Competition and Road Transport Sector

By Shri Dhanendra Kumar¹

Transport is considered lifeline of economy of a country. While at the macroeconomic level, mobility that it confers is linked to a level of output, employment and income within a national economy, at the microeconomic level it is linked to producer, consumer and production costs.² An efficient Road Transport Sector, in particular, plays a crucial role in a country’s economic progress and growth. Bringing together both supply and demand sides, road transport sector influences entire gamut of social and economic activities of a country.

Road Transport Sector and its importance

1.2. Often only direct effects of road transport generated by the transportation of goods and people are considered, ignoring its positive multiplier effects on industry, commerce, small trade and the service sector. These spin-offs including better access to market places and enhanced investments are limited not only to urban centres. A study conducted by US Agency for International Development in 1982 outlines significant social-economic benefits out of a well developed road network even in rural areas in terms of increased employment opportunities due to use of labour-based methods in road construction projects, access to education, health and nutritional facilities, strengthening of local market towns as economic centres, movement of farm inputs, collection of the harvested crops, crop marketing etc.

2. International Experiences - Autobahns of Germany and Interstate System of US

2.1 Experience from other countries suggests that an efficient road transport system can greatly contribute towards growth of a nation’s economy. The Autobahns in Germany show how road networks can help country’s economy as a whole. Providing jobs during its constructions and economic benefits after its completion, Germany's autobahn having a network of about 12,200 km today unites the remotest corners of the country, while connecting major cities with one another. It is estimated that 5.8 m people working in road transport now generate a per capita gross value of about €66,000 in Germany. The total gross value creation in road transport is about €381.6 billion which accounts for about 18 percent

¹ The author is at present Chairman of Competition Commission of India. The views expressed in this article are personal and may not necessarily reflect the position of CCI.
² Transportation and Economic Development, Dr. Jean-Paul Rodrigue , http://people.hofstra.edu/geotrans/eng/ch7en/conc7en/ch7c7len.html
of the overall gross value creation. The autobahns of Germany have been followed in other countries of Europe also like Switzerland and Austria.

2.2 Authorized by the Federal-Aid Highway Act of 1956, popularly known as the National Interstate and Defense Highways Act of 1956, U.S. Interstate System created by Dwight D. Eisenhower is another example of how roads can build nations. One of the most efficient road systems in the world, currently, it is about 46,000 miles long and connects coasts, borders, cities and small towns leading to vast proliferation of businesses in USA.

3. Road Transport Sector-Present Status in India

3.1 A robust economy growing at a rate of about 8% has created a huge demand and pressure on the road transport infrastructure in India. In many developed countries, transportation accounts between 6% and 12% of GDP. In India, the sector accounts for about 6.4% of GDP. As may be seen from the Table 1 below, road transport has emerged as the dominant segment in India’s transportation sector with a share of 4.8% in India’s GDP in comparison to railways that has a mere 1% share of GDP in 2008-09. The increase in percentage share of transport in GDP since 1999-2000 has come from road transport sector only, with share of other modes remaining nearly constant with a marginal increase in the share of railways.

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3 The Benefits of Road Transport, October 2008, ADAC, [http://www1.adac.de/images/Benefits%20Road%20Transport-Fachinfo_081201_tcm8-238409.pdf](http://www1.adac.de/images/Benefits%20Road%20Transport-Fachinfo_081201_tcm8-238409.pdf)

4 Details have been outlined in The Road That Built America, The Incredible Story of the U.S. Interstate System, Dan McNichol

5 Ministry of Road Transport and Highways, Transport Research Wing

### Water Transport

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### Air Transport

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### Services *

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* Source: Central Statistical Organisation

* Services incidental to transport. Since 2004-05, values are at 2004-05 prices; All shares in GDP are inclusive of Financial Intermediation Services indirectly Measured (F.I.S.M.).

### Expanding Road Network

3.3 Road Transport

India having about 3.6 million kilometres of road network now is arguably the second largest in the world. Currently, the length of various categories of roads is estimated to be as under:

Table 2: Length of Roads in India

<table>
<thead>
<tr>
<th>National Highways</th>
<th>70,934 Km</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Highways</td>
<td>1,33,000 Km</td>
</tr>
<tr>
<td>Major District Road and other District Roads</td>
<td>34,17,000 Km</td>
</tr>
</tbody>
</table>

3.4. Share of road traffic in total traffic has grown from about 14% of freight traffic and 15% of passenger traffic in 1950-51 to an estimated 60% of freight traffic and 87% of passenger traffic by the end of 2005-06. Although National Highways constitute only about 2 per cent of the road network, it carries 40 per cent of the total road traffic.

