control to market direction and the consequent exposure of the railway to virulent price and service competition (especially from road transport), where previously it had been shielded from such competition. Thus far, the railway has been unable to respond effectively to this competition, in either of the core transportation sectors. As evidence of this, annual rail passenger kilometres have declined by more than 60 per cent, while annual rail freight tonne kilometres have remained practically constant, since 1987. The railway has been unable to shed costs at a rate compatible with the loss of traffic, and this coupled with an inability either to increase its transportation charges owing to competitive pressures, has resulted in a deterioration in its cost recovery performance over this period.

(c) *How can application of marketing techniques improve railway profitability?*

An answer to this question lies in the fact that individual railway traffics or traffic segments are ***not*** uniform in terms of their contribution or potential contribution to full cost recovery. That this is so is well illustrated by the experience of India (box I).

⁴ Country Report for Malaysia, p.14.

Box 1 Divergent Financial Returns and Cross-Subsidies between Traffic Segments in India

Financial contributions (i.e. revenue less attributable costs) are calculated annually for 7 passenger traffic segments and nearly 250 freight commodities carried by the Indian Railways. Contribution data for 1993/94 indicate very clearly the widely divergent profitability of individual traffic segments.

In that year, the operating surplus of the railway (revenue less working expenses) amounted to Rs 47.11 billion. By contrast, the aggregated financial contributions of the top 7 rail freight commodities (in terms of revenue) was estimated at Rs 41.43 billion and the aggregated contributions of all passenger segments at Rs - 12.73 billion. Thus, the contribution generated by the top 7 commodities was sufficient after deduction of the negative contribution on passenger traffic, to provide a substantial proportion (61 %) of the overall operating surplus for the railway. The fact that it did not account for 100% of this surplus would suggest that there are substantial profit contributors amongst the remaining freight commodities transported by the railway, although it is likely that not all commodities would generate a positive contribution.

While the passenger traffic sector overall generated sufficient revenue to cover **only 77.5%** of its attributable cost, three passenger traffic segments achieved at least full cost recovery. These were the Air-conditioned Class, Air-conditioned Sleeper and Air-conditioned Chair Car segments, with cost recovery percentages of 121.3%, 148.3%, and 105.6%, respectively. The worst contributor was the Ordinary Second Class segment which is strictly fare controlled and for which collected revenue recovered only 44.8% of attributable cost.

In the case of the top 7 freight commodities, cost recovery overall was **164.5%**. For individual commodities, it ranged from 321.6%, for Iron and Steel, to 111.2%, for Food Grains (the latter being subject to tariff regulation in some areas).

The Government of India has not as yet accepted the concept of CSO funding of loss-making traffic segments, for which, owing to government policy, an improved level of cost recovery cannot be achieved. Hence, there is considerable pressure to improve the profit performance of those traffic segments - mostly bulk freight commodities - which can be expected to provide a cross subsidy for the loss-making segments. Several marketing strategies have been devised and implemented to achieve this goal, the most significant being the introduction of incentive pricing to reduce empty backhaulage of wagons.

Source: Country Report for India

Some traffics - for example principally, but not exclusively, those freight traffics capable of being handled in point to point block train loads over comparatively long distances at high frequency - offer a relatively high level of cost recovery, while others due to lack of volume and numerous other factors, such as an inability to yield profitable fares or freight tariffs, are substantial loss contributors.

The success of the railway in being able to lift the level of overall cost recovery, within the constraints imposed on revenue generation by government policy, thus depends on its ability to:

- (i) *Actively market* those individual traffics or traffic segments which can be identified as profit contributors;

- (ii) *Enhance operational efficiency* in the case of individual traffics or traffic segments which have the potential to offer improved financial returns;
- (iii) *De-market* those traffics or traffic segments which can be identified as chronic loss contributors, and *from which it is possible for the railway system to withdraw*;
- (iv) *Quarantine and seek direct compensation for* those traffics or traffic segments which can be identified as chronic loss contributors, but from which, owing to government policy, *it is not possible for the railway system to withdraw*

The conventional view that marketing is concerned with growth, rather than with contraction, has to be overturned if marketing techniques are to succeed in improving corporate profitability. Marketing is, after all, nothing more than a systematic management tool aimed at identifying and manipulating the factors which will contribute most to profit growth. This may be achieved as much through a process of strategic contraction, as through the promotion of growth. However, it has to be emphasized that strategic withdrawal from individual loss-making traffics should be contemplated only if the revenue generated by those traffics is insufficient to cover their direct operating or incremental costs and then only after all possibilities for coordination with other modes for their handling have been fully explored.

