Transport needs regulation

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This paper analyses the reasons for the existence of regulation in all modes of transport. As, increasingly, both public and private sectors compete to operate a variety of modes of transport, what is required is more regulation. However this will have to be tempered with positive, progressive and modern systems.

TRANSPORT is sought by people as a basic amenity of civilized existence, it is needed for earning a livelihood, for pleasure and recreation, or even for showing off a certain social or economic status. In a larger sense, transport binds a society or a nation together. Transport infrastructure is often a barometer of a nation's prosperity. Developed economies have a greater obsession with it and build and maintain a variety of facilities and modes: from road to rail and air, and from bus to train, ship and aircraft. Modes of transport are intricately woven into the living patterns of peoples and nations.

It is this ability to determine the quality of life that invites regulation into the transport sector to serve broader social, economic and even political goals. Apart from its positive aspects, transport can cause death and injury if its quality is poor. Those who buy transport services could pay for it with their lives if the service is defective and unsafe. In recent years, with the growing concern for the environment and fears of possible extinction of fossil fuels, an entire new dimension is added. All this calls for a regulatory mechanism that is influenced by the expectations of people and which, in turn, helps ensure a sustainable higher quality of life.

The new context

With the winds of liberalization blowing across the world and engulfing even sectors which have hitherto insulated themselves, there is need for a new orientation towards regulation. And transport cannot be an exception. Although transport is not a primary activity, it has the power to determine the effectiveness of many other economic and social activities. The delivery of development and of economic and social justice – for all the good intentions and investments that may go into them – could well be halted or slowed down if the transport sector does not develop on an equal footing. It is this power of *veto* that compels considerations of transport more as an infrastructure than as business.

When a country is relatively undeveloped or people are content to live in smaller societies, transport becomes optional, a curiosity, or a luxury. But when its people are on the move and their aspirations and awareness are on the rise, transport becomes a necessity and the lack of it could cause intense frustration and disenchantment. The regulatory mechanism should therefore be strong enough to prevent abuse and to protect the lives and property of the public; at the same time it should be resilient and flexible enough to foster growth, variety, and satisfaction in travel in keeping with broader goals of development.

Goals of regulation

Transport is a public utility in the sense that it is vital to the overall public interest. Almost every business enterprise and every individual is directly affected by the transportation industry[1]. Because of the way it influences the health and vitality of the economy, it becomes a governmental responsibility to ensure that transport is available freely, operated safely and conducted without unfair discrimination against its users.

Historically, governments intervened to regulate transport for reasons of equity and later to lay down acceptable safety and environmental standards. It has equally been evident that governments tend to intervene when market forces do not produce either the desired efficiency or the type and kinds of services governments desire. The goals of regulation, hence, are: *protection of public interest and promotion of the best possible system of transportation*[2].

Public interest in transportation arises primarily because freedom is inextricably linked with transportation. In a free society, it is not merely the exchange of ideas but also the ability to go wherever one would like to and settle down where one could find a suitable vocation that become important. In the process, however, people would like to opt for cheaper, convenient and more accessible modes of transportation. It is impossible to live a civilized life without mobility. Developed societies are therefore characterized by an abundance of transport enabling personalized travel through a vast road network and reinforcing it through a variety of public transportation modes from buses to light rail and trains to aircraft.

Transport is needed not only for economic and social development but also for binding a nation together. It is common knowledge that the USA did not become a cohesive, contiguous nation till the trains and roads linked the East and the West. The strategic influence is equally powerful. The British could not have ruled India without developing the Railways that became not only the means of communication but also of troop movements. Isolated regions within a country tend to look inward and become parochial. In the march of civilizations from dependence to independence and on to interdependence, transportation has played a significant role.

In order to build, maintain and strengthen a viable transportation network, it is equally necessary to encourage manufacturers and operators who can produce and run a variety of transportation modes on land, sea and air. It is incumbent on the part of the government to ensure that the business of transport is reasonably profitable so that new technologies are introduced and the quality of service is enhanced. At the same time a fairly balanced regulation will ensure that people are not exploited.

If there are too many restrictions affecting economic viability the result will be low technology, poor service and consequent immobility. Regulation must have a positive impact, i.e. to encourage rather than to discourage better quality of service. It is a case in point that in India, wherever public transportation has been encouraged (notably in states such as Maharashtra, Gujarat and Andhra Pradesh), there is reasonable adequacy and efficiency. Wherever transportation is not properly nurtured (as in the states such as Bihar and Orissa) mobility is difficult, quality of service poor and costs in terms of time and money enormous.