### 4. Focus on Highways in recent years

4.1 Historically, investments in the infrastructure sector, particularly in the highways, have been made by the Government. Roads were earlier cited as “Public Goods” but that perception has changed over the years. The increasing resource requirements and the concern for managerial efficiency are some of the factors that have given a policy shift to an increasingly active involvement of the private sector in India and one of the significant steps taken in this direction was amendment in 1995 in National Highway Act, 1956 to encourage private sector participation in the development, maintenance and operation of national highways.

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7 Basic Road Statistics of India 2001-02, 2002-03 and 2003-04 published by Transport Research Wing, Ministry of Road Transport and Highways. As per latest figures from Ministry of Road Transport and Highways.

8 Ministry of Road Transport and Highways, Annual Report, 2008-09

9 Competition, Entrepreneurship, and the Future of Roads, Ed. Gabriel Roth. The author has discussed how thousands of miles of roads were covered under privatization in 18th and 19th centuries.
4.2 In order to take up the improvement and development of National Highways, National Highways Development Project (NHDP), has been initiated on a large scale. Spread over seven phases with an estimated project construction cost of Rs. 337,959 crore upto 2017, the project has been undertaken in the country under National Highway Authority of India (NHAI). 10 Besides NHDP, Special Accelerated Road Development Programme for (SARDP-NE) and Special Programme of Development of roads have been initiated in North Eastern and Left Wing Extremism (LWE) areas respectively.

4.3 There is a massive and ambitious road development programme to build 7,000 km of highways annually for the next five years at a rate of 20 kms per day. In addition, ten planned "mega projects", at around US$1bn each, have been announced which has the potentials to attract big private players including foreign players.11

4.4 To meet out these objectives, the government has in recent times further put in place a number of institutional and regulatory mechanisms including a set of fiscal and financial incentives to encourage private sector participation in road sector. While road construction projects were earlier funded by and/or by multilateral development agencies, the preferred model for development now is that of the public-private partnership. The common forms of PPP for development of National Highways in vogue are Build, Operate and Transfer (Toll) Model, Build, Operate and Transfer (Annuity) Model and Design, Build, Finance and Operate (DBFO) Model. In the BOT (Toll) model, the concessionaire receives its income from toll revenues (toll fees prescribed by NHAI), and save for any grant it receives from the awarding authority, takes the risk that these revenues will be sufficient to repay any debt financing to fund project costs and provide a return to shareholders. By contrast, BOT (Annuity) model, the concessionaire’s revenue is earned via sums payable by the awarding authority semi-annually. The level of annuity payment bid by the concessionaire is intended to be sufficient to cover project and finance costs and provide a reasonable return to shareholders. As the concessionaire does not bear the traffic or tolling risk in this model, it is generally considered to be less risky for investors. It has been thought that lower perceived risk levels will be attractive to many private sector players, which in turn will promote competition.

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10 Details as obtained from Ministry of Road and Transport Highways
11 As reported in the Ministry of Shipping, Road Transport and Highways, press release, “Mega Highway Projects”, 1 December 2009.
4.5 Initially NHAI found it hard to evince sufficient private sector participation in its road projects, as witnessed in some tendered projects where there have been no, or only sole, bidder competing for a project. In August 2009, the Prime Minister constituted a committee chaired by Shri B. K. Chaturvedi of the Planning Commission (known as the "Chaturvedi Committee") to review and consider any procedural and financial impediments to NHDP with a view to accelerating the pace of the programme. Following an extensive consultation with various stakeholders, Chaturvedi Committee came out with sets of recommendations for the selection of projects by NHAI and also suggested a host of amendments to model concession agreement for national highways.

4.6 The recommendations of the Chaturvedi Committee were adopted by the Government and subsequent Requests for Qualification (RFQ) and Requests for Proposal (RFP) have followed the recommended amendments to the bidding process and model concession agreements. In order to give a boost to NHDP and to prevent projects being held up in multiple tendering processes, Chaturvedi Committee recommended that earlier waterfall approach be replaced with a more streamlined approach to the selection of the appropriate model for implementation. The Chaturvedi Committee also suggested certain amendments to the bidding process which were accepted by Ministry of Road and Transport Highways (MoRTH). Major concerns relating to RFQ, RFP and MCA affecting bid response have been sought to be removed through implementation of these recommendations.

4.7 A change has recently been announced by NHAI restricting a bidder from being able to bid for more projects, while it currently has three or more letters of award of contract outstanding. This change has been introduced to prevent bidders overstretching themselves even when they do have adequate resources to complete the projects. Although this should generate competition in long run, however, if projects are not efficiently processed, apprehensions have been raised, that this change may also lead to reduced pool of available bidders in future.