In the railway environment, de-marketing strategies have been applied in order to achieve a withdrawal from unprofitable freight traffic segments, such as short-haul less-than-carload freight traffic. India and (to some extent) Malaysia have applied punitive freight rates to discourage this business. In the case of longer haul LCL traffic, the second strategy (improvement of operational efficiency) has been applied by providing freight rate incentives to LCL customers in order to encourage them to containerize their freight consignments. *[Such strategies, however, should be applied with caution and with due regard to the needs and business interests of customers. In chapter 7 (section 7.3) , where logistics management is discussed, an example is given of the application of a containerization strategy which had wholly undesirable consequences for the railway organization seeking to apply it, simply because it had embarked on the strategy without considering the needs and circumstances of customers].*

Finally, the marketing concept also embraces the quarantining, or isolation, of services or activities which are inherently unprofitable, but the continuing provision of which is required by governments to satisfy policy goals, such as poverty alleviation or regional development. Such unprofitable activities may be related to particular market segments, as is the case with third class or economy passenger services upon which many governments of the region impose fare ceilings or caps, or they may be related to operation of particular parts of the network such as branchlines, or finally they may be related to a requirement to provide for employee welfare or for the retention of employees who would otherwise be declared as surplus.

One solution to this problem which is gaining popularity throughout the region and elsewhere is the identification and explicit funding of these services as *Community*, or *Public, Service Obligations (CSOs or PSOs)*. Effectively, implementation of this solution would mean that a railway system would be required to forecast and agree with the government prior to the commencement of each financial year, a level of explicit subsidy to be paid by

the government to eliminate losses which might otherwise be incurred on services identified as CSOs or PSOs. This amount would then be paid to the railway as a specific revenue supplement.

An important prerequisite for the operation of a CSO contract is the availability of discrete and at least annually updated cost estimates for each declared CSO activity. Apart from providing a basis for explicit subsidization of unprofitable components of railway business, isolation of the costs of CSO activities has the advantage of revealing the financial performance of potentially profitable components, allowing a more focussed approach to developing strategies for improvement of this performance.

The policy of cross-subsidization of unprofitable traffics by the financial surpluses of profitable traffics (as practised by several of the region's railways) will not generally allow the strengths of the latter to be fully developed or exploited, and indeed may well arouse customer resistance and result in loss of traffic.

For these reasons, explicit subsidization of unprofitable but necessary activities, via an appropriate funding mechanism, such as CSO or PSO funding, may well be crucial for the long term survival of railways. However, as is shown in Box II, only three of the 12 regional railway systems participating in the ESCAP Marketing Survey have so far implemented a CSO funding system.

Box II Compensation for Unprofitable Services

Railway	Adoption of CSO Funding?	Remarks
Bangladesh	Yes	Applies to all passenger services, below cost carriage of certain freight commodities, operation of uneconomic branchlines and employee welfare
India	No	Government requires cross-subsidization between profitable and unprofitable services
Indonesia	No	
Islamic Republic of Iran	No	
Kazakhstan	No	
Malaysia	Yes	Limited to East Coast long distance passenger services. Development of non-core business expected to cross-subsidize core transportation business (eg. Property income to finance rollingstock fleet modernization)
Mongolia	No	
Pakistan	Yes	Applies to most passenger services and carriage of freight on behalf of Government
Sri Lanka	No	
Thailand	No	Under consideration
Uzbekistan	No	
Viet Nam	No	

Source: Country Reports and ESCAP Survey Missions

3.2 Responding to Increasing Competition

The fact that railways, worldwide, are being exposed to an increasing intensity of competition from other transport modes, notably from road transport, reinforces the need for railway organizations to implement systematic marketing techniques. Over at least the past two decades and possibly over a longer timeframe, this intensified competition has succeeded in reducing the market share of rail in all traffic segments, but most notably in the freight traffic segments. Coupled with reducing real levels of financial support for maintenance of rail systems, this intensifying competition has had the effect of further depressing railway profitability.

An essential function of marketing management is to gather and to act on intelligence about the activities and the pricing strategies of competitors. In this way, it can help to lessen the adverse impacts of competition on railway profitability. Not the least important aspect of marketing management's role in this context is its ability to provide railway corporate management with adequate market intelligence to be able to effectively lobby governments in order to achieve a more equitable basis of competition within the transport sector.

It can be fairly claimed that the main emphasis in the development of national transport policies within the region and elsewhere over recent years has been the removal of the economic regulation of transport, often referred to as *transport deregulation or liberalization*. This has produced some beneficial effects in terms of encouraging greater levels of competition within the sector, but at the same time the focus on deregulation has obscured from the view of the transport policy makers of the region the urgent necessity of achieving an adequate level of cost recovery from commercial road transport operators.

That there is an under-recovery of the costs attributable to the use of the public road system by road transport operators, especially operators of heavy commercial vehicles, is well documented in World Bank reports and elsewhere. However, the wider effects of current road cost recovery policies are not generally well understood. Perhaps their most damaging effect is that they set an artificial ceiling on the level of railway rates and charges, by facilitating predatory competition on the part of road transport operators who in many countries of the region are assisted by artificially low cost structures and an absence of commercial regulation. The consequence of these policies is that taxpayers *could* face a double burden - in the form of a greater net commitment of public funds for road maintenance (where there is insufficient cross-subsidization from charges on other categories of road users), plus a greater commitment of public funds to cover the railway financial deficit which would be significantly larger than it would have been, had there been equitable competition.