The public, strategic and business interests may often conflict with one another, which is why the overall purpose of regulation is to balance and prioritize conflicting interests in such a way that the entire society will be benefited. It is for this reason that the Committee on Transport Policy and Co-ordination set up by the Planning Commission of India in 1966, followed by the National Transport Policy Committee in 1980, argued for a National Transport Commission to advise the government from time to time to match the changing priorities of a nation on the move.

Economic regulation

The transportation sector is often regulated in order to bring it in conformity with economic priorities. Unless people and goods move from place to place, economic activity cannot take place. There are basically four ingredients in economic regulation, viz. fare regulation, entry regulation, quality of service regulation and tax regulation.

Fare regulation

In a free market, fares are determined on the basis of what the traffic can bear. This might however result in competition and even lower fares on high density routes and desertion or high fares on low density routes. In order to ensure even spread of transportation it is necessary for the government to regulate fares so that passengers are not exploited and at the same time economic viability of the operators is not jeopardized. From taxis to aeroplanes, governmental authorities fix the fares through regulation whether in free market economies or in socialist states. Even in the wake of economic liberalization, the move is still to regulate the fares of basic services that cater to a large number of people, leaving services of higher quality to market forces to determine the fare levels.

In most developing countries, the public sector began operating transportation systems mainly to 'promote, provide or secure' an efficient, adequate, economical and properly co-ordinated transport service. In other words, large public sector organizations like the Railways, Airways and Roadways, were created to bring in economies of scale, provide adequate maintenance infrastructure and introduce professionalism so that they could transfer the surplus from operations that result in a profit to those that result in a loss, yet make the entire enterprise economically viable. The need for explicit subsidies was sought to be avoided in this way. However, experience the world over has shown that a preponderance of operations that result in a loss, however desirable they may be from social and economic considerations, could plunge the entire system into losses and make it impossible for improving the quality of services, let alone upgrading the technology of operations.

Even in the present days of liberalization, there is no government that would like to surrender its right to fix fares. Because of this it becomes a challenge for the regulatory mechanism to safeguard the interests of the public in general and at the same time to give a reasonable return on the investments made by the operators. The alternative is to explicitly subsidize the operations that result in a loss, in order to bring in greater transparency both in the cost of operations and the benefits accruing to a particular region or people.

Entry regulation

Transport systems by their very nature do not operate in isolation. They are part of a society interacting with other systems and carrying people and goods to their desired destinations. It is not only the question of equity but also safety that invites regulation in choosing the most qualified candidate to enter the transportation industry. In the case of railways, monopolies and oligopolies were able to take care of safety, as it was easier to identify the owners and hold them responsible for quality of service or for any exploitation of passengers. Tight regulation also exists in air transport where safety is of paramount importance. Inspection and approval by governmental agencies have also been in vogue in the shipping industry. However, in the case of road transport where ownership is diffused and almost anyone can enter, the need for entry regulation is increasingly felt.

In the case of India, entry into the road transport sector is easy. Consequently the standards of quality are low. Little wonder that more than 60,000 people die every year in road accidents. An effective regulatory mechanism will ensure that authorized and licensed personnel drive vehicles. In case of accidents, it is not just the driver but, more importantly, the owner who should be held criminally responsible either for allowing an incompetent person to drive or for his inability to ensure better maintenance. Long term business interest will introduce greater professionalism and technological improvements and ensure commitment to offer higher quality service. The goals of a regulatory mechanism in industries such as these should be to encourage large private and public sector corporate bodies to operate and compete in offering a better and safer service rather than diffuse the entire industry into millions of operators who cannot look beyond the day's income or are incapable of conforming to operational discipline and safety standards[3].

In the case of bus deregulation in UK, strict entry requirements were introduced in 1985 through operator licensing. Before an operator is authorized to run trucks or coaches, he has to satisfy the regulatory authorities on (a) financial viability of his firm, (b) provision of maintenance and garaging facilities, (c) employment of qualified drivers and mechanics and (d) knowledge of business – either his own or acquired by employing professionals. Such entry qualifications will raise the standards of transport business and make the operators more responsible and responsive.