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12 Chaturvedi Committee’s report suggests significant changes in areas of bid-security, conflict of interest, pre-qualification, early termination, model concession agreement, divestment of equity, security amount to increase the potential pool of bidders for each project etc.

13 www. Ashurt.com/doc.aspx?id_constant=505.The study also gives details of the recommendations of Chaturvedi Committee and its further implementation. Part of which has been discussed here as well.
4.8 Despite several policy initiatives, however, the sector remains inefficient. The reason for inefficiencies eventually may be linked to improper and ineffective regulation in the sector and policies that inhibit competition.¹⁴

5. Role of Competition Commission

5.1 Competition Commission of India (CCI) established by the Competition Act, 2002 is mandated to prohibit anti-competitive agreements that cause or likely to cause appreciable adverse effects on competition in markets within India, prohibit abuse of dominance by enterprises and regulate combination where the total value of assets or turnover of the parties to a combination does not exceed the limits prescribed in the act.

5.2 The Commission is also mandated to create awareness and impart training on competition issues through advocacy, and render opinion on competition issues on a reference or otherwise as prescribed in the law.

6. Competition Issues in Road Transport Sector

At a time, when there is emphasis on need of well connected road networks, provision of effective and efficient goods and passenger transport services, it is imperative that various issues concerning competition both in road construction sector and goods and passenger road traffic sector are examined.

6.1 Competition issues in Road Construction Projects

Design of Tender Documents and Transparent Bidding Procedure

6.1.1 Tender design is a skilful task and should be done in such a manner that it encourages a transparent evaluation. Prequalification process having composite scoring containing both technical and financial values with technical scores having high subjectivity, may have bearing on competition and therefore requires careful consideration.

6.1.2 The technical specifications if are too stringent, then the competition is reduced typically. Behaviour of bid rigging and collusive bidding is expected in the road construction industry as it is highly concentrated and players compete with each other repeatedly. Some of the symptoms of existence of anti competitive behaviour can be noticed when similar rates are quoted by everybody participating in the tender e.g. for a particular stretch if 5% above estimates are allowed, all participants will increase rates by say, 4.99 or 4.79% together.

¹⁴ Some analysis on the issue has been done in “Towards a functional Competition Policy for India: An overview”; edited by Pradeep S Mehta; CUTS International.
6.1.3 The agencies involved in the award of contract for road construction projects must ensure that a system of transparent bidding procedure is in place. It may among other things involve a well developed, fair and transparent pre-qualification system, well-defined system of invitation of bids, uniformity of policies and standards. It has been experience in some cases that even though two-three players bid for a project, but more often, the one who is awarded the contract, eventually sub-contracts the work to the other remaining players, its so-called competitors. Therefore, bids should not be structured in a manner which allows only a few large players to bid and corner the projects.

6.1.4 Korea has evolved a unique electronic based procurement process. The platform undertakes easy monitoring of certain patterns of conduct like some bids much higher than the published price, fewer than normal competitors submitting the bids, inexplicably huge margin between winning bidder and another bid, low bid regular recurrence etc. which may indicative of collusive bidding or bid rigging. Govt. may consider evolving such a system for all procurement systems including award of contracts in road construction projects.

6.1.5 As per Section 3 (3) (d) of the Competition Act, 2002, any agreement which directly or indirectly results in bid rigging or collusive bidding, shall be presumed to have an appreciable adverse effect on competition. The CCI is mandated not only to prohibit such anti-competitive agreements but also penalise the players involved in these kinds of activities. The authorities concerned must ensure that tendency of high bid prices, collusive bidding is kept under check and any such practices reported to CCI for conducting appropriate inquiries for remedies.

**Ease of Entry Barriers**

6.1.5 Another point which has significant bearing on competition is mandatory requirement for registration of contractors at the state level. There have been instances when this kind of requirement has led to creation of entry barriers leading to territorial allocation among different contractors, ultimately leading to the monopoly at the implementation level and thus requires to be corrected.

6.1.6 National Highway Fee (Determination of Rates & Collection) Rules, 2008 enables Government to collect fee for usage of any section of national highway, permanent bridges etc. In most of the toll highways, since no alternative route has been provided, the user is forced to use the highways. This fee is in addition to cess being charged on petrol meant for
development of roads and the taxes being paid. This may give rise to a situation of abuse of dominance creating high cost services and proper regulation to check that may be required.

**Road Construction materials**

6.1.7 Due to massive construction activity, there is a high demand of construction materials like Aggregates, Cement, Bitumen, Steel etc. Continued supply on competitive rates of these construction materials need to be ensured and process of provision of vital inputs for construction of roads must be monitored closely to ensure that anti-competitive agreements and cartelisation like noticed in some European Countries do not lead to higher project costs.\(^\text{15}\) Sometimes there may be projection for necessity of use of certain items designating them as proprietary in nature, a practice which needs careful evaluation since it may inhibit competition.

**Outsourcing of maintenance work**

6.1.8 At present, the maintenance of roads is largely in the hands of Government. Outsourcing road maintenance to the private sector has been found to be instrumental in massive reduction in road maintenance costs. Substantial savings ranging from 20% to 50% have been noted in Brazil and Columbia on this account. Government may not only contemplate outsourcing such activities, but also think of generating enough competition to keep it away from the clutches of few big players; otherwise there will be denial of expected benefits.

**Performance Based Contracts**

6.1.9. The traditional way of contracting out road maintenance is based on the amount of work being measured and paid for on agreed rates for different work items, giving the contractor little incentives for efficiency. By contrast, Performance-based Road Management and Maintenance Contracts (PBC) based on how well the contractor manages to comply with the performance standards defined in the contract and not on the amount of works and services executed may increase efficiency in executing road maintenance. Although this allocates higher risk to the contractor compared to the traditional contract arrangements, it also opens up opportunities to increase his margins, since improved efficiencies and effectiveness of design, process, technology or management are able to reduce the cost of achieving the specified performance standards. The introduction of Performance Contracts in road maintenance has resulted in considerable cost reductions in Australia, the United States

\(^{15}\) European Competition Commission imposed fines on 14 companies totalling to €266.717 million for price fixing of road bitumen in the Netherlands.
and New Zealand. This may also help in inducing desirable competition in the sector and may be considered in India as well.

**Capacity Building**

6.1.10 There is also an urgent need for capacity building of contractors, consultants, concessionaires, qualified engineers, technicians for the massive Highway Development Programmes under way. In the absence of adequate number of Engineers/Technicians, Concessionaires/contractors and consultants, there is no level playing field and the competition is restricted among the few existing bodies/organisations.

**Need for a Regulator**

6.1.11 Apart from addressing issues mentioned in preceding paras, Government may also consider appointing a regulator in road sector who will look into not only financial claims by the concessionaire but also issues involved in fixing toll rates with increase/decrease in toll collection because of competing facilities and modes of transport. Apart from regulating fixation of tolls and claims, control over anti-competitive behaviour would also a regulatory institution\(^\text{16}\) to prevent the acquisition and exploitation of excessive market power. The CCI is prepared to take up this task both through enforcement and by way of measures of advocacy.

**6.2 Competition issues in Passenger Road Transport**

**Developments in the sector**

6.2.1 As has been brought out, the passenger road traffic sector has witnessed exponential growth in recent years; operated partly by public sector and largely by private sector comprising about 28 % and 72 % respectively of the total buses. The participation of the state in road transport commenced in 1950 and since then State Road Transport Undertakings (SRTUs) have been formed in every state. The performance of SRTUs, however, has been quite dismal over the years. The net aggregate loss incurred by 35 SRTUs has increased by 58.4 % from Rs. ( - ) 1981 crore in 2007-08 to Rs.( - ) 3137 crore in 2008-09.\(^\text{17}\) The reasons for the underlying inefficiencies may be explained in lack of enough competition and ineffective regulation in the passenger road transport sector.

**Ways to introduce competition in the sector**

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\(^{17}\) Review of the performance of State Road Transport Undertakings(SRTUs), Ministry of Road Transport and Highways (Transport Research Wing), March 2009
6.2.2 Many ways of introducing fair competition in service provision to the inter-city passenger transport markets have been suggested. Route franchising, a means of maintaining some public control over the level of services and prices in the public passenger transport market, while using competitive forces to secure supply at the lowest cost have been taken as one of the ways to introduce competition as in UK, Costa Rica and New Zealand. Where fragmented competition is not possible because of the indivisible scale of operation, market disciplines can still be employed by competitive concessioning facilities or systems. This has been applied to the management of urban bus systems, particularly in francophone Africa. 18

6.2.3 A study 19 of state of competition in seven states—Rajasthan, Orissa, Kerala, Tamil Nadu, West Bengal, Himachal Pradesh and Maharashtra conducted by National Council of Applied Economic Research (NCAER) as commissioned by Competition Commission of India, on the basis of the performance of three important indices, namely, Competitive index, Efficiency index and Consumer Satisfaction index, has noted that the degree of competition in passenger road transport varies from state to state. After doing analysis of alternate models in the Passenger Road Transport (PRT) sector; the study has recommended following to improve the competitiveness of bus passenger transportation:

   i) Public sector monopoly may be put to an end to let competition prevail on each of the routes.

   ii) Registration time should be reduced since it has been found to be the one of the barriers of competition in the public transport sector

   iii) There is a need for reduction of permit charges since such charges for more than one region are considered as barriers for free entry.

   iv) Asymmetry of information must be corrected since without perfect information, competitive environment cannot prevail.

6.2.4 Taking the bus routes into two parts: commercial and non-commercial routes, (the former being profitable routes while the latter non-profitable) and keeping in view also the social requirements, the study has proposed competitive tendering on commercial and competitive bidding on non-commercial routes, which essentially may have two broad alternatives; Universal Service Obligation (USO) and Operational Viability Gap Fund (OVBF). While in the case of former, competitive tendering may remain the criteria for

choosing franchise in a given area, in case of OVBF, the lowest subsidy bidder may be awarded the contract.

**Experience of Competitive tendering in some countries**

6.2.5 London Transport began competitive tendering bus services in 1986 and nearly all services were competitively tendered by the end of fiscal year 1998-99. The following chart summarises cost performance from 1985, which entails the advantage of competitive tendering.

<table>
<thead>
<tr>
<th>Efficiency Parameters</th>
<th>1985-99</th>
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<tbody>
<tr>
<td>Service Kilometer</td>
<td>+28.5%</td>
</tr>
<tr>
<td>Annual Costs</td>
<td>-26%</td>
</tr>
<tr>
<td>Cost per Kilometer</td>
<td>-42.4%</td>
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</tbody>
</table>

6.2.6 Positive outcome of competitive process has also been realised in countries like United States, Chile, France and Finland and thus needs to be followed in India as well.

6.2.7 In an unregulated market, profit may be sought through the creation of an operators cartel, as occurred in the bus industry in Santiago, or by operators combining with suppliers of terminals or other infrastructure to exclude competitors from access to crucial facilities.

Co-operation among the bus companies on pricing and market sharing within the so-called general tariff agreement has been observed which violates the laws on competition.\(^\text{21}\) The competitive tendering suggested above would ensure that 3A’s- availability, affordability and accessibility are efficiently catered to by the road transport sector.

**Impact of Competition on consumers**

6.2.8 It has been observed that increase in number of market players enhances competition with a positive impact in terms of reduction in prices for the consumers as observed in case of airlines industry in India. Delhi-Dehradun sector, where the number of operators is less has clocked the highest fare per Kilometer, as against Delhi-Bangalore having comparatively more number, clocking the lowest.


\(^{21}\) OECD Paper on Finland, 1998
Since positive co-relation of number of players in the market with that of reduction in fares has been noticed as above, it is necessary to remove all entry barriers and enhance participation through a process of competition.

6.3 Competition issues in Goods Transport Industry in India

Evaluation of Role of Intermediaries

6.3.1 To study the competition issues in the Goods Transport industry, CCI had commissioned a study in past which was conducted by Department of Economics, University of Mumbai. The structure of trucking industry in India has been as one consisting of truck operators, intermediaries and users. It has been noted that majority of truck goods transporters are small operators and as a general practice, they do not come into direct business contact with the users. Only in about 2-3 percent of cases customers directly access the truck owners and book their goods. After studying different supply chain models, the study has noted that the market appears to be segmented on various basis, say as per area of operations and as per routes, i.e. operators as well as booking and commission agents seems to have certain preferred routes. It has also been observed that this kind of market segmentation seems to have led to more powers in the hands of intermediaries as the information flow is normally accessible to them only.

6.3.2 The intermediaries include broking agents (also called transport suppliers or transport contractors) and brokers. These players basically perform the role of middlemen for truck owners. In the past, the intermediaries, have enjoyed higher margins and have been in such a position so as to exploit the market situation in their favour since they alone have the financial resources and market information necessary to influence the prices. Agents/transport contractors are at present an unregulated lot, even though they act as powerful agents. Section 93 of Motor vehicle Act provides for licencing, inter-alia of any agent or canvasser engaged in the business of collecting, forwarding or distributing goods by trucks. Since the wordings of the section are not clear and brokers and booking agents are not distinctly covered, there is a need to cover their activities under regulation in order to avoid any possible anti-competitive agreements among them.

**Collective behaviour of operators**

6.3.3 There have also been instances of cartelised operations of truckers’ union around the production sites and factories. The process of cartelization in the local movements and bid rigging practices in the context of attempts to aim at competition for the market by way of tenders and open bid procedures, need to be looked into and such practices removed/curbed. A system of syndicate may emerge among the truckers if the activities are not regulated as observed in Nepal. Mexico’s Federal Competition Commission has recently fined five trucking companies upwards of US$2 million for allegedly colluding to raise prices to their customers to make up for increases in fuel costs. In case of Sirmur Truck Operators the truck operators were found acting in concert while fixing freight rates for rendering transport services and not allowing non-member truckers to operate. The MRTP Commission finding such practices as restrictive had to issue cease and desist orders.