The detrimental impacts of government road cost recovery policies must in the first instance be addressed by direct action by railway management to lobby governments to change their policies. Implementation of a systematic marketing approach will not of itself allow railways to successfully combat these adverse impacts, but it will at least lead to a better understanding of the problem and provide a sound basis on which railway managements can lobby governments for its resolution.

In addition, these adverse impacts can be minimized by the application of marketing strategies in particular traffic, or market, segments in which customers carefully

trade off service factors against price in making choices about mode of transportation. The cheapest service will not always be selected, if other customer requirements, such as those associated with frequency, transit reliability and consignment security (in the case of freight traffic) are not also satisfied. Different market segments will typically place different weights on price and service factors, and railways will be in the best position to be able to exploit these differences if they apply marketing techniques which will first allow customer needs to be accurately identified and then answered with tailor-made price and service strategies.

Application of customer oriented marketing strategies will require not only that railways develop a detailed knowledge of their customers, but also that they routinely gather and assess intelligence on their competitors. The type of information which should be collected is outlined in chapter 9.

3.3 Is Privatization a Necessary Pre-requisite to Effective Railway Marketing?

In a word, the answer to this question is *No*. There seems to be a popular misconception that only the private sector can successfully implement marketing systems, policies and strategies - a misconception which may stem from the belief that public sector enterprises have no incentive to operate in a profit maximizing way. Such a belief is quickly being overturned by the modern tendency of governments, including some in the ESCAP region, to require their railway systems to achieve full cost recovery and to engage their senior management personnel under fixed term, incentive based contracts in order to ensure this result.

Indeed, it may be argued that the methods and form of privatization will determine whether privatized railways will have any incentive at all to embrace marketing systems, policies and strategies. If privatization merely results in the transformation of a public monopoly into a private one, then it is unlikely that marketing will assume top priority among the management strategies adopted by the newly privatized railway. In addition, privatization *could* result in a paradox whereby the profit maximizing strategies of a privatized railway actually work against effective marketing of its services. The recent experience of railway privatization in the United Kingdom of Great Britain and Northern Ireland abounds in examples of such paradoxes, owing to the constraints imposed on the new private railway operators by the form of privatization employed.

One such example is that of South Western Trains, one of the 25 passenger rail operating companies recently set up to operate services under a franchise agreement with the United Kingdom government, as part of its railway privatization programme. As is the case with the majority of passenger franchises let, the franchise term for South West Trains is only 7 years, meaning that the company is under great pressure from its shareholders to achieve profitability early in the term of its franchise. Since its franchise agreement does not give it full commercial pricing freedom, the company must achieve its profit objectives by reducing the level of its controllable costs, the majority of which are *labour costs*. With this objective in mind, the company in February 1997 made some 70 of its train drivers redundant, with the result that it could not operate the full timetable required of it by the Office of Rail Franchising and it was obliged to cancel no fewer than 39 trains per day, most of them commuter trains operating during off-peak times. Although it subsequently attempted to restore the faith of its travelling public by offering a *fare holiday*, the damage

had been done, simply because the company could not offer the type of product customers (passengers) wanted, which was a frequent rail service *throughout* the day, not just at peak times.

By contrast, there are numerous examples of publicly owned railway companies employing very effective marketing strategies to achieve profit or market share maximizing objectives. In France, the government owned railway organization (S.N.C.F.) has been able to win from the airlines a dominant share of the long distance domestic travel market for its high speed TGV services. This it has been able to do not solely by offering a superior product, which provided users with highly competitive transit times, but also by packaging its product competitively, in terms of scheduling, pricing and passenger comfort/convenience. In Australia, while employment in the government owned railways dropped by more than 50 per cent (to 57,700 persons) between 1980 and 1995, the volume of freight carried by these railways increased by 69 per cent, despite intensified competition from road transport during this period. While much of this increase may be attributed to the growth in bulk traffic, it also reflects increasing rail penetration of the East Coast inter-capital container haulage market, which the government owned National Rail Corporation serves with fast overnight intermodal services, running at near passenger speeds and priced competitively to attract traffic from the interstate highways.

While railway privatization strategies as a means of eliminating railway financial deficits are currently in vogue throughout the region and elsewhere, it is important to note that privatization may not always provide appropriate solution to this problem, particularly when governments remain committed to the continuation of unprofitable services, as a social responsibility. It is important also that the issues of managerial efficiency and ownership of railways should not be confused. Railways can be, and are being, commercialized under public ownership, and the adoption of a marketing culture is an essential part of this process.