Quality of service regulation

While entry regulation can, to a great extent, ensure the quality of service offered by transport operators, in order to ensure an efficient, adequate and properly coordinated transport service, it is essential to create a professionally competent cadre of regulatory officials. Beginning with the issue of operating licences and supervision, the regulatory mechanism should encourage the setting up of appropriate training institutions to improve driving and operating skills in the interest of improving service and ensuring safety.

Tax regulation

Transportation is traditionally considered a source of revenue by governments. Passengers on every mode are taxed either for the use of infrastructure or to augment government's resources. The tax structure should foster development of transportation by using the revenues to improve terminal facilities, to evolve safety and environmental standards and to enable growth. To cite an example from India, again from the road transport sector, it is contended that only a fraction of what is collected as tax is spent on roads and hence the appalling state even of the highways. If more money is spent on the roads, the costs of operation will come down and there will, in turn, be even greater mobility thereby increasing the tax revenues of the government. The concept of toll roads and private sector participation may encourage growth in the sector.

Physical and infrastructure regulation

All systems must have ground rules or 'rules of the road'. Some structure or operating procedure is needed to ensure operational discipline. The objectives of physical and infrastructure regulation are mainly to ensure safety and reliability. To this end standards for ensuring quality of road or railway construction, provision of advanced facilities in airports and technological up-gradation at ports will need prescription of certain minimum standards. Regulatory authorities should be empowered, as indeed in most countries they are, not only to check maintenance of the carriers but also of the carriageways so that public interest is protected.

In transport systems which were being operated by large public sector organizations, the line dividing the government and the operator was either thin or even non-existent. In its capacity as both the regulator and the operator, the government by and large took care of certain minimum standards, either through the regulatory mechanism or directly by influencing its own undertakings.

In view of the introduction of the private sector, the need to strengthen and properly define the role of the regulatory authorities is both necessary and urgent. In the case of airlines, the frequently voiced complaints of private airlines about the alleged intransigence of regulatory authorities are an indirect admission that the system is alive and working. What one may call harassment may well be a matter of public interest where safety is concerned. Similarly in the case of road transport the fitness of vehicles is a major factor in accident prevention. The large public sector organizations had the means to provide a system of preventive maintenance through qualified staff and even if the regulatory mechanism did not function effectively there were checks and balances within these large undertakings. If privatization is going to bring in diffused ownership, the need for physical and infrastructure regulation will be even more pronounced.

To take the case of road transport in India, the vehicles which are being operated today are very old and

Transport and regulation

Goals of regulation

- Protection of public interest
- Transport as a viable business to attract better manufacturers and operators
- Supporting national and strategic interests.

Economic regulation

- Fare regulation
- Entry regulation
- Quality of service regulation
- Tax regulation

Physical and infrastructure regulation

- Quality of roads and carriageways
- Quality of vehicles and carriers
- Maintenance efficiency

Social policy regulation

- Balanced regional development
- Equity
- Energy and environmental issues
- Consumer protection.

technological revolution has almost passed by them. Even the minimum expectations of manufacturing a passenger bus could not be met. Bus bodies are mounted on truck chassis which are built for heavier loads, their powerful engine and other assemblies are more fuel consuming, clearance from ground level is high, thus inconveniencing passenger entry and exit, and they are not designed for comfort. The regulatory mechanism should initiate, encourage or even force technological upgradation.

Pneumatic doors in city buses could have saved thousands of lives. Power steering and automatic gears can relieve the drivers of fatigue and monotony. Air suspension and rear-engine mounting could have made travel more comfortable. But all these are shunned because the commuters do not have the power to make their presence felt and will continue to depend on the government to regulate for progress. It is in this context that the physical and infrastructure regulation will need to be revamped in order to take the new technologies at their tide and pass on the benefits to the travelling public.

Social policy regulation

Public interest in transport has been discussed in considerable detail in the foregoing pages. It is, however, necessary to mention or even re-state certain issues that form part of the social policy and require regulation for achieving policy objectives. The main issues are: balanced regional and urban development, equity, safety and environment and consumer protection.

Balanced regional and urban development

Much of the economic development in Europe and North America in the 19th century was due to the development of transportation. An even spread of transportation helped disperse population, economic activities and other related facilities across the continents. In the case of developing countries which began a new life only during the second half of the 20th century, the tasks of economic reconstruction and social development had to be taken up simultaneously. Investments made to spread education, health and the means of social justice had to be supported by appropriate mobility so that a large number of people could benefit from the fruits of development.