**Need for competitive rates**

6.3.4 The CCI, as mandated shall investigate all cases of action in concert in order to ensure maintenance of competitive rates. As a measure to curb the practices of price fixation in local movements, Regional Transport Authority (RTA) may provide parking spaces where operators could be located and also notify (based upon discussions with the operators and users) a price band within which the operators could compete until such time that the market

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23 In Nepal truckers are organized under syndicates under which non members are not allowed to play. (Anti-Competitive Practices in Nepal, Adhikari and Regmi, CUTS and SAWTEE, 2001.)
has effective competition, as has been concluded in the study conducted by University of Mumbai mentioned above.

**Corrections in existing regulations**

6.3.5 Certain corrective actions in existing regulatory environment are also required. For example, anomalies resulting from Customs’ bonding requirements in the context of container movements from the ports need corrections to provide a level playing field to the trucking sector and increase its efficacy. Further, continuation of the relevant provisions relating to fixation of minimum and maximum rates in Section 67(1) and 79(2)(iv) of Motor Vehicles Act is also to be required to be looked into to ensure that there is no demand for minimum rates under the existing regulatory framework.

**Easy Availability of Finance to facilitate entry**

6.3.6 At present funds are available to small road transport operators under the priority sector lending scheme of Banks. Small operators have to depend on private finance with high rate of interest which increases their capital cost, while big and rich transport operators are in a position to meet the finance requirements. Easing out high cost of financing may facilitate further entry of small operators and encourage competition. 24

**Ease of movements to promote efficiency**

6.3.7 It has been realised 25 that smooth and seamless flow of freight movement by road across States/UTs must be facilitated so as to foster single barrier free domestic market. Adaptability and application of information technology and intelligent Transport systems (ITS) to all aspects of trucking operations would help achieving this and also in ushering competition, since through these measures, information asymmetry which impacts profitable operations can be minimized.

6.3.8 While the industry delivers low freight rates, service quality is poor; with transit times nearly double that of developed countries. Normal distance travelled by trucks in India is 250-300 Km per day where as the international norm is 600-800 km per day. Reasons for vehicle detention may be a variety of regulatory requirements like inter or intra state permits, road tax, load checks, local police check posts, sales tax, octroi, entry permits, various paper requirements and also inefficient and corrupt enforcement. Table 4 below gives details of total en-route expenditure incurred for the three routes- Mumbai-Delhi, Kolkata –Delhi and Kolkata –Chennai and its percentage distribution under different heads. A further break-up of


25 National Road Transport Policy, Ministry of Road Transport and Highways
official and unofficial expenses towards official agencies and octroi, etc. are also shown in terms of percentages.

### Table 4: En-Route Expenses Incurred

<table>
<thead>
<tr>
<th>Description</th>
<th>Mumbai-Delhi</th>
<th>Calcutta-Delhi</th>
<th>Calcutta-Chennai</th>
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<tbody>
<tr>
<td>Total en-route Expenditure</td>
<td>Rs. 8100</td>
<td>Rs. 6550</td>
<td>Rs. 7500</td>
</tr>
<tr>
<td>Distribution of Exp. (% of total)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1. Diesel &amp; Oil</td>
<td>51.85%</td>
<td>64.12%</td>
<td>65.83%</td>
</tr>
<tr>
<td>2. Crew Expenses</td>
<td>7.41%</td>
<td>7.63%</td>
<td>9.33%</td>
</tr>
<tr>
<td>3. RTO &amp; Police</td>
<td>29.88%</td>
<td>6.71%</td>
<td>9.08%</td>
</tr>
<tr>
<td>Official</td>
<td>(24.8) %</td>
<td>Nil</td>
<td>(54.4) %</td>
</tr>
<tr>
<td>Unofficial</td>
<td>(75.2) %</td>
<td>(100.0)</td>
<td>(45.6)</td>
</tr>
<tr>
<td>4. Octroi &amp; other taxes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check-post Exp.</td>
<td>1.05%</td>
<td>3.66%</td>
<td>3.34%</td>
</tr>
<tr>
<td>Official</td>
<td>(29.4)</td>
<td>(12.5)</td>
<td>(Nil)</td>
</tr>
<tr>
<td>Unofficial</td>
<td>(70.6)</td>
<td>(87.5)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>5. Toll fees</td>
<td>0.80%</td>
<td>0.31%</td>
<td>1.27%</td>
</tr>
<tr>
<td>6. Broker's Commission</td>
<td>5.56%</td>
<td>5.35%</td>
<td>2.00%</td>
</tr>
<tr>
<td>Official</td>
<td>(83.3)</td>
<td>(100.0)</td>
<td>(71.4)</td>
</tr>
<tr>
<td>Unofficial</td>
<td>(16.7)</td>
<td>(Nil)</td>
<td>(28.6)</td>
</tr>
<tr>
<td>7. Loading/Unloading</td>
<td>2.22%</td>
<td>12.22%</td>
<td>3.79%</td>
</tr>
<tr>
<td>Official</td>
<td>(83.3)</td>
<td>(100.0)</td>
<td>(71.4)</td>
</tr>
<tr>
<td>Unofficial</td>
<td>(16.7)</td>
<td>(Nil)</td>
<td>(28.6)</td>
</tr>
<tr>
<td>8. Others (Weighting, minor repairs, tyre puncture, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Official</td>
<td>(30.0)</td>
<td>-</td>
<td>(89.6)</td>
</tr>
<tr>
<td>Unofficial</td>
<td>(70.0)</td>
<td>-</td>
<td>(10.4)</td>
</tr>
</tbody>
</table>

6.3.9 Truck delays at checkpoints have been estimated to cost economy anywhere between Rs.9 billion and Rs.23 billion a year.. The estimate does not include “Facilitation Payments” made at the checkpoints and these have been estimated to range between Rs.9 and Rs.72 billion. According to study of World Bank, costs of various inefficiencies in the trucking sector shows that between Rs. 17 and 46 billion of economic costs could be saved per year, should the inefficiencies in the current system be addressed.

6.3.10 As has been observed, system of inter-state check posts that poses hindrance to timely movement of goods needs improvement for speedy clearance of movement of vehicles at the entry and exit points. This is expected not only to lead to faster turnaround time but also help to improve road economics. In this direction, green channel concept like one introduced in Gujarat and adoption of Single Window clearance for all authorised charges may improve freight movement at a desired level if associated with automation and computerisation of

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26 A Background Paper on Barriers to Inter-State Trade and Commerce –The Case of Road Transport, by Dr. Bibek Debroy and Dr. P.D. Kaushik of Rajiv Gandhi Institute for Contemporary Studies
27 Road Transport Efficiency Study, India, World Bank, 2005
Inter State Check Posts (ICPs). Electronic surveillance and computerisation present vast opportunities for outsourcing with consequential benefits arising out of competition.

6.3.11 Coupled with the above measures, state level rationalization of motor vehicle taxation, uniformity in RTO rules will avoid irrational pricing and lead to enhanced efficiency of services.

6.3.12 A survey by UN-ESCAP has highlighted the pervasive effect of delays in the free flow of goods from India across international borders, namely Nepal and Bangladesh. Usually, the cost burden at the border is estimated as US$ 1.5-10 per ton, which is considerably higher than in most developed economies. The North East sector is supposed to be worst sector for transporting agencies because of various reasons, namely, difficult driving conditions and poor legal enforcement measures.

Table 5: Transport and Transit: Performance Indicators

<table>
<thead>
<tr>
<th></th>
<th>Time Delays (in days)</th>
<th>Costs (US $/ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Transit time</td>
<td>Border Crossing</td>
</tr>
<tr>
<td>Calcutta-Petrapole-Benapole-Dhaka (Road)</td>
<td>1.5 - 2</td>
<td>0.5 - 2</td>
</tr>
<tr>
<td>Kathmandu-Biratnagar-Calcutta (Road)</td>
<td>5 - 7</td>
<td>1.5 - 2</td>
</tr>
<tr>
<td>Kathmandu-Birganj-Calcutta-Haldia (Multimode)</td>
<td>5 - 7</td>
<td>3 - 7</td>
</tr>
<tr>
<td>Patna-Hill-J.Bridge-Dhaka-Chittagong (Road)</td>
<td>10 - 15</td>
<td>1 - 3</td>
</tr>
<tr>
<td>Guwahati-Shillong-Dawki-Tamabil-Chittagong (Road)</td>
<td>6 - 10</td>
<td>0.5 - 2</td>
</tr>
</tbody>
</table>

6.3.13 To reduce delays at border crossings, particularly for high value or time-sensitive goods, the report of World Bank on Efficiencies in Transport Sector in India recommends consideration of a system such as the European T.I.R., to permit sealed trucks which elect to use the system to operate without en-route inspections on the basis of a certificate issued at origin by a duly authorized and bonded issuing entity.

29 A Background Paper on Barriers to Inter-State Trade and Commerce – The Case of Road Transport, by Dr. Bibek Debroy and Dr. P.D. Kaushik of Rajiv Gandhi Institute for Contemporary Studies
6.3.14 A sound ease free freight system will require a host of wayside amenities like maintenance and repair facilities, parking space along highways, terminals for commencement of next assignment. The govt. may look into this to avoid congestion and ease of flow. This will open windows of opportunities for private participation and realisation of fruits of privatisation through a process of competitive bidding.

6.3.15 The road transport sector at present is heavily regulated and progressive economic deregulation in this area is required. It has been assessed that the road freight sector can sustain a high level of competition and liberalisation of this sector has the potential to produce substantial gains through price reductions, service improvements and enhancements in efficiency. Thus, effective steps are required to be taken to generate enough and effective competition in the sector.

7. Inter-Modal Competition Issues

7.1 In order to cater to the emerging requirements of economy, elimination of regulatory and physical barriers in all sectors of transport is necessary which can pave the way for a seamless national (single) market. There is a case for last mile connectivity both in freight and passenger road sector. In the latter while it may mean a single ticket system which will connect remotest villages to railways and airports, in the former it may mean integration of places of production to all centres of despatch and market places. Compartmentalized approach to decision making towards India’s transport policies needs change and what needs to be emphasised is development of a multi-modal freight transport system which can lead to improved productivity through eliminations of the bottlenecks. There is a case for promoting multi-modal transport to optimize investments and improve overall distributive and transport efficiency.

7.2 Advantages of inter-modal operations, though are obvious, they may also have anti-competitive effects. For example, a shipping company may charge its customers less if they make use of a certain allied company in the port for the unloading and then another allied/specified one for transporting it via road. This in itself is not a collusive agreement, but may have an adverse effect on the rest of the competitors, which could result in, amongst other things, foreclosure. There may be also a tendency to abuse its position of dominance, in case one company gets control over say, shipping lines, ports and road transport together.

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30 Competition issues in Road Transport 2000, OECD Policy Roundtables
31 Studies have been conducted in this area by Dr. Sriram, The Role of Transportation and Logistics in India: Emerging Issues and Prospects
32 CII(2000),”A case for substitution of Octroi, Confederation of Indian Industry
Further, combination between different players operating different modes of transport—for example, a shipping company and a road transport company would also have to be monitored in order to eliminate any anti-competitive effect arising out of such combinations.

8. Conclusion

8.1 Robust growth in road transport in recent years has been attained despite significant barriers to inter-state freight and passenger movement compared to inland waterways, railways and air which do not face much enroute checks/barriers. Global competition has made the existence of efficient transport an absolute imperative requiring removal of all impediments that affects the efficiency of passenger and freight road transport today.

8.2 In terms of quality, majority of the road network require huge investments for repair, renovation and increase in the number of lines. It is estimated that India’s logistical cost as a percentage of total production cost is about twice the world average of 7%. The slow transportation of goods has also affected the movement of goods among states, delaying exports and imports of the country. Rakesh Mehta Report on infrastructure (1996) estimated the economic losses from bad roads at anywhere upto Rs. 30,000 crore a year, or around 1 to 2 percent of GDP each year. Out of total national highway length of 70,934 Km, it is estimated that only 14% is four lane and more with divided carriage way, while 59% are two lane ways and 27% are single lane ways. Immediate capacity augmentation and upgradation with enhanced safety features is required for taking India on a path of high trajectory growth.

8.3 A study conducted by Asian Development Bank brings out that limited or lack of competition has resulted in inefficiencies in transport services, absence of commercial management of operations, and underinvestment in transport infrastructure in many Central Asian Countries. This holds true in case of India also.

8.4 It has been underlined that economic development has become less dependent on relations with the resources and more dependent on relations across space. The business benefits from improvements in transport both in commodity as well as labour market; in former, since it will improve efficiency of the firms with which they will get access to raw materials and in the latter in terms of improvement in the access to labour. With efficient road transport, the potential market for a given product increases and so does competition. A wide

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33 India Infrastructure Report, 1996
34 Ministry of Road and Transport Highways
range of products becomes available to consumers through competition which tends to reduce costs and promote quality and innovation\textsuperscript{36}.

8.5 Effective transport system is expected to contribute to a great deal to the successful implementation of country’s socio-economic policies and also to the lowering of domestic production costs through timely delivery and enhancement of the economies of scale in the production process. Increased competition in the sector along with removal of all barriers shall lead to desirable results.

8.6 While CCI would look into competition issues and investigate all kinds of anti-competitive behaviour, policies need to be framed and reviewed by different agencies involved, measures are required to be taken to generate competition and remove existing bottlenecks both in intra as well as inter modal transport operations. This would not only lead to provision of secure transport, availability of wider choice and lower prices to the common man, but also help India achieve a much needed sustained double digit growth in the coming decade.

\textsuperscript{36} Transportation and Economic Development, Dr. Jean –Paul Rodrigue.