In the developing economies, market forces tend to exploit people rather than serve them and hence the intervention of the government through legislation and regulation. Railways, airlines and road transport were progressively brought under government control to subserve broader economic and social goals. In large countries like India there are several regions which are rich in resources but are economically poor since they are unable to trade. The investments in railways and roads were directly intended to open up remote areas so that they can be brought into the main national stream. The Northeast with its tough and hilly terrain had to be served by the public sector airline company, in spite of the losses it incurred, in order to serve the cause of integration. There are huge costs involved in the process and they were to be met by the government either directly or indirectly through the public sector.

The integration of railway companies into one large governmental system, the passing of the Road Transport Corporations Act in 1950 and the enactment of the Air Corporations Act in 1953 were the Indian government's response to the challenge of balanced regional development. It was recognized that transportation, being basic to human existence, cannot be left to market forces in an unequal society. Even after half a century of independent existence, there are still doubts whether the country can trust market forces in a sector as important as transportation.

In order to support policies for economic and social development, even if it is considered that the transport sector is ripe for private intervention, the public interest can only be served through a positive yet vigorous regulatory mechanism. The privatization of transportation industry in the UK during the last ten years has seen a greater strengthening and reinforcement of the regulatory mechanism. If this is what a developed country was obliged to do, developing countries will need to strengthen rather than weaken their regulatory mechanism.

Equity

It is generally established that the poor spend a higher percentage of their income on transportation than the rich do. Studies in India have shown that the poorer sections of people spend up to 20% of their income to commute to their places of work. In a typically nationalized sector of transport it is far easier for the government to direct its public sector undertakings to operate uneconomic services. This has been the case in India. Subsidies given by the Railways and State Transport Undertakings to a variety of commuters are a case in point. By legislation or through fiat governments protect public interest.

Students, irrespective of the economic status of their parents, traditionally enjoyed concessional travel. Postal mails are a compulsory commodity to be transported by any mode of transport whether in the public or in the private sector. Whether the government compensates for the costs or not, social responsibilities of the carrier are often alluded to in justifying such obligations. In an increasingly privatized environment, it will be necessary for the government to either subsidize such concessions or to legislate making it obligatory on the part of the carriers to fulfil such social responsibilities.

Energy and environment

The increasing dependence on fossil fuels, congestion of carriageways or air routes and the propensity of the transport sector to ruin the environment call for strict and stringent regulatory constraints. In developed countries, in spite of the love for personalized transport, there is increasing emphasis on public transport as this is the only way to effectively meet energy, congestion and environmental issues. Public transport can carry more number of people over longer distances using less road space and fuel per person and at the same time cause less pollution. Priority to public transport can be achieved to an extent by traffic limitation strategies and pricing but, considering the rapid deterioration in the quality of life especially in the urban areas, stringent regulatory measures will be required in the future.

Consumer interest

Consumerism is a nascent phenomenon in developing countries. It was not till 1966 that India woke up to the need to protect consumer interests through legislation. Particularly in a sector like transportation that can cause both direct and indirect damage to life and property and inconvenience the public through unjust fare practices, consumer protection will emerge as a major concern of the government. While transport is dealt with as part of general legislation, there will soon emerge a need to bring in legislation for the protection of the passenger. The private airlines are already causing concern and the unorganized truck and bus industry has always been difficult to discipline. The inability of the present regulatory mechanism to protect the passengers, the public and the users of other modes of transport will need to be corrected quickly.

Conclusion

Transport and regulation cannot be separated and the greater the concern for protecting the public, the more will be the need to regulate the industry. As the industry grows and as both public and private sectors compete to operate a variety of modes of transport, what is required is more regulation. This will have to be tempered with positive, progressive and modern systems. The tempo of economic development triggered by liberalization should be adequately supported by improving efficiency and effectiveness of the transport sector. In most developing countries the regulatory mechanism affecting the transportation industry needs not merely a new look but a total overhaul, so that it can respond to the demands of a new century.

1. Wood, D. F. and Johnson, J. C., *Contemporary Transportation*, Macmillan, New York, 1989, p. 33.
2. Davis, G. M., Farris, M. I. and Holden, J. J., *Management of Transportation Carriers*, Plaeger, New York, 1975, p. 22.
3. Padam, S., *Omnibus: Essays in Transport and Management*, Central Institute of Road Transport, Pune, 1